APPENDIX D

WASTE CHARACTERIZATION ANALYTICAL REPORTS

L11020490 – IDM Water

158 Starlite Drive, Marietta, OH 45750 • T:740-373-4071 • F:740-373-4835 • http://www.microbac.com

Laboratory Report Number: L11020490

Client: Mary Lou Rochette, 156 Starlite Drive, Marietta, OH, 45750

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories.

Review and compilation of your report was completed by Microbac's Sales and Service Team. If you have questions, comments or require further assistance regarding this report, please contact your team member noted in the reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

Kathy Albertson	*Team Chemist/Data Specialist*	Kathy.Albertson@microbac.com
Stephanie Mossburg	*Team Chemist/Data Specialist*	Stephanie.Mossburg@microbac.com
Tony Long	*Team Chemist/Data Specialist*	Tony.Long@microbac.com
Amanda Fickiesen	*Client Services Specialist*	Amanda.Fickiesen@microbac.com
Annie Brown	*Client Services Specialist*	Annie.Brown@microbac.com

This report was reviewed on February 28, 2011.

Stephanie Mossburg - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the DoD QSM and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in this report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, DoD ELAP certification number 2936.01. The reported results are related only to the samples analyzed as received.

This report was certified on February 28, 2011.

David Vandenberg - Managing Director

State of origin: Virginia
Accrediting authority: N/A ID:N/A
QAPP: DOD Ver 4.1
This report contains a total of 51 pages.

Look closer. Go further. Do more.

Microbac REPORT L11020490
PREPARED FOR Kemron Environmental Services
WORK ID:

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1.0 Introduction

LABORATORY REPORT

L11020490

02/28/11 09:51

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Summary

Client ID	Lab ID	Date Collected	Date Received
SWMU-57-21711-1DM-W	L11020490-01	02/17/2011 15:00	02/18/2011
SWMU-57-21711-1DM-W	L11020490-02	02/17/2011 15:05	02/18/2011

L1_A_PROD_COVER - Modified 02/06/2008
PDF File ID: 1929994
Report generated: 02/28/2011 09:51

Report Number: **L11020490**
Report Date : **February 28, 2011**

Sample Number: **L11020490-01**
Client ID: **SWMU-57-21711-1DM-W**
Matrix: **Water**
Workgroup Number: **WG357105**
Collect Date: **02/17/2011 15:00**

PrePrep Method: **NONE**
Prep Method: **HACH**
Analytical Method: **410.4 MOD**
Analyst: **TMM**
Dilution: **1**
Units: **mg/L**

Instrument: **UV-120-1V**
Prep Date: **02/21/2011 09:45**
Cal Date:
Run Date: **02/21/2011 09:45**
File ID: **1V.1102210945-18**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Chemical Oxygen Demand		**231**		**150**	**10.0**

Sample Number: **L11020490-02**
Client ID: **SWMU-57-21711-1DM-W**
Matrix: **Water**
Workgroup Number: **WG356955**
Collect Date: **02/17/2011 15:05**

PrePrep Method: **NONE**
Prep Method: **SM5210B**
Analytical Method: **SM5210B**
Analyst: **TMM**
Dilution: **1**
Units: **mg/L**

Instrument: **YSI-5000**
Prep Date: **02/18/2011 09:20**
Cal Date:
Run Date: **02/18/2011 09:20**
File ID: **00.1102180920-11**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Biochemical Oxygen Demand		**31.0**		**8.00**	**2.67**

Login Number: L11020490

Department: Login

Chain of Custody:

Shipment Conditions

COC #	Cooler #	Temperature
2048	0014384	1.0

Sample Management: All samples were received intact.

Sample Identification

Lab ID	Client ID
L11020490-01	SWMU-57-21711-1DM-W
L11020490-02	SWMU-57-21711-1DM-W

Narrative ID: 21691
Approved By: Stephanie Mossburg
Stephanie Mossburg

2.0 Full Sample Data Package

2.1 General Chemistry Data

2.1.1 BOD Data

2.1.1.1 Summary Data

Login Number: L11020490

Department: Conventionals

Analyst: Tammy Morris

METHOD

Analysis EPA405.1/SM 5210B (Biochemical Oxygen Demand)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 22228
Approved By: Deanna Hesson

LABORATORY REPORT

L11020490

02/28/11 09:51

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-21711-1DM-W	L11020490-02	SM5210B	1	18-FEB-11

Report Number: **L11020490**
Report Date : **February 28, 2011**

Sample Number: **L11020490-02**
Client ID: **SWMU-57-21711-1DM-W**
Matrix: **Water**
Workgroup Number: **WG356955**
Collect Date: **02/17/2011 15:05**

PrePrep Method: **NONE**
Prep Method: **SM5210B**
Analytical Method: **SM5210B**
Analyst: **TMM**
Dilution: **1**
Units: **mg/L**

Instrument: **YSI-5000**
Prep Date: **02/18/2011 09:20**
Cal Date:
Run Date: **02/18/2011 09:20**
File ID: **00.1102180920-11**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Biochemical Oxygen Demand		**31.0**		**8.00**	**2.67**

2.1.1.2 QC Summary Data

Example BOD Calculations

$$(B1 - B2) * F = B$$

$$[(D1 - D2) - B]/(volume/300) = mg/l\ O$$

where:

B1 = initial DO of the seeded blank.
B2 = final DO of the seeded blank.
F = ratio of seed in sample to seed in the blank in decimal form.
D1 = initial DO of the sample.
D2 = final DO of the sample.
volume = ml of sample used.
300 = total ml in the BOD bottle (sample and dilution water).

Final BOD result is the average of 1,2 or 3 bottles that meet the criteria stated in the SOP.

Microbac Laboratories Inc.

Data Checklist

Date: 18-FEB-2011
Analyst: TMM
Analyst: NA
Method: BOD
Instrument: YSI-5000
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG356955

Calibration/Linearity	2/18/11
Second Source Check	
ICV/CCV (std)	X
ICB/CCB	
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	
Case Narratives	
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	TMM
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
24-FEB-2011

Secondary Reviewer:
24-FEB-2011

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-24-2011 13:53:00

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: SM5210B

AAB#: WG356955

Login Number: L11020490

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-21711-1DM-W	02	02/17/11							2		02/18/11	.8	2	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1928614
Report generated 02/24/2011 13:25

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L11020490
Blank File ID: 00.1102180920-01
Prep Date: 02/18/11 09:20
Analyzed Date: 02/18/11 09:20
Analyst: TMM

Work Group: WG356955
Blank Sample ID: WG356955-01
Instrument ID: YSI-5000
Method: SM5210B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG356955-02	00.1102180920-02	02/18/11 09:20	
LCS2	WG356955-03	00.1102180920-03	02/18/11 09:20	
LCSX	WG356955-04	00.1102180920-04	02/18/11 09:20	
SWMU-57-21711-1DM-W	L11020490-02	00.1102180920-11	02/18/11 09:20	
DUP	WG356955-06	00.1102180920-14	02/18/11 09:20	

Report Name: BLANK_SUMMARY
PDF File ID: 1928615
Report generated 02/24/2011 13:25

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L11020490 Prep Date:02/18/11 09:20 Sample ID:WG356955-01
Instrument ID:YSI-5000 Run Date:02/18/11 09:20 Prep Method:SM5210B
File ID:00.1102180920-01 Analyst:TMM Method:SM5210B
Workgroup (AAB#):WG356955 Matrix:Water Units:mg/L
Contract #: Cal ID:YSI-50 -

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Biochemical Oxygen Demand	1.00	3.00	1.00	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1928616
24-FEB-2011 13:25

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020490 Analyst: TMM Prep Method: SM5210B
Instrument ID: YSI-5000 Matrix: Water Method: SM5210B
Workgroup (AAB#): WG356955 Units: mg/L
QC Key: DOD4 Lot #: STD43157

Sample ID: WG356955-02 LCS File ID: 00.1102180920-02 Run Date: 02/18/2011 09:20
Sample ID: WG356955-03 LCS2 File ID: 00.1102180920-03 Run Date: 02/18/2011 09:20

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Biochemical Oxygen Demand	198	215	109	198	219	111	1.69	84.6 - 115.4	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1928617
Report generated: 02/24/2011 13:25

2.1.1.3 Raw Data

WORKGROUP: WG356955

BIOCHEMICAL OXYGEN DEMAND

LCS/SPIKE: Std 43157 =200

Daily Dilution: 10 (4000)/500

Daily Dilution: 20 (200)/200 = 20 ADT - ON: Tmm 2/18/11 0920

2nd Source: Std 43505 ADT - OFF: TMM 2/23/11 0810

- ✓ LCS made fresh today
- ✓ LCS pH (6.5-7.5) pH = 7.439
- ✓ Dilution water D.O. = 9.11
- ✓ Dilution water made: 2/18/11
- ✓ Seed 1 cap. Per 850 mL DI water
- ✓ LCS added to bottles
- ✓ Spike added to sample
- ✓ Duplicate analyzed
- ✓ Chlorine checked on all samples
- ___ Nitrification inhibitor (HACH Formula 2533) Lot: _____

BOD X

BOD-C _____

EPA Method 405.1/SM 5210B SOP K4051 Revision #: 16 Instrument: YSI 5000 Incubator: 3

All DO reading in mg/L O

Curve DD

		Volume (mL)	Initial D.O.	Final D.O	
UNSEEDED BOD BLANK	1	200	8.91	8.47	0.44
	2				

		Volume (mL)	Initial D.O.	Final D.O
UNSEEDED BOD-C BLANK	1			
	2			

		Volume (mL)	Initial D.O.	Final D.O	
BOD SEEDED CONTROL BLANK (10mL SEED)	1	200	8.86	6.96	0.345
	2	200	8.88	7.33	

		Volume (mL)	Initial D.O.	Final D.O
BOD-C SEEDED CONTROL BLANK (10mL SEED)	1			
	2			

		Volume (mL)	Initial D.O.	Final D.O
BOD BLANK (2mL SEED)	1	200	8.73	8.10
	2	200	8.73	8.24

		Volume (mL)	Initial D.O.	Final D.O
BOD-C BLANK (2mL SEED)	1			
	2			

		Volume (mL)	Initial D.O.	Final D.O
BOD LCS (198 mg/L)	1	6	8.93	4.43
BOD-C LCS (198 mg/L) Inhibitor added ____	2	7	8.97	3.42

		Volume (mL)	Initial D.O.	Final D.O
BOD LCS (198 mg/L)	1	6	8.93	4.18
BOD-C LCS (198 mg/L) Inhibitor added ____	2	7	8.95	3.52

		Volume (mL)	Initial D.O.	Final D.O
2nd SOURCE	1	3	8.99	4.59
	2	4	8.98	3.19

Reviewed By: _____

Page 1 of ___

DCN#86128

Approved: February 24, 2011

WORKGROUP: WG356955

Client: Kemron (Radford)
Source: Sump-57-21711-1Dup-W
Sample No: ~~2-490-02~~ 2-490-02
Initial pH: 3.238 Final pH: 7.065
Chlorine: ____
Nitrification inhibitor added: ____
Comments:

Volume (mL)	Initial D.O.	Final D.O
1	8.92	
3	8.89	
5	8.91	7.60
20	8.92	6.09
75	9.02	2.49

Client: Dup
Source: Outfall 105
Sample No: 2-496-02
Initial pH: 8.062 Final pH: ____
Chlorine: yes
Nitrification inhibitor added: NO
Comments:

Volume (mL)	Initial D.O.	Final D.O
20	8.89	
50	8.88	7.24
100	9.17	6.73
200	9.166	5.116

Client: Dup 2/9/11
Source: BIO IN 2-496-01
Sample No: ~~2-496-01~~ 02-496-01
Initial pH: 5.429 Final pH: 6.686
Chlorine: ____
Nitrification inhibitor added: NO
Comments: Dup

Volume (mL)	Initial D.O.	Final D.O
0.3	8.92	4.93
0.5	8.87	4.01
1	8.82	5.03
2	8.86	<1
0.3	8.82	7.03
0.5	8.84	6.00
1	8.83	5.00
2	8.83	<1

Client: Dup
Source: Outlet 102
Sample No: 2-499-01
Initial pH: 9.178 Final pH: 6.557
Chlorine: ____
Nitrification inhibitor added: NO
Comments:

Volume (mL)	Initial D.O.	Final D.O
20	8.84	8.13
75	8.07	
200	9.52	7.82

Client: Dup
Source: Outfall002
Sample No: 2-495-02
Initial pH: 7.712 Final pH: ____
Chlorine: ____
Nitrification inhibitor added: NO
Comments:

Volume (mL)	Initial D.O.	Final D.O
20	8.95	8.04
75	9.20	7.87
200	9.84	7.29

3

DCN#86128

Approved: February 24, 2011

Microbac Laboratories Inc.

BOD REPORT

Workgroup (AAB#):WG356955
Product:SM5210B
Analyte:BIOCHEMICAL OXYGEN DEMAND

Analyst:TMM
Run Date:02/18/2011 09:20

SAMPLE NUMBER	DIL	SEED	VOL1	IDO1	FDO1	RESULT1	VOL2	IDO2	FDO2	RESULT2	VOL3	IDO3	FDO3	RESULT3	RESULT	Units
WG356955-01	1	0.345	200	8.73	8.10	0.4275	200.0	8.73	8.24	0.2175	200.0				0.3225	mg/L
WG356955-02	1	0.345	6	8.93	4.43	207.8	7.0	8.97	3.42	223.1	200.0				215.4	mg/L
WG356955-03	1	0.345	6	8.93	4.18	220.3	7.0	8.95	3.52	217.9	200.0				219.1	mg/L
WG356955-04	1	0.345	3	8.99	4.59	405.5	4.0	8.98	3.19	408.4	200.0				406.9	mg/L
L11020462-01	1	0.345	20	8.90	5.58	44.63	10.0	8.96	6.73	56.55	200.0				50.59	mg/L
L11020462-02	1	0.345	50	8.73	1.73	39.93	20.0	8.90	5.99	38.48	200.0				39.20	mg/L
L11020463-02	1	0.345	200	9.62	7.83	2.168	200.0				200.0				F 2.168	mg/L
WG356955-07	1	0.345	200	9.62	7.83	2.168	200.0				200.0				2.168	mg/L
WG356955-08	1	0.345	20	8.94	7.01	23.78	50.0	8.96	4.53	24.51	200.0				24.14	mg/L
L11020463-04	1	0.345	200	9.61	8.24	1.538	200.0				200.0				F 1.538	mg/L
L11020492-02	1	0.345	75	8.99	7.50	4.580	200.0				200.0				F 4.580	mg/L
L11020490-02	1	0.345	75	9.02	2.49	24.74	20.0	8.92	6.09	37.28	200.0				31.01	mg/L
L11020496-02	1	0.345	200	9.66	5.16	6.233	100.0	9.17	6.73	6.285	200.0				6.259	mg/L
L11020496-01	1	0.345	1	8.82	5.03	1034	0.5	8.87	6.01	1509	200.0				1271	mg/L
WG356955-05	1	0.345	1	8.82	5.03	1034	0.5	8.87	6.01	1509	200.0				1271	mg/L
WG356955-06	1	0.345	1	8.83	5.00	1046	0.5	8.84	6.00	1497	200.0				1271	mg/L
L11020499-01	1	0.345	200	9.52	7.82	2.033	200.0				200.0				F 2.033	mg/L
L11020495-02	1	0.345	200	9.84	7.29	3.308	200.0				200.0				3.308	mg/L
L11020495-01	1	0.345	200	8.92	7.56	1.523	200.0				200.0				F 1.523	mg/L
L11020494-01	1	0.345	200	9.04	7.85	1.268	200.0				200.0				ND	mg/L
L11020494-02	1	0.345	200	9.05	7.38	1.988	200.0				200.0				ND	mg/L

Report Name: BOD_REPORT
Report Generated: 24-FEB-2011 10:13

[redacted]

Approved: February 24, 2011

2.1.2 COD Data

2.1.2.1 Summary Data

Login Number: L11020490

Department: Conventionals

Analyst: Tammy Morris

METHOD

Analysis EPA 410.4 MOD/SM5220D/HACH 8000 (Chemical Oxygen Demand)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 22227
Approved By: Deanna Hesson

LABORATORY REPORT

L11020490

02/28/11 09:51

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-21711-1DM-W	L11020490-01	410.4 MOD	1	18-FEB-11

Microbac Laboratories Inc.

Report Number: **L11020490**

Report Date : **February 28, 2011**

Sample Number: **L11020490-01**
Client ID: **SWMU-57-21711-1DM-W**
Matrix: **Water**
Workgroup Number: **WG357105**
Collect Date: **02/17/2011 15:00**

PrePrep Method: **NONE**
Prep Method: **HACH**
Analytical Method: **410.4 MOD**
Analyst: **TMM**
Dilution: **1**
Units: **mg/L**

Instrument: **UV-120-1V**
Prep Date: **02/21/2011 09:45**
Cal Date:
Run Date: **02/21/2011 09:45**
File ID: **1V.1102210945-18**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Chemical Oxygen Demand		**231**		**150**	**10.0**

2.1.2.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
x = instrument response as absorbance or OD
y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:
y = mx + b

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of m from plot:	2.7599	
Value of b from plot:	0.0153	
Absorbance of unknown from quantitation report (x):	0.3765	
Calculated concentration (y):	1.05440235	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	1.05	mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

A, B, C = constants from the ICAL quadratic regression

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

y = Ax^2 + Bx + C

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of A from plot:	101.2796	
Value of B from plot:	318.9056	
Value of C from plot:	-2.2712	
Absorbance of unknown from quantitation report (x):	0.1583	
Calculated concentration (y):	50.7495108	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	50.75	mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 21-FEB-2011
Analyst: TMM
Analyst: NA
Method: COD-HIGH
Instrument: UV-120-1V
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG357105

Calibration/Linearity	1/12/11
Second Source Check	
ICV/CCV (std)	X
ICB/CCB	
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	
Case Narratives	
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	TMM
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
22-FEB-2011

Secondary Reviewer:
23-FEB-2011

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-23-2011 15:37:12

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 410.4 MOD

AAB#: WG357105

Login Number: L11020490

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-21711-1DM-W	01	02/17/11							28		02/21/11	3.8	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1926939
Report generated 02/23/2011 12:51

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L11020490
Blank File ID: 1V.1102210945-02
Prep Date: 02/21/11 09:45
Analyzed Date: 02/21/11 09:45
Analyst: TMM

Work Group: WG357105
Blank Sample ID: WG357105-01
Instrument ID: UV-120-1V
Method: 410.4 MOD

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357105-02	1V.1102210945-03	02/21/11 09:45	
LCS2	WG357105-03	1V.1102210945-04	02/21/11 09:45	
SWMU-57-21711-1DM-W	L11020490-01	1V.1102210945-18	02/21/11 09:45	
DUP	WG357105-06	1V.1102210945-25	02/21/11 09:45	

Report Name: BLANK_SUMMARY
PDF File ID: 1926940
Report generated 02/23/2011 12:51

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L11020490 Prep Date:02/21/11 09:45 Sample ID:WG357105-01
Instrument ID:UV-120-1V Run Date:02/21/11 09:45 Prep Method:HACH
File ID:1V.1102210945-02 Analyst:TMM Method:410.4 MOD
Workgroup (AAB#):WG357105 Matrix:Water Units:mg/L
Contract #: Cal ID:UV-120-

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Chemical Oxygen Demand	10.0	150	10.0	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1926941
23-FEB-2011 12:51

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020490 Analyst: TMM Prep Method: HACH
Instrument ID: UV-120-1V Matrix: Water Method: 410.4 MOD
Workgroup (AAB#): WG357105 Units: mg/L
QC Key: DOD4 Lot #: STD43558

Sample ID: WG357105-02 LCS File ID: 1V.1102210945-03 Run Date: 02/21/2011 09:45
Sample ID: WG357105-03 LCS2 File ID: 1V.1102210945-04 Run Date: 02/21/2011 09:45

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Chemical Oxygen Demand	1000	927	92.7	1000	954	95.4	2.85	90 - 110	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1926942
Report generated: 02/23/2011 12:51

2.1.2.3 Raw Data

Curves

Wq353819

Parameter: COD-high

Spectrophotometer: UV-120-1V

Calibration (Curve) standard stock: Std41436

Concentration: 10,000 mg/L

Recipe for preparation of curve standards found in:

SOP: K4105 Revision: 13 Page: 7

Second Source Stock: Std40147 (concentration: 1000)

Daily Preparation: 2(1000)/2

concentration = = 1000

Calibration Standards (mg/L)	Volume (mL)	Cell Size (cm)	Wavelength (nm)	Absorbance	
Std 1 (1500)	2 mL	~~10mm to 20 mm~~ 1"	620	0.515	0.504
Std 2 (1000)				0.334	0.340
Std 3 (500)				0.176	0.177
Std 4 (300)				0.112	0.108
Std 5 (150)				0.056	0.060
(0)				0.005	0.007
2nd Source (1,000)	↓	↓	↓	0.326	0.317

Analyst: Tammy Myers

Date/Time: 1/12/2011 @920

DCN#85727

Approved: January 14, 2011

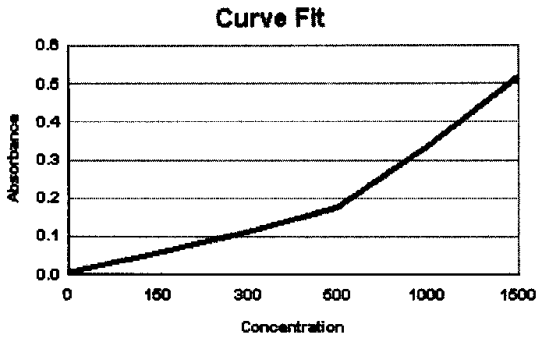
Microbac Laboratories Inc.
INITIAL CALIBRATION

Workgroup:WG353819
Analytical Method:400
Instrument ID:UV-120-1V

Analyst:TMM
Initial Calibration Date:01/12/2011

Analyte: CHEMICAL OXYGEN DEMAND
Number of Points: 6
Slope: 0.000336239
Y-Intercept: 0.00632898
Coef. Of Correlation (R^2): 0.999350
Coef. Of Correlation (R): 0.999675

Concentration X	Absorbance Y	X^2	X * Y	Y-Fitted (mX^2+B)
0.00	0.00500	0.00	0.00	0.00632898
150	0.0560	22500	8.40	0.0567649
300	0.112	90000	33.6	0.107201
500	0.176	250000	88.0	0.174449
1000	0.334	1000000	334	0.342568
1500	0.515	2250000	773	0.510688



WG_ICAL_CAL_WET - Modified 03/06/2008
Report generated 01/12/2011 13:29

[redacted]

Approved: January 14, 2011

Microbac Laboratories Inc.
ALTERNATE SOURCE REPORT

Workgroup #: WG353819
File ID: 1V.1101120920-07
CCV ID: WG353819-07
Units: mg/L
Analyte: CHEMICAL OXYGEN DEMAND

Instrument ID: UV-120-1V
Run Date: 01/12/2011
Run Time: 09:20
Analyst: TMM
Cal ID: UV-120 -

Analyte	Expected	Found	RF	%D	Q
Chemical Oxygen Demand	1000	951	0.000326	4.9	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

WET_WG_SSCV - Modified 03/06/2008
Report generated 01/12/2011 13:29

[redacted]

Approved: January 14, 2011

COD-high

EPA 410.4/SM5220D/HACH 8000 CCV: Std 41436 LCS: Std 43558 Spike: Std 41436

SOP K4105 Revision #: 13 Daily dilution: 4(16,000)50 Daily dilution: 2(1,000)/2 Daily dilution: 0.1(10,000)1/2

Curve ID: 1/12/11 Daily dilution: =800 Daily dilution: =1000 Daily dilution: =500

Wavelength (nm): 620 Hot Block Temp: 150 C Spectrophotometer: UV-120-1V

SAMPLE	DILUTION	ABSORBANCE 1	ABSORBANCE 2
CCV: 800 mg/L		0.282	
BLANK:		0.003	
LCS: 1000 mg/L		0.318	
LCS DUP: 1000 mg/L		0.327	
02-393-01	1/100	0.106	
02	1/10	0.251	
03	1/100	0.323	
04	1/100	0.246	
06	1/2 Ø 21mm	0.355	
07	1/20 | 1/50	0.612 | 0.376	
08	1/2.0	0.347	
09	1/20	0.332	
02-396-04	1/50 | 1/100	0.557 | 0.218	
05	1/100 | 1/200	0.507 | 0.110	
06	1/100	0.250	
07	1/100	0.220	
08	1/100	0.218	
02-490-01		0.084	
02-508-01		0.121	
02	1/2	0.406	
04		0.142	
05		0.443	
07		0.121	
08		0.190	
DUP: 2-508-08		0.188	
MS: (800)		0.352	
MDS: (500)		0.338	
CCV: 900 mg/L		0.286	

ANALYST: Tammy Morris

DATE/TIME: (on) 2/21/11 @ 945

DATE/TIME: (off) @ 1145

DCN#86147

Approved: February 23, 2011

Microbac Laboratories Inc.
SAMPLE REPORT

Workgroup: WG357105
Analyte: CHEMICAL OXYGEN DEMAND

Analyst: TMM
Date: 02/21/2011

Sample ID	I Vol	F Vol	Response	Slope	Y Intercept	Anal. Conc.	Rep. Conc.	Dil	Units
WG357105-01	2	2	0.00300	0.0003362	0.006329	-9.9006	-9.9006	1	mg/L
WG357105-02	2	2	0.318	0.0003362	0.006329	926.93	926.93	1	mg/L
WG357105-03	2	2	0.327	0.0003362	0.006329	953.70	953.70	1	mg/L
L11020393-01	2	2	0.106	0.0003362	0.006329	296.43	29643	100	mg/L
L11020393-02	2	2	0.251	0.0003362	0.006329	727.67	7276.7	10	mg/L
L11020393-03	2	2	0.323	0.0003362	0.006329	941.80	94180	100	mg/L
L11020393-04	2	2	0.246	0.0003362	0.006329	712.80	71280	100	mg/L
L11020393-06	2	2	0.355	0.0003362	0.006329	1037.0	2073.9	2	mg/L
L11020393-07	2	2	0.376	0.0003362	0.006329	1099.4	54971	50	mg/L
L11020393-08	2	2	0.347	0.0003362	0.006329	1013.2	20264	20	mg/L
L11020393-09	2	2	0.332	0.0003362	0.006329	968.57	19371	20	mg/L
L11020396-04	2	2	0.218	0.0003362	0.006329	629.52	62952	100	mg/L
L11020396-05	2	2	0.110	0.0003362	0.006329	308.32	61665	200	mg/L
L11020396-06	2	2	0.250	0.0003362	0.006329	724.69	72469	100	mg/L
L11020396-07	2	2	0.220	0.0003362	0.006329	635.47	63547	100	mg/L
L11020396-08	2	2	0.218	0.0003362	0.006329	629.52	62952	100	mg/L
L11020490-01	2	2	0.0840	0.0003362	0.006329	231.00	231.00	1	mg/L
L11020508-01	2	2	0.121	0.0003362	0.006329	341.04	341.04	1	mg/L
L11020508-02	2	2	0.406	0.0003362	0.006329	1188.6	2377.3	2	mg/L
L11020508-04	2	2	0.142	0.0003362	0.006329	403.50	403.50	1	mg/L
L11020508-05	2	2	0.443	0.0003362	0.006329	1298.7	1298.7	1	mg/L
L11020508-07	2	2	0.121	0.0003362	0.006329	341.04	341.04	1	mg/L
L11020508-08	2	2	0.190	0.0003362	0.006329	546.25	546.25	1	mg/L
WG357105-05	2	2	0.190	0.0003362	0.006329	546.25	546.25	1	mg/L
WG357105-06	2	2	0.188	0.0003362	0.006329	540.30	540.30	1	mg/L
WG357105-07	2	2	0.352	0.0003362	0.006329	1028.1	1028.1	1	mg/L
WG357105-08	2	2	0.338	0.0003362	0.006329	986.41	986.41	1	mg/L

UV_SAMPLE_REPORT - Modified 03/06/2008

Report generated 02/22/2011 13:15

[redacted]

Approved: February 23, 2011

Microbac Laboratories Inc.
CONTINUING CALIBRATION REPORT

Workgroup #: WG357206
File ID: 1V.1102210945-01
CCV ID: WG357206-01
Units: mg/L
Analyte: CHEMICAL OXYGEN DEMAND

Instrument ID: UV-120-1V
Run Date: 02/21/2011
Run Time: 09:45
Analyst: TMM
Cal ID: UV-120 - 16-FEB-11

Analyte	Expected	Found	RF	%D	Q
Chemical Oxygen Demand	800	820	0.000353	2.5	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

WET_WG_CCV - Modified 03/06/2008

Report generated 02/22/2011 11:14

[redacted]

Approved: February 23, 2011

Microbac Laboratories Inc.
CONTINUING CALIBRATION REPORT

Workgroup #: WG357206
File ID: 1V.1102210945-28
CCV ID: WG357206-02
Units: mg/L
Analyte: CHEMICAL OXYGEN DEMAND

Instrument ID: UV-120-1V
Run Date: 02/21/2011
Run Time: 09:45
Analyst: TMM
Cal ID: UV-120 - 16-FEB-11

Analyte	Expected	Found	RF	%D	Q
Chemical Oxygen Demand	800	832	0.000358	4.0	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

WET_WG_CCV - Modified 03/06/2008

Report generated 02/22/2011 11:14

[redacted]

Approved: February 23, 2011

3.0 Attachments

Microbac Laboratories Inc.
Analyst Listing
February 28, 2011

ADC – ANTHONY D. CANTER	AJF – AMANDA J. FICKIESEN	ALB – ANNIE L. BROWN
ALV – AMY L. VALENTINE	AML – TONY M. LONG	AZH – AFTER HOURS
BLG – BRENDA L. GREENWALT	BRG – BRENDA R. GREGORY	CAA – CASSIE A. AUGENSTEIN
CAF – CHERYL A. FLOWERS	CEB – CHAD E. BARNES	CLC – CHRYS L. CRAWFORD
CLS – CARA L. STRICKLER	CLW – CHARISSA L. WINTERS	CPD – CHAD P. DAVIS
CSH – CHRIS S. HILL	DDE – DEBRA D. ELLIOTT	DEL – DON E. LIGHTFRITZ
DEV – DAVID E. VANDENBERG	DGB – DOUGLAS G. BUTCHER	DIH – DEANNA I. HESSON
DLB – DAVID L. BUMGARNER	DLP – DOROTHY L. PAYNE	DLR – DIANNA L. RAUCH
ECL – ERIC C. LAWSON	EDL – ERIN D. LONG	ERP – ERIN R. PORTER
FJB – FRANCES J. BOLDEN	HAV – HEMA VILASAGAR	HJR – HOLLY J. REED
JAL – JOHN A. LENT	JBK – JEREMY B. KINNEY	JDH – JUSTIN D. HESSON
JKT – JANE K. THOMPSON	JLL – JOHN L. LENT	JWR – JOHN W. RICHARDS
JWS – JACK W. SHEAVES	JYH – JI Y. HU	KEB – KATIE E. BARNES
KHR – KIM H. RHODES	KRA – KATHY R. ALBERTSON	LKN – LINDA K. NEDEFF
LSB – LESLIE S. BUCINA	MDA – MIKE D. ALBERTSON	MDC – MIKE D. COCHRAN
MES – MARY E. SCHILLING	MMB – MAREN M. BEERY	MRT – MICHELLE R. TAYLOR
MSW – MATT S. WILSON	PDM – PIERCE D. MORRIS	PWD – PAUL W. DENT
RAH – ROY A. HALSTEAD	RB – BOB BUCHANAN	REK – BOB E. KYER
RLK – ROBIN L. KLINGER	RWC – RODNEY W. CAMPBELL	SLM – STEPHANIE L. MOSSBURG
SLP – SHERI L. PFALZGRAF	TIP – TAE I. PARRISH	TMB – TIFFANY M. BAILEY
TMM – TAMMY M. MORRIS	VC – VICKI COLLIER	WJB – WILL J. BEASLEY
WTD – WADE T. DELONG		

Microbac Laboratories Inc.
List of Valid Qualifiers
February 28, 2011

Qualkey: DOD

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	The reported result is associated with a contaminated method blank.
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
I	Semiquantitative result (out of instrument calibration range)
J	Estimated concentration; sample matrix interference.
J	Estimated value ; the analyte concentration was greater than the highest standard
J	Estimated value ; the analyte concentration was less than the low standard (LOQ)
J	The reported result is an estimated value.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Nontarget analyte; the analyte is a tentativlely identified compound (TIC) by GC/MS
NA	Not applicable
ND	Not detected at or above the reporting limit (RL).
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Analyte was not detected. The concentration is below the reported LOD.
UJ	Undetected; the analyte was analyzed for, but not detected.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)
Z	Cannot be resolved from isomer - see below

*****Special Notes for Organic Analytes**

Qualkey: DOD

1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methylphenol and 4-Methylphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound an are matrix dependent.

COC No. A 2048

156 Starlite Drive
Marietta, OH 45750

KEMRON
ENVIRONMENTAL SERVICES

CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4308
Fax: 740-376-2536

Company Name: UXB - KEMRON

Project Contact: MARY CAY RICHOTTE | Contact Phone #: 740-373-4308

Turn Around Requirements: 10-DAY | Location: SWMU-57 IDM

Project ID: MP0469-400-002

Sampler (print): JONAH ANDERSON | Signature:

Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	COD	BOD	TOTAL # (LAB USE)
SWMU-57-21711-IDM-W	X		2-17-11	1000	W	1		1		
SWMU-57-21711-IDM-W	X		2-17-11	1505	W	1			1	

Program: ☐ CWA ☐ RCRA ☐ DOD ☐ AFCEE ☐ Other _____

ADDITIONAL REQUIREMENTS

* IDM CHARACTERIZATION

-TEMP BLANK-

Relinquished by: (Signature)	Date	Time
	2-17-11	1615
Relinquished by: (Signature)	Date	Time

Microbac OVD
Received: 02/18/2011 10:21
By: BRENDA GREENWALT
221000012490

Brenda Greenwalt

Date	Time	Received by: (Signature)

Remarks:

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

Page _____ of _____

1000012490

COOLER INSPECTION

Received: 02/18/2011 10:21
Delivery Method: FedEx
Opened By: Brenda Greenwalt
Comments:

Login(s): L11020490|

Cooler(s)

Cooler #	Temp Gun	Temp	Tracking #	COC #	Comments
0014384	G	1.0	345750495100256187504379331920000	2048	

1	Yes	Were shipping coolers sealed?
2	Yes	Were custody seals intact?
3	Yes	Were cooler temperatures in range of 0-6?
4	Yes	Was ice present?
5	Yes	Were COC's received/information complete/signed and dated?
6	Yes	Were sample containers and labels intact and match COC?
7	Yes	Were the correct containers and volumes received?
8	Yes	Were samples received within EPA hold times?
9	Yes	Were correct perservatives used? (water only)
10	Yes	Were pH ranges acceptable? (voa's excluded)
11	NA	Were VOA samples free of headspace (less than 6mm)?

Discrepancies:

Microbac - Ohio Valley Division
158 Starlite Drive
Marietta, OH 45750
Tel: (740)373-4071 Fax: (740)373-4835

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L11020490
Account: 2820
Project: 2820.216
Samples: 2
Due Date: 25-FEB-2011

Samplenum	Container ID	Products
L11020490-01	798826	COD-HIGH COD-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	18-FEB-2011 12:00	RLK	
2	ANALYZ	W1	WET	21-FEB-2011 08:02	TMM	AZH

Samplenum	Container ID	Products
L11020490-02	798827	BOD

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	L1	18-FEB-2011 12:00	RLK	
2	ANALYZ	L1	WET	18-FEB-2011 12:25	TMM	RLK

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

L11020492 – Pond Water

158 Starlite Drive, Marietta, OH 45750 • T:740-373-4071 • F:740-373-4835 • http://www.microbac.com

Laboratory Report Number: L11020492

Client: Mary Lou Rochette, 156 Starlite Drive, Marietta, OH, 45750

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories.

Review and compilation of your report was completed by Microbac's Sales and Service Team. If you have questions, comments or require further assistance regarding this report, please contact your team member noted in the reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

Kathy Albertson	*Team Chemist/Data Specialist*	Kathy.Albertson@microbac.com
Stephanie Mossburg	*Team Chemist/Data Specialist*	Stephanie.Mossburg@microbac.com
Tony Long	*Team Chemist/Data Specialist*	Tony.Long@microbac.com
Amanda Fickiesen	*Client Services Specialist*	Amanda.Fickiesen@microbac.com
Annie Brown	*Client Services Specialist*	Annie.Brown@microbac.com

This report was reviewed on March 03, 2011.

Stephanie Mossburg - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the DoD QSM and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in this report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, DoD ELAP certification number 2936.01. The reported results are related only to the samples analyzed as received.

This report was certified on March 03, 2011.

David Vandenberg - Managing Director

State of origin: Virginia
Accrediting authority: N/A ID:N/A
QAPP: DOD Ver 4.1
This report contains a total of 839 pages.

Look closer. Go further. Do more.

Microbac REPORT L11020492
PREPARED FOR Kemron Environmental Services
WORK ID:

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2.1.1.5 Raw QC Data 105
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1.0 Introduction

LABORATORY REPORT

L11020492

03/03/11 15:59

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Summary

Client ID	Lab ID	Date Collected	Date Received
SWMU-57-POND-21711-W	L11020492-01	02/17/2011 14:45	02/18/2011
SWMU-57-POND-21711-W	L11020492-02	02/17/2011 14:45	02/18/2011

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number: **L11020492-01**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Leachate**
Workgroup Number: **WG357245**
Collect Date: **02/17/2011 14:45**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **7470A**
Analytical Method: **7470A**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **02/22/2011 09:28**
Cal Date: **02/23/2011 08:44**
Run Date: **02/23/2011 09:44**
File ID: **HY.022311.094404**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6		U	.002	.001	D009	.2

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020492-01**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Leachate**
Workgroup Number: **WG357223**
Collect Date: **02/17/2011 14:45**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/22/2011 09:59**
Cal Date: **02/22/2011 10:33**
Run Date: **02/22/2011 17:06**
File ID: **P2.022211.170646**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Antimony, TCLP	7440-36-0		U	1	.5		
Arsenic, TCLP	7440-38-2		U	.1	.05	D004	5
Barium, TCLP	7440-39-3		U	.1	.05	D005	100
Beryllium, TCLP	7440-41-7		U	.02	.01		
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Nickel, TCLP	7440-02-0		U	.4	.2		
Selenium, TCLP	7782-49-2		U	.1	.05	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5
Thallium, TCLP	7440-28-0		U	10	5		
Vanadium, TCLP	7440-62-2		U	.1	.05		

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020492-01**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Leachate**
Workgroup Number: **WG357223**
Collect Date: **02/17/2011 14:45**
Sample Tag: **02**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/22/2011 09:59**
Cal Date: **02/23/2011 09:44**
Run Date: **02/23/2011 19:15**
File ID: **P2.022311.191522**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Lead, TCLP	7439-92-1		U	.05	.025	D008	5

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number: **L11020492-02**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Water**
Workgroup Number: **WG357245**
Collect Date: **02/17/2011 14:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **7470A**
Analytical Method: **7470A**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **02/22/2011 09:28**
Cal Date: **02/23/2011 08:44**
Run Date: **02/23/2011 09:45**
File ID: **HY.022311.094547**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Mercury	7439-97-6		U	0.000200	0.000100

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020492-02**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Water**
Workgroup Number: **WG357117**
Collect Date: **02/17/2011 14:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/21/2011 10:48**
Cal Date: **02/22/2011 10:33**
Run Date: **02/22/2011 14:33**
File ID: **P2.022211.143342**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Aluminum, Total	7429-90-5	0.115		0.100	0.0500
Arsenic, Total	7440-38-2	0.00945	J	0.0100	0.00500
Barium, Total	7440-39-3	0.00913	J	0.0100	0.00500
Beryllium, Total	7440-41-7		U	0.0100	0.00500
Cadmium, Total	7440-43-9		U	0.0100	0.00500
Calcium, Total	7440-70-2	10.9		0.200	0.100
Chromium, Total	7440-47-3		U	0.0200	0.0100
Cobalt, Total	7440-48-4		U	0.0200	0.0100
Copper, Total	7440-50-8	0.0547		0.0200	0.0100
Iron, Total	7439-89-6	0.961		0.100	0.0500
Magnesium, Total	7439-95-4	5.11		0.500	0.250
Manganese, Total	7439-96-5	0.247		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.0200
Potassium, Total	7440-09-7	4.46		1.00	0.500
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	4.68		0.500	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500

J Estimated value ; the analyte concentration was less than the low standard (LOQ)
U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020492-02**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Water**
Workgroup Number: **WG357117**
Collect Date: **02/17/2011 14:45**
Sample Tag: **02**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/21/2011 10:48**
Cal Date: **02/23/2011 09:44**
Run Date: **02/23/2011 20:49**
File ID: **P2.022311.204950**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Lead, Total	7439-92-1	0.00639		0.00500	0.00250
Zinc, Total	7440-66-6	0.449		0.0200	0.0100

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number: **L11020492-02**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Water**
Workgroup Number: **WG357188**
Collect Date: **02/17/2011 14:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **1**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **02/21/2011 06:07**
Cal Date: **02/22/2011 09:56**
Run Date: **02/22/2011 12:40**
File ID: **EL.022211.124055**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Antimony, Total	7440-36-0	0.0264		0.00100	0.000500
Selenium, Total	7782-49-2		U	0.00100	0.000500
Thallium, Total	7440-28-0		U	0.000200	0.000100

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020492-02**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Water**
Workgroup Number: **WG357196**
Collect Date: **02/17/2011 14:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3510C**
Analytical Method: **8082**
Analyst: **ECL**
Dilution: **1**
Units: **ug/L**

Instrument: **HP9**
Prep Date: **02/21/2011 10:30**
Cal Date: **02/18/2011 18:51**
Run Date: **02/23/2011 14:24**
File ID: **9GR60546.R**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Aroclor-1016	12674-11-2		U	0.538	0.269
Aroclor-1221	11104-28-2		U	0.538	0.269
Aroclor-1232	11141-16-5		U	0.538	0.269
Aroclor-1242	53469-21-9		U	0.538	0.269
Aroclor-1248	12672-29-6		U	0.538	0.269
Aroclor-1254	11097-69-1		U	0.538	0.269
Aroclor-1260	11096-82-5		U	0.538	0.269

Surrogate	% Recovery	Lower	Upper	Qual
2,4,5,6-Tetrachloro-m-xylene	68.3	30	132	
Decachlorobiphenyl	32.0	40	135	*

***** Surrogate or spike compound out of range
U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020492-02**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Water**
Workgroup Number: **WG357376**
Collect Date: **02/17/2011 14:45**

PrePrep Method: **NONE**
Prep Method: **1010**
Analytical Method: **1010**
Analyst: **JBK**
Dilution: **1**
Units: **Degrees C**

Instrument: **PRECISION**
Prep Date: **02/23/2011 13:50**
Cal Date:
Run Date: **02/23/2011 13:50**
File ID: **PR11022414500501**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Ignitability		77.0	>		

> Result is greater than the associated numerical value.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number: **L11020492-02** | PrePrep Method: **NONE** | Instrument: **UV-120-1V**
Client ID: **SWMU-57-POND-21711-W** | Prep Method: **METHOD** | Prep Date: **02/21/2011 11:09**
Matrix: **Water** | Analytical Method: **410.4 MOD** | Cal Date:
Workgroup Number: **WG357104** | Analyst: **TMM** | Run Date: **02/21/2011 11:09**
Collect Date: **02/17/2011 14:45** | Dilution: **1** | File ID: **1V.1102211109-09**
Units: **mg/L**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Chemical Oxygen Demand		74.1		20.0	10.0

Sample Number: **L11020492-02** | PrePrep Method: **NONE** | Instrument: **YSI-5000**
Client ID: **SWMU-57-POND-21711-W** | Prep Method: **SM5210B** | Prep Date: **02/18/2011 09:20**
Matrix: **Water** | Analytical Method: **SM5210B** | Cal Date:
Workgroup Number: **WG356955** | Analyst: **TMM** | Run Date: **02/18/2011 09:20**
Collect Date: **02/17/2011 14:45** | Dilution: **1** | File ID: **00.1102180920-10**
Units: **mg/L**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Biochemical Oxygen Demand		4.58	J	8.00	2.67

J Estimated value ; the analyte concentration was less than the low standard (LOQ)

Sample Number: **L11020492-02** | PrePrep Method: **NONE** | Instrument: **BURET**
Client ID: **SWMU-57-POND-21711-W** | Prep Method: **SW7.34** | Prep Date: **02/22/2011 09:00**
Matrix: **Water** | Analytical Method: **SW7.34** | Cal Date:
Workgroup Number: **WG357182** | Analyst: **DLP** | Run Date: **02/22/2011 09:00**
Collect Date: **02/17/2011 14:45** | Dilution: **1** | File ID: **ET.1102220900-04**
Units: **mg/kg**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Reactivity, Sulfide	18496-25-8		U	100	100

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020492-02** | PrePrep Method: **NONE** | Instrument: **UV-120-1V**
Client ID: **SWMU-57-POND-21711-W** | Prep Method: **SW7.33** | Prep Date: **02/22/2011 09:05**
Matrix: **Water** | Analytical Method: **SW7.33** | Cal Date: **02/03/2011 09:20**
Workgroup Number: **WG357180** | Analyst: **DLP** | Run Date: **02/22/2011 09:05**
Collect Date: **02/17/2011 14:45** | Dilution: **1** | File ID: **1V.1102220905-02**
Units: **mg/kg**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Reactivity, Cyanide	57-12-5		U	10.0	10.0

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number:	**L11020492-02**	PrePrep Method:	**NONE**	Instrument:	**PAAR**
Client ID:	**SWMU-57-POND-21711-W**	Prep Method:	**SW5050**	Prep Date:	**02/22/2011 09:15**
Matrix:	**Water**	Analytical Method:	**SW5050**	Cal Date:	
Workgroup Number:	**WG357189**	Analyst:	**DLP**	Run Date:	**02/22/2011 09:15**
Collect Date:	**02/17/2011 14:45**	Dilution:	**1**	File ID:	**AR.1102220915-04**
		Units:	**mg/kg**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Total Halides			**U**	**500**	**250**

U Analyte was not detected. The concentration is below the reported LOD.

Login Number: L11020492

Department: Login

Chain of Custody:

Shipment Conditions

COC #	Cooler #	Temperature
2496	0014384	1.0

Sample Management: All samples were received intact.

Sample Identification

Lab ID	Client ID
L11020492-01	SWMU-57-POND-21711-W
L11020492-02	SWMU-57-POND-21711-W

Narrative ID: 21692
Approved By: Stephanie Mossburg
Stephanie Mossburg

2.0 Full Sample Data Package

2.1 Semivolatiles Data

2.1.1 PCB GC Data (8082)

2.1.1.1 Summary Data

Login Number: L11020492

Department: General Chromatography

Analyst: Eric Lawson

METHOD

Analysis SW-846 8082A

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

The extraction laboratory noted that sample 02 contained emulsions.

CALIBRATION

Initial Calibration: For all compounds that yielded a %RSD greater than 15%, linear or higher order equations were applied. All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Continuing Calibration and Tune: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: There were no MS/MSD results associated with this sample delivery group, due to insufficient volume of sample. The laboratory included an LCS and LCS duplicate in the preparation batch in lieu of the NELAC prescribed MS/MSD. Microbac recommends site specific MS/MSD samples to avoid possible data qualification.

SAMPLES

Samples: All acceptance criteria were met.

Surrogates: Recoveries out of range were observed for the following analytes: Decachlorobiphenyl. Please see the applicable QC report for a detailed presentation of the failures.

Sample 02 was not re-extracted as per TSR.

Manual Integration Reason Codes

Reason #1: Data System Fails to Select Correct Peak In some cases the chromatography system selects and integrates the 'wrong peak'. In this case the analyst must correct the selection and force the system to integrate the proper peak. Other times the system may miss the peak completely.

Reason #2: Data System Splits the Peak Incorrectly or Integrates a False Peak as a Rider Peak This phenomena is common at low concentrations where the signal:noise ratio is low. A single compound (peak) is incorrectly split into multiple peaks or integrated as a main peak with one or more rider peaks resulting in low area counts for the target compound.

Reason #3: Improperly Integrated Isomers and/or coeluting compounds. This system often fails to distinguish coeluting compounds and or isomers. The integration areas and concentrations are wrong, and they must be corrected by manual integration. Prime examples are benzo(k)fluoranthene and benzo(b)fluoranthene which are often unresolved and integrated improperly when both are present at low concentrations in standards or samples.

Reason #4: System Establishes Incorrect Baseline There are numerous situations in chromatography where the system establishes the baseline incorrectly. Some baseline errors will be obvious to the analyst and should be corrected via manual procedures.

Reason #5: Miscellaneous Other situations involving integration errors may require in-depth review and technical judgment. These cases should be brought to the attention of the laboratory management. If the form of manual integration is not clearly covered by these four cases, then review and approval by the Laboratory Director or the QA/QC Supervisor will be required.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 22092
Approved By: Mike Cochran



LABORATORY REPORT

L11020492

03/03/11 15:59

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-POND-21711-W	L11020492-02	8082	1	18-FEB-11

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number:	L11020492-02	PrePrep Method:	NONE	Instrument:	HP9
Client ID:	SWMU-57-POND-21711-W	Prep Method:	3510C	Prep Date:	02/21/2011 10:30
Matrix:	Water	Analytical Method:	8082	Cal Date:	02/18/2011 18:51
Workgroup Number:	WG357196	Analyst:	ECL	Run Date:	02/23/2011 14:24
Collect Date:	02/17/2011 14:45	Dilution:	1	File ID:	9GR60546.R
Sample Tag:	01	Units:	ug/L		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Aroclor-1016	12674-11-2		U	0.538	0.269
Aroclor-1221	11104-28-2		U	0.538	0.269
Aroclor-1232	11141-16-5		U	0.538	0.269
Aroclor-1242	53469-21-9		U	0.538	0.269
Aroclor-1248	12672-29-6		U	0.538	0.269
Aroclor-1254	11097-69-1		U	0.538	0.269
Aroclor-1260	11096-82-5		U	0.538	0.269

Surrogate	% Recovery	Lower	Upper	Qual
2,4,5,6-Tetrachloro-m-xylene	68.3	30	132	
Decachlorobiphenyl	32.0	40	135	*

* Surrogate or spike compound out of range
U Analyte was not detected. The concentration is below the reported LOD.

2.1.1.2 QC Summary Data

Example 8082 Calculations

1.0 Calculating the Response Factor (RF) from the initial calibration (ICAL) data:

$$RF = \frac{As}{Cs}$$

where:	Example:
A_s = Area of the compound being measured in the standard	10000
C_s = Concentration of the compound being measured (ng/mL)	100
	RF = 100

2.0 Calculating the concentration (C) of a compound in water using data from prep log and quantitation report:*

$$C = \frac{(A_x)(Vf)(D)}{(RF)(Vi)}$$

where:	Example:
A_x = Area of the compound begin measured	10000
Vf = Final volume of sample extract (mL). (prep log)	1
D = Dilution factor for sample as a multiplier (10X=10)	1
RF = Response factor from ICAL calculated above.	100
Vi = Initial volume of sample (mL). (prep log)	1000
	C(ug/L) = 0.1

3.0 Calculating the concentration (C) of a compound in soil using data from prep log and quantitation report:*

$$C = \frac{(A_x)(Vf)(D)}{(RF)(Wi)}$$

where:	Example:
A_x = Area of the compound begin measured	10000
Vf = Final volume of sample extract (mL). (prep log)	1
D = Dilution factor for sample as a multiplier (10X=10)	1
RF = Response factor from ICAL calculated above.	100
Wi = Initial weight of sample (g).	30
	C(ug/kg) = 3.333333

* Concentrations appearing on instrument quantitation reports are on-column results and do not take into account initial volume, final volume and dilution factor.

Microbac Laboratories Inc.
Sample Extract Log

Workgroup: WG357085
Analyst: CAF
Spike Analyst: CAF
Method: 3510C
Run Date: 02/21/2011 10:30
SOP: EXP01 Revison 13
Spike Witness: CSH
Surr Solution: STD43926

Methylene Chloride Lot #: COA15249
Hexane Lot #: COA15073
Sodium Sulfate,Anhydrous,Granular (Lot #: COA15226
94:6 Hexane:Ether Lot #: RGT15669
Florisil Disposable Column Lot #: COA14997

	SAMPLE #	Type	Reference	pH	Prod	Init Amnt	Surr Amnt	Spike Amnt	Spike Sol	Final Vol	Color
1	L11020492-02	SAMP		N	8082	930 mL	.2 mL			10 mL	Transparent
2	L11020517-01	SAMP		N	8082	890 mL	.2 mL			10 mL	Transparent
3	WG357085-01	BLANK		N	8082	1000 mL	.2 mL			10 mL	Transparent
4	WG357085-02	LCS		N	8082	1000 mL	.2 mL	.1 mL	STD43199	10 mL	Transparent
5	WG357085-03	LCS2		N	8082	1000 mL	.2 mL	.1 mL	STD43199	10 mL	Transparent

L11020492-02	EMULSIONS
L11020517-01	EMULSIONS

Clean-ups	
Florisil	3620B
Acid	3665A

Analyst: Cheryl A. Flowers

Reviewer:

EXTRACT - Modified 10/22/2008
PDF ID: 1925168
Report generated: 02/22/2011 08:21

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP9 Dataset: 062310
Analyst1: ECL Analyst2: NA
Method: 8082 SOP: GCS10 Rev: 12

Maintenance Log ID: 33520 Syringe Filter Lot#:

Column 1 ID: Column 2 ID: RTX-CLP2

Workgroups:

CCV Std: STD37054 LCS STD: STD37752
Internal STD: NA Surrogate STD: STD39048 Calibration STD

Comments: CONFIRMATIONS ONLY

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	9GR57250.R	WG335137-01 1660 ICAL 2000 PPB	1	1	STD37054	06/23/10 14:08
2	9GR57251.R	WG335137-02 1660 ICAL 1000 PPB	1	1	STD37054	06/23/10 14:26
3	9GR57252.R	WG335137-03 1660 ICAL 500 PPB	1	1	STD37054	06/23/10 14:44
4	9GR57253.R	WG335137-04 1660 ICAL 250 PPB	1	1	STD37054	06/23/10 15:02
5	9GR57254.R	WG335137-05 1660 ICAL 100 PPB	1	1	STD37054	06/23/10 15:21
6	9GR57255.R	WG335137-06 1660 ICAL 50 PPB	1	1	STD37054	06/23/10 15:39
7	9GR57256.R	WG335137-07 1660 ALT 250 PPB	1	1	STD38445	06/23/10 15:57
8	9GR57257.R	WG335138-01 1254 ICAL 2000 PPB	1	1	STD38442	06/23/10 16:15
9	9GR57258.R	WG335138-02 1254 ICAL 1000 PPB	1	1	STD38442	06/23/10 16:33
10	9GR57259.R	WG335138-03 1254 ICAL 500 PPB	1	1	STD38442	06/23/10 16:51
11	9GR57260.R	WG335138-04 1254 ICAL 250 PPB	1	1	STD38442	06/23/10 17:09
12	9GR57261.R	WG335138-05 1254 ICAL 100 PPB	1	1	STD38442	06/23/10 17:27
13	9GR57262.R	WG335138-06 1254 ICAL 50 PPB	1	1	STD38442	06/23/10 17:45
14	9GR57263.R	WG335138-07 1254 ALT 500 PPB	1	1	STD38446	06/23/10 18:03
15	9GR57264.R	1248 500 PPB	1	1	STD38443	06/23/10 18:21
16	9GR57265.R	1248 ALT 500 PPB	1	1	STD37194	06/23/10 18:39
17	9GR57266.R	1242 500 PPB	1	1	STD38444	06/23/10 18:57
18	9GR57267.R	1242 ALT 500 PPB	1	1	STD38447	06/23/10 19:15
19	9GR57268.R	1232 500 PPB	1	1	STD37192	06/23/10 19:33
20	9GR57269.R	1232 ALT 500 PPB	1	1	STD37195	06/23/10 19:51
21	9GR57270.R	1221 500 PPB	1	1	STD37193	06/23/10 20:09
22	9GR57271.R	1221 ALT 500 PPB	1	1	STD38445	06/23/10 20:27
23	9GR57272.R	WG335181-01 1660 CCV 500 PPB	1	1	STD37054	06/23/10 20:45
49	9GR57273.R	WG334786-03 1660 MRL 50 PPB	7	1	STD37054	06/23/10 21:03
25	9GR57274.R	WG334289-01 BLANK	7	1	SOIL	06/23/10 21:21
26	9GR57275.R	WG334289-02 LCS	7	1	SOIL	06/23/10 21:39
27	9GR57276.R	WG334289-03 LCS DUP	7	1	SOIL	06/23/10 21:57
28	9GR57277.R	L10060255-01 CF	7	1	SOIL	06/23/10 22:15
29	9GR57278.R	L10060255-02 CF	7	1	SOIL	06/23/10 22:33
30	9GR57279.R	L10060255-03 CF	7	1	SOIL	06/23/10 22:51
31	9GR57280.R	L10060255-04 CF	7	1	SOIL	06/23/10 23:09
32	9GR57281.R	L10060255-05 CF	7	1	SOIL	06/23/10 23:27
33	9GR57282.R	L10060255-06 CF	7	1	SOIL	06/23/10 23:45
34	9GR57283.R	L10060255-07 CF	7	1	SOIL	06/24/10 00:02

Page: 1 Approved: 24-JUN-10

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP9 Dataset: 062310
Analyst1: ECL Analyst2: NA
Method: 8082 SOP: GCS10 Rev: 12

Maintenance Log ID: 33520 Syringe Filter Lot#:
Column 1 ID: Column 2 ID: RTX-CLP2
Workgroups:

CCV Std: STD37054 LCS STD: STD37752
Internal STD: NA Surrogate STD: STD39048

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
35	9GR57284.R	WG335182-01 1254 CCV 500 PPB	1	1	STD38442	06/24/10 00:20
36	9GR57285.R	WG335181-02 1660 CCV 250 PPB	1	1	STD37054	06/24/10 00:38
37	9GR57286.R	L10060255-08 CF	7	1	SOIL	06/24/10 00:56
38	9GR57287.R	L10060283-03 CF	7	1	SOIL	06/24/10 01:14
39	9GR57288.R	L10060283-04 CF	7	1	SOIL	06/24/10 01:32
40	9GR57289.R	L10060320-01 CF	7	1	SOIL	06/24/10 01:50
41	9GR57290.R	L10060320-02 CF	7	1	SOIL	06/24/10 02:08
42	9GR57291.R	WG334658-01 BLANK	7	1	SOIL	06/24/10 02:26
43	9GR57292.R	WG334658-02 LCS	7	1	SOIL	06/24/10 02:44
44	9GR57293.R	WG334658-03 LCS DUP	7	1	SOIL	06/24/10 03:02
45	9GR57294.R	L10060493-01 CF	7	1	SOIL	06/24/10 03:20
46	9GR57295.R	WG335182-02 1254 CCV 500 PPB	1	1	STD38442	06/24/10 03:38
47	9GR57296.R	WG335181-03 1660 CCV 500 PPB	1	1	STD37054	06/24/10 03:56
50	9GR57297.R	WG334786-04 1660 MRL 50 PPB	7	1	STD37054	06/24/10 04:14

Comments

Seq.	Rerun	Dil.	Reason	Analytes
28				
	L10060255-01 CF: DCB surrogate failed high due to SMI.			
29				
	L10060255-02 CF: DCB surrogate failed high due to SMI.			
38				
	L10060283-03 CF: DCB surrogate failed high due to SMI.			
39				
	L10060283-04 CF: DCB surrogate failed low due to SMI.			
40				
	L10060320-01 CF: DCB surrogate failed high due to SMI.			

Page: 2 Approved: 24-JUN-10

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP9 Dataset: 021811
Analyst1: ECL Analyst2: NA
Method: 8082 SOP: GCS10 Rev: 12

Maintenance Log ID: Syringe Filter Lot#:
Column 1 ID: Column 2 ID: NA
Workgroups:

CCV Std: STD43286 LCS STD:
Internal STD: NA Surrogate STD: NA Calibration STD:

Comments: ICAL ONLY

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	9GR60430.R	1660 10 PPM	1	1	STD43286	02/18/11 13:10
2	9GR60431.R	1660 CCV 500 PPB	1	1	STD43286	02/18/11 13:28
3	9GR60432.R	1660 CCV 500 PPB	1	1	STD43286	02/18/11 13:54
4	9GR60433.R	1660 CCV 500 PPB	1	1	STD43286	02/18/11 14:13
5	9GR60435.R	WG357030-01 1660 ICAL 2000 PPB	1	1	STD43286	02/18/11 17:22
6	9GR60436.R	WG357030-02 1660 ICAL 1000 PPB	1	1	STD43286	02/18/11 17:39
7	9GR60437.R	WG357030-03 1660 ICAL 500 PPB	1	1	STD43286	02/18/11 17:57
8	9GR60438.R	WG357030-04 1660 ICAL 250 PPB	1	1	STD43286	02/18/11 18:15
9	9GR60439.R	WG357030-05 1660 ICAL 100 PPB	1	1	STD43286	02/18/11 18:33
10	9GR60440.R	WG357030-06 1660 ICAL 50 PPB	1	1	STD43286	02/18/11 18:51
11	9GR60441.R	WG357030-07 1660 ALT 250 PPB	1	1	STD42874	02/18/11 19:09
12	9GR60442.R	1254 500 PPB	1	1	STD42875	02/18/11 19:27
13	9GR60443.R	1254 ALT 500 PPB	1	1	STD42883	02/18/11 19:45
14	9GR60444.R	1248 500 PPB	1	1	STD42876	02/18/11 20:03
15	9GR60445.R	1248 ALT 500 PPB	1	1	STD42884	02/18/11 20:21
16	9GR60446.R	1242 500 PPB	1	1	STD42877	02/18/11 20:39
17	9GR60447.R	1242 ALT 500 PPB	1	1	STD42885	02/18/11 20:57
18	9GR60448.R	1232 500 PPB	1	1	STD42881	02/18/11 21:15
19	9GR60449.R	1232 ALT 500 PPB	1	1	STD42886	02/18/11 21:33
20	9GR60450.R	1221 500 PPB	1	1	STD42882	02/18/11 21:51
21	9GR60451.R	1221 ALT 500 PPB	1	1	STD42887	02/18/11 22:09

Comments

Seq.	Rerun	Dil.	Reason	Analytes
2				
	1660 CCV 500 PPB: Failed low.			
3				
	1660 CCV 500 PPB: Failed low.			
4				
	1660 CCV 500 PPB: Failed low. Needs recalibrated.			

Page: 1 Approved: 21-FEB-11

Cassie D. Augenstein

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HP9 Dataset: 022311

Analyst1: ECL Analyst2: NA

Method: 8082 SOP: GCS10 Rev: 12

Maintenance Log ID: Syringe Filter Lot#:

Column 1 ID: Column 2 ID: RTX-CLP2

Workgroups:

CCV Std: STD43286 LCS STD: STD43199

Internal STD: NA Surrogate STD: STD43926 Calibration STD:

Comments:

Seq.	File ID	Sample Information	Mat	Dil	Reference	Date/Time
1	9GR60540.R	1660 10 PPM	1	1	STD43286	02/23/11 11:30
2	9GR60542.R	WG357362-01 1660 CCV 500 PPB	1	1	STD43286	02/23/11 12:23
3	9GR60543.R	WG357085-01 BLANK	1	1		02/23/11 13:30
4	9GR60544.R	WG357085-02 LCS	1	1		02/23/11 13:48
5	9GR60545.R	WG357085-03 LCS DUP	1	1		02/23/11 14:06
6	9GR60546.R	L11020492-02	1	1		02/23/11 14:24
7	9GR60547.R	L11020517-01	1	1		02/23/11 14:42
8	9GR60548.R	L11020506-01 10x	10	10	SOIL	02/23/11 15:00
9	9GR60549.R	L11020491-01 20x	10	20	SOIL	02/23/11 15:18
10	9GR60550.R	L11020482-01 50x	10	50	SOIL	02/23/11 15:36
11	9GR60551.R	L11020482-01 5x	10	5	SOIL	02/23/11 15:54
12	9GR60552.R	HEXANE	1	1		02/23/11 16:12
13	9GR60553.R	HEXANE	1	1		02/23/11 16:30
14	9GR60554.R	HEXANE	1	1		02/23/11 16:48
15	9GR60555.R	WG357362-02 1660 CCV 250 PPB	1	1	STD43286	02/23/11 17:06

Comments

Seq.	Rerun	Dil.	Reason	Analytes
6				
	L11020492-02: DCB surrogate failed low, not being re-extracted as per TSR.			
7				
	L11020517-01: Both surrogates failed low. QNS for re-extraction.			
8				
	L11020506-01 10x: DCB surrogate failed high due to SMI.			
11				
	L11020482-01 5x: DCB surrogate failed high due to SMI.			

Page: 1 Approved: 24-FEB-11

Cassie D. Augenstein

Microbac Laboratories Inc.

Data Checklist

Date: 23-JUN-2010
Analyst: ECL
Analyst: NA
Method: 8082
Instrument: HP9
Curve Workgroup: NA
Runlog ID: 34916
Analytical Workgroups: L10060255, L10060283, L10060320, L10060493

ANALYTICAL	
System Performance Check	NA
DFTPP (MS)	NA
Endrin/DDT breakdown (8081/MS)	NA
Pentachlorophenol/benzidine tailing (MS)	NA
Eluent check (IC)/system pressure (HPLC)	NA
Window standard (FID)	NA
Initial Calibration	X
Average RF	X
Linear regression or higher order curve	NA
Alternate source standard (ICV) % Difference	X
Continuing Calibration (CCV)	X
% D/% Drift	X
Minimum response factors (MS)	NA
Continuing calibration blank (CCB) (IC)	NA
Special standards	X
Blanks	X
TCL hits	X
Surrogate recoveries	X
LCS/LCSD (Laboratory Control Sample)	X
Recoveries	X
Surrogate recoveries	X
MS/MSD/Sample duplicates	NA
Recoveries	NA
%RPD	NA
Samples	X
TCL hits	X
Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC)	X
Surrogate recoveries	X
Internal standard areas (MS)	NA
Library searches (MS)	NA
Calculations & correct factors	X
Compounds above calibration range	NA
Reruns	X
Manual integrations	X
Project/client specific requirements	X
REPORTING	
Upload batch form	X
KOBRA workgroup data/forms/bench sheets	X
Case narratives	NA
Check for completeness	X
Primary Reviewer	ECL
SUPERVISORY/SECONDARY REVIEW	
Check for compliance with method and project specific requirements	X
Check the completeness/accuracy of reported information	X
Data qualifiers	X
Secondary Reviewer	MDC

Primary Reviewer:
24-JUN-2010



Secondary Reviewer:
24-JUN-2010



CHECKLIST1 - Modified 03/05/2008
Generated: JUN-24-2010 11:05:22

Microbac Laboratories Inc.

Data Checklist

Date: 18-FEB-2011
Analyst: ECL
Analyst: NA
Method: 8082
Instrument: HP9
Curve Workgroup: NA
Runlog ID: 39115
Analytical Workgroups: ICAL ONLY

ANALYTICAL	
System Performance Check	NA
DFTPP (MS)	NA
Endrin/DDT breakdown (8081/MS)	NA
Pentachlorophenol/benzidine tailing (MS)	NA
Eluent check (IC)/system pressure (HPLC)	NA
Window standard (FID)	NA
Initial Calibration	X
Average RF	X
Linear regression or higher order curve	NA
Alternate source standard (ICV) % Difference	X
Continuing Calibration (CCV)	NA
% D/% Drift	NA
Minimum response factors (MS)	NA
Continuing calibration blank (CCB) (IC)	NA
Special standards	X
Blanks	NA
TCL hits	NA
Surrogate recoveries	NA
LCS/LCSD (Laboratory Control Sample)	NA
Recoveries	NA
Surrogate recoveries	NA
MS/MSD/Sample duplicates	NA
Recoveries	NA
%RPD	NA
Samples	NA
TCL hits	NA
Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC)	NA
Surrogate recoveries	NA
Internal standard areas (MS)	NA
Library searches (MS)	NA
Calculations & correct factors	X
Compounds above calibration range	NA
Reruns	NA
Manual integrations	NA
Project/client specific requirements	NA
REPORTING	
Upload batch form	X
KOBRA workgroup data/forms/bench sheets	NA
Case narratives	NA
Check for completeness	X
Primary Reviewer	ECL
SUPERVISORY/SECONDARY REVIEW	
Check for compliance with method and project specific requirements	X
Check the completeness/accuracy of reported information	X
Data qualifiers	X
Secondary Reviewer	CAA

Primary Reviewer:
19-FEB-2011

Secondary Reviewer:
21-FEB-2011

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-21-2011 12:34:31

Microbac Laboratories Inc.

Data Checklist

Date: 23-FEB-2011
Analyst: ECL
Analyst: NA
Method: 8082
Instrument: HP9
Curve Workgroup: NA
Runlog ID: 39189
Analytical Workgroups: L11020492, L11020517, L11020506, L11020491, L11020482

ANALYTICAL	
System Performance Check	NA
DFTPP (MS)	NA
Endrin/DDT breakdown (8081/MS)	NA
Pentachlorophenol/benzidine tailing (MS)	NA
Eluent check (IC)/system pressure (HPLC)	NA
Window standard (FID)	NA
Initial Calibration	NA
Average RF	NA
Linear regression or higher order curve	NA
Alternate source standard (ICV) % Difference	NA
Continuing Calibration (CCV)	X
% D/% Drift	X
Minimum response factors (MS)	NA
Continuing calibration blank (CCB) (IC)	NA
Special standards	NA
Blanks	X
TCL hits	X
Surrogate recoveries	X
LCS/LCSD (Laboratory Control Sample)	X
Recoveries	X
Surrogate recoveries	X
MS/MSD/Sample duplicates	NA
Recoveries	NA
%RPD	NA
Samples	X
TCL hits	X
Mass spectra (MS/HPLC)/2nd column confirmations (ECD/FID/HPLC)	NA
Surrogate recoveries	X
Internal standard areas (MS)	NA
Library searches (MS)	NA
Calculations & correct factors	X
Compounds above calibration range	X
Reruns	X
Manual integrations	NA
Project/client specific requirements	NA
REPORTING	
Upload batch form	X
KOBRA workgroup data/forms/bench sheets	X
Case narratives	NA
Check for completeness	X
Primary Reviewer	ECL
SUPERVISORY/SECONDARY REVIEW	
Check for compliance with method and project specific requirements	X
Check the completeness/accuracy of reported information	X
Data qualifiers	X
Secondary Reviewer	CAA

Primary Reviewer:
24-FEB-2011

Secondary Reviewer:
24-FEB-2011

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-24-2011 10:28:52

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method 8082 AAB#: WG357196

Login Number: L11020492

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-POND-21711-W	02	02/17/11					02/21/11	3.8	7		02/23/11	2.2	40	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1928302
Report generated 02/24/2011 11:08

Microbac Laboratories Inc.
SURROGATE STANDARDS

Login Number: L11020492
Instrument Id: HP9
Workgroup (AAB#): WG357196

Method: 8082
CAL ID: HP9-18-FEB-11
Matrix: Water

Sample Number	Dilution	Tag	1	2
L11020492-02	1.00	01	68.3	32.0
WG357085-01	1.00	01	68.2	82.2
WG357085-02	1.00	01	74.6	52.3
WG357085-03	1.00	01	70.4	77.2

Surrogates	Surrogate Limits		
1 - 2,4,5,6-Tetrachloro-m-xylene	30	-	132
2 - Decachlorobiphenyl	40	-	135

Underline = Result out of surrogate limits

DL = surrogate diluted out
ND = surrogate not detected

SURROGATES - Modified 03/06/2008
PDF File ID: 1928310
Report generated: 02/24/2011 11:09

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L11020492	Work Group:	WG357196
Blank File ID:	9GR60543.R	Blank Sample ID:	WG357085-01
Prep Date:	02/21/11 10:30	Instrument ID:	HP9
Analyzed Date:	02/23/11 13:30	Method:	8082
Analyst:	ECL		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357085-02	9GR60544.R	02/23/11 13:48	01
LCS2	WG357085-03	9GR60545.R	02/23/11 14:06	01
SWMU-57-POND-21711-W	L11020492-02	9GR60546.R	02/23/11 14:24	01

Report Name: BLANK_SUMMARY
PDF File ID: 1928303
Report generated 02/24/2011 11:08

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11020492 Prep Date: 02/21/11 10:30 Sample ID: WG357085-01
Instrument ID: HP9 Run Date: 02/23/11 13:30 Prep Method: 3510C
File ID: 9GR60543.R Analyst: ECL Method: 8082
Workgroup (AAB#): WG357196 Matrix: Water Units: ug/L
Contract #: Cal ID: HP9-18-FEB-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Aroclor-1016	0.250	0.500	0.250	1	U
Aroclor-1221	0.250	0.500	0.250	1	U
Aroclor-1232	0.250	0.500	0.250	1	U
Aroclor-1242	0.250	0.500	0.250	1	U
Aroclor-1248	0.250	0.500	0.250	1	U
Aroclor-1254	0.250	0.500	0.250	1	U
Aroclor-1260	0.250	0.500	0.250	1	U

Surrogates	% Recovery	Surrogate Limits			Qualifier
2,4,5,6-Tetrachloro-m-xylene	68.2	30	-	132	PASS
Decachlorobiphenyl	82.2	40	-	135	PASS

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1928304
24-FEB-2011 11:08

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020492 Analyst: ECL Prep Method: 3510C
Instrument ID: HP9 Matrix: Water Method: 8082
Workgroup (AAB#): WG357196 Units: ug/L
QC Key: DOD4 Lot #: STD43199

Sample ID: WG357085-02 LCS File ID: 9GR60544.R Run Date: 02/23/2011 13:48
Sample ID: WG357085-03 LCS2 File ID: 9GR60545.R Run Date: 02/23/2011 14:06

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Aroclor-1016	2.50	2.36	94.3	2.50	2.55	102	7.85	25 - 145	30	
Aroclor-1260	2.50	2.53	101	2.50	3.06	122	18.9	30 - 145	30	

Surogates	LCS	LCS2	Surrogate Limits	Qualifier
	% Recovery	% Recovery		
2,4,5,6-Tetrachloro-m-xylene	74.6	70.4	30 - 132	PASS
Decachlorobiphenyl	52.3	77.2	40 - 135	PASS

* EXCEEDS %REC LIMIT

\# EXCEEDS RPD LIMIT

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1928305
Report generated: 02/24/2011 11:08

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L11020492 **Instrument ID:** HP9

Analytical Method: 8082 **Initial Calibration Date:** 23-JUN-10 17:45

ICAL Workgroup: WG335138 **Column ID:** R

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD (R^2)
Aroclor-1254-1		99790	12.0		
Aroclor-1254-2		336400	18.7		
Aroclor-1254-3		473500	15.9		
Aroclor-1254-4		226600	19.4		
Aroclor-1254-5		395600	11.5		

R = Correlation coefficient; 0.995 minimum
R^2 = Coefficient of determination; 0.99 minimum

INT_CAL - Modified 03/06/2008
PDF File ID: 1928306
Report generated 02/24/2011 11:08

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L11020492
Analytical Method: 8082
ICAL Workgroup: WG357030

Instrument ID: HP9
Initial Calibration Date: 18-FEB-11 18:51
Column ID: R

Analyte		AVG RF	% RSD	LINEAR (R)	QUAD (R^2)
Aroclor-1016-1		233600	9.85		
Aroclor-1016-2		494100	12.2		
Aroclor-1016-3		907000	6.37		
Aroclor-1016-4		413400	7.49		
Aroclor-1016-5		283600	7.13		
Aroclor-1260-1		528300	10.5		
Aroclor-1260-2		592400	8.00		
Aroclor-1260-3		370100	6.71		
Aroclor-1260-4		746900	4.37		
Aroclor-1260-5		172900	4.59		

R = Correlation coefficient; 0.995 minimum
R^2 = Coefficient of determination; 0.99 minimum

INT_CAL - Modified 03/06/2008
PDF File ID: 1928306
Report generated 02/24/2011 11:08

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L11020492
Analytical Method: 8082
Instrument ID: HP9
Initial Calibration Date: 23-JUN-10 17:45
Column ID: R

Analyte	WG335138-01			WG335138-02			WG335138-03		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Aroclor-1254-1	2000	162226094	81110	1000	90871252.0	90870	500	49628416.0	99260
Aroclor-1254-2	2000	524725200	262400	1000	291267584	291300	500	156885134	313800
Aroclor-1254-3	2000	773739915	386900	1000	418730523	418700	500	224815214	449600
Aroclor-1254-4	2000	347199347	173600	1000	193641333	193600	500	106497655	213000
Aroclor-1254-5	2000	682539754	341300	1000	367181747	367200	500	197086780	394200

INT_CAL - Modified 03/06/2008
PDF File ID: 1928306
Report generated 02/24/2011 11:08

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L11020492 **Instrument ID:** HP9

Analytical Method: 8082 **Initial Calibration Date:** 23-JUN-10 17:45

Column ID: R

Analyte	WG335138-04			WG335138-05			WG335138-06		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Aroclor-1254-1	250	26185404.0	104700	100	11055604.0	110600	50.0	5609259.00	112200
Aroclor-1254-2	250	82590761.0	330400	100	39045582.0	390500	50.0	21505072.0	430100
Aroclor-1254-3	250	115430055	461700	100	53550885.0	535500	50.0	29423357.0	588500
Aroclor-1254-4	250	56031778.0	224100	100	26364199.0	263600	50.0	14570408.0	291400
Aroclor-1254-5	250	93657661.0	374600	100	43062704.0	430600	50.0	23283850.0	465700

INT_CAL - Modified 03/06/2008
PDF File ID: 1928306
Report generated 02/24/2011 11:08

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L11020492
Analytical Method: 8082
Instrument ID: HP9
Initial Calibration Date: 18-FEB-11 18:51
Column ID: R

Analyte	WG357030-01			WG357030-02			WG357030-03		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Aroclor-1016-1	2000	391543818	195800	1000	227700571	227700	500	113745189	227500
Aroclor-1016-2	2000	802504721	401300	1000	464161119	464200	500	237649882	475300
Aroclor-1016-3	2000	1602571460	801300	1000	918936772	918900	500	455360787	910700
Aroclor-1016-4	2000	703590091	351800	1000	412690661	412700	500	214095627	428200
Aroclor-1016-5	2000	497813028	248900	1000	284673012	284700	500	143825322	287700
Aroclor-1260-1	2000	905444537	452700	1000	514138531	514100	500	252147157	504300
Aroclor-1260-2	2000	1049174650	524600	1000	592698151	592700	500	285363329	570700
Aroclor-1260-3	2000	671025651	335500	1000	377842297	377800	500	181537976	363100
Aroclor-1260-4	2000	1408478880	704200	1000	784361371	784400	500	370724156	741400
Aroclor-1260-5	2000	316287424	158100	1000	179602130	179600	500	87856968.0	175700

INT_CAL - Modified 03/06/2008
PDF File ID: 1928306
Report generated 02/24/2011 11:08

Microbac Laboratories Inc.

INITIAL CALIBRATION DATA

Login Number: L11020492 **Instrument ID:** HP9

Analytical Method: 8082 **Initial Calibration Date:** 18-FEB-11 18:51

Column ID: R

Analyte	WG357030-04			WG357030-05			WG357030-06		
	CONC	RESP	RF	CONC	RESP	RF	CONC	RESP	RF
Aroclor-1016-1	250	59338318.0	237400	100	25110036.0	251100	50.0	13113634.0	262300
Aroclor-1016-2	250	130743049	523000	100	52692398.0	526900	50.0	28686776.0	573700
Aroclor-1016-3	250	226620088	906500	100	92709637.0	927100	50.0	48877494.0	977500
Aroclor-1016-4	250	106332530	425300	100	43265285.0	432700	50.0	21484822.0	429700
Aroclor-1016-5	250	68869989.0	275500	100	29752260.0	297500	50.0	15364885.0	307300
Aroclor-1260-1	250	128156240	512600	100	58247230.0	582500	50.0	30172169.0	603400
Aroclor-1260-2	250	143657393	574600	100	63802375.0	638000	50.0	32688654.0	653800
Aroclor-1260-3	250	89132117.0	356500	100	37816193.0	378200	50.0	20459490.0	409200
Aroclor-1260-4	250	182611078	730400	100	73370910.0	733700	50.0	39358784.0	787200
Aroclor-1260-5	250	42726536.0	170900	100	17375454.0	173800	50.0	8962286.00	179200

INT_CAL - Modified 03/06/2008
PDF File ID: 1928306
Report generated 02/24/2011 11:08

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L11020492 Run Date: 06/23/2010 Sample ID: WG335138-07
Instrument ID: HP9 Run Time: 18:03 Method: 8082
File ID: 9GR57263.R Analyst: ECL QC Key: DOD4
ICal Workgroup: WG335138 Cal ID: HP9 - 23-JUN-10

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Aroclor-1254		500	490	ug/L	293000	2.00	20	

* Exceeds %D Limit

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 1928307
Report generated 02/24/2011 11:09

Microbac Laboratories Inc.
ALTERNATE SOURCE CALIBRATION REPORT

Login Number: L11020492 Run Date: 02/18/2011 Sample ID: WG357030-07
Instrument ID: HP9 Run Time: 19:09 Method: 8082
File ID: 9GR60441.R Analyst: ECL QC Key: DOD4
ICal Workgroup: WG357030 Cal ID: HP9 - 18-FEB-11

Analyte		Expected	Found	Units	RF	%D	UCL	Q
Aroclor-1016		250	224	ug/L	416000	10.3	20	
Aroclor-1260		250	244	ug/L	459000	2.40	20	

* Exceeds %D Limit

ALT - Modified 09/06/2007
Version 1.5 PDF File ID: 1928307
Report generated 02/24/2011 11:09

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357362-01

Instrument ID: HP9 Run Time: 12:23 Method: 8082

File ID: 9GR60542.R Analyst: ECL QC Key: DOD4

Workgroup (AAB#): WG357196 Cal ID: HP9 - 18-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Aroclor-1016		500	498	ug/L	468000	0.365	20	
Aroclor-1221		NA		ug/L			20	
Aroclor-1232		NA		ug/L			20	
Aroclor-1242		NA		ug/L			20	
Aroclor-1248		NA		ug/L			20	
Aroclor-1254		NA		ug/L			20	
Aroclor-1260		500	524	ug/L	505000	4.79	20	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 1928308

Report generated 02/24/2011 11:09

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357362-02

Instrument ID: HP9 Run Time: 17:06 Method: 8082

File ID: 9GR60555.R Analyst: ECL QC Key: DOD4

Workgroup (AAB#): WG357196 Cal ID: HP9 - 18-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	RF	%D	UCL	Q
Aroclor-1016		250	260	ug/L	488000	3.88	20	
Aroclor-1221		NA		ug/L			20	
Aroclor-1232		NA		ug/L			20	
Aroclor-1242		NA		ug/L			20	
Aroclor-1248		NA		ug/L			20	
Aroclor-1254		NA		ug/L			20	
Aroclor-1260		250	260	ug/L	499000	4.19	20	

* Exceeds %D Criteria

CCV - Modified 03/05/2008

PDF File ID: 1928308

Report generated 02/24/2011 11:09

2.1.1.3 Sample Data

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\022311\9GR60546.D Vial: 6
Acq On : 23 Feb 2011 14:24 Operator: ECL
Sample : L11020492-02 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 24 08:12:19 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.403	185839567	13.6609 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	68.30%
12) S Decachlorobiphenyl	11.030	43878416	6.4074 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	32.04%#
Target Compounds			
2) L1 Aroclor-1016-1	5.306f	12746417	54.5617 UG/L
3) L1 Aroclor-1016-2	0.000	0	N.D. UG/L
4) L1 Aroclor-1016-3	0.000	0	N.D. UG/L
5) L1 Aroclor-1016-4	0.000	0	N.D. UG/L
6) L1 Aroclor-1016-5	0.000	0	N.D. UG/L
Sum Aroclor-1016-1		12746417	54.5617 UG/L
Average Aroclor-1016-1			54.562 UG/L
7) L2 Aroclor-1260-1	0.000	0	N.D. UG/L
8) L2 Aroclor-1260-2	0.000	0	N.D. UG/L
9) L2 Aroclor-1260-3	0.000	0	N.D. UG/L
10) L2 Aroclor-1260-4	0.000	0	N.D. UG/L
11) L2 Aroclor-1260-5	0.000	0	N.D. UG/L
Sum Aroclor-1260-1		0	N.D. UG/L
Average Aroclor-1260-1			0.000 UG/L

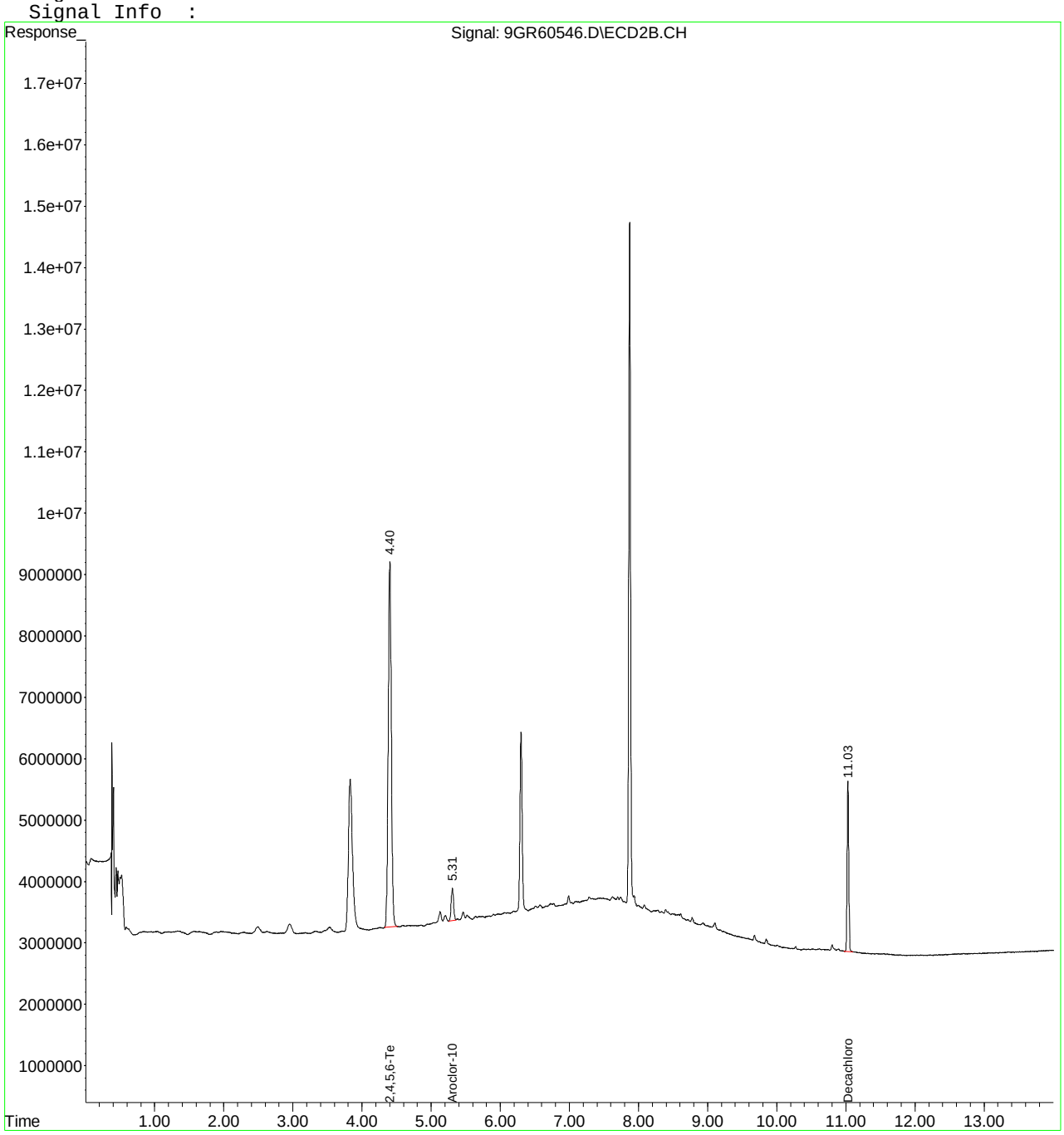
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Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\022311\9GR60546.D Vial: 6
Acq On : 23 Feb 2011 14:24 Operator: ECL
Sample : L11020492-02 Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 24 8:12 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



2.1.1.4 Standards Data

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57257.D Vial: 8
Acq On : 23 Jun 2010 16:15 Operator: ECL
Sample : WG335138-01 1254 ICAL 2000 PPB Inst : HP9
Misc : 1,1 STD38442 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:22:02 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:00 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.466	833792112	86.7371 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	433.69%#
7) S Decachlorobiphenyl	11.061	386709786	76.5300 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	382.65%#
Target Compounds			
2) L1 Aroclor-1254-1	7.334	162226094	1608.2629 UG/L
3) L1 Aroclor-1254-2	7.978	524725200	1556.7107 UG/L
4) L1 Aroclor-1254-3	8.433	773739915	1632.6078 UG/L
5) L1 Aroclor-1254-4	8.812	347199347	1527.1814 UG/L
6) L1 Aroclor-1254-5	9.146	682539754	1702.7172 UG/L
Sum Aroclor-1254-1		2490.4E6	8027.4800 UG/L
Average Aroclor-1254-1			1605.496 UG/L

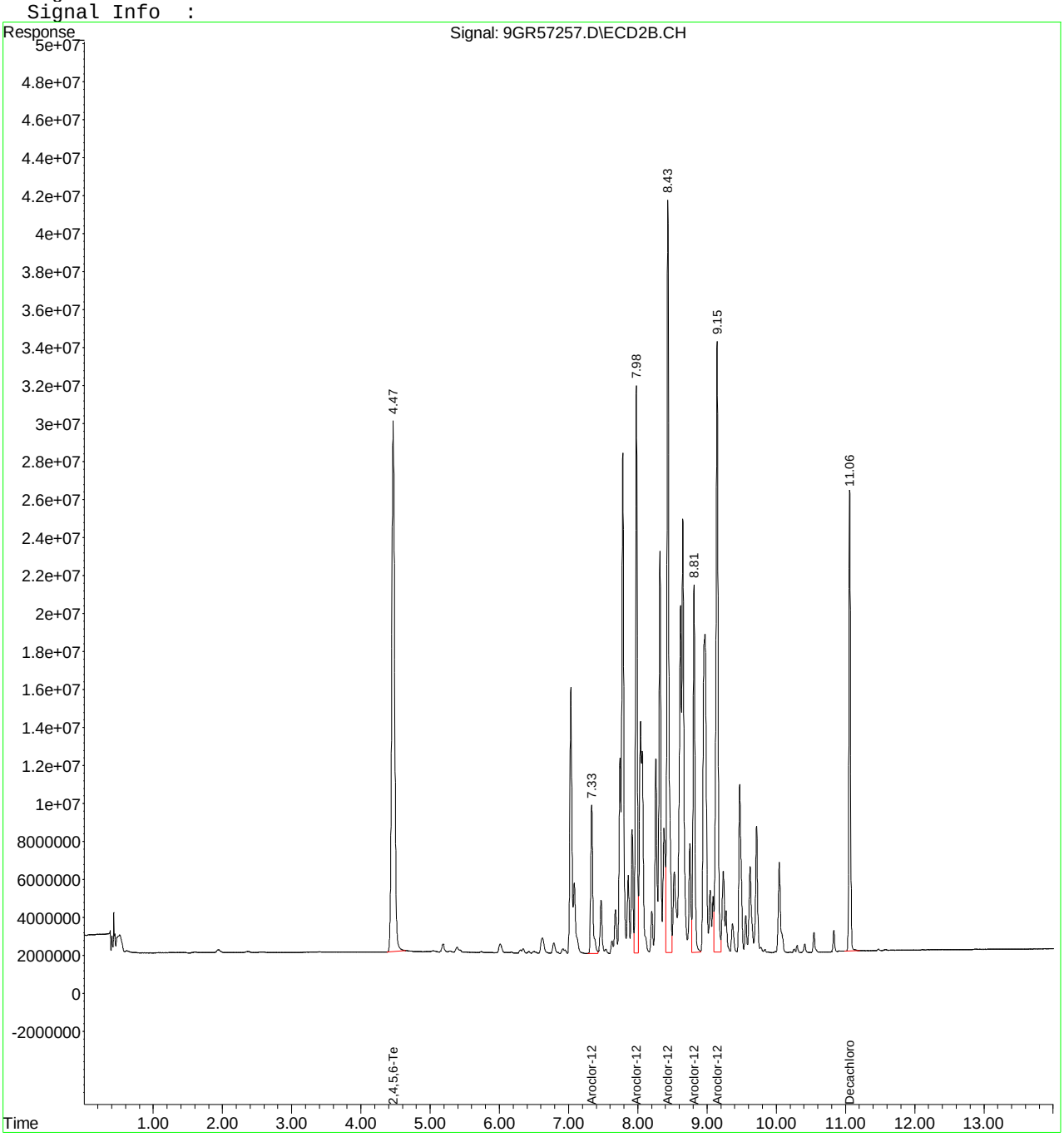
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9GR57257.D 1254R.M Thu Jun 24 08:23:40 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57257.D Vial: 8
Acq On : 23 Jun 2010 16:15 Operator: ECL
Sample : WG335138-01 1254 ICAL 2000 PPB Inst : HP9
Misc : 1,1 STD38442 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:22 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:00 2010
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57258.D Vial: 9
Acq On : 23 Jun 2010 16:33 Operator: ECL
Sample : WG335138-02 1254 ICAL 1000 PPB Inst : HP9
Misc : 1,1 STD38442 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:22:15 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:13 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.465	452771858	47.1133 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	235.57%#
7) S Decachlorobiphenyl	11.066	213312925	42.2521 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	211.26%#
Target Compounds			
2) L1 Aroclor-1254-1	7.332	90871252	904.5762 UG/L
3) L1 Aroclor-1254-2	7.977	291267584	864.1099 UG/L
4) L1 Aroclor-1254-3	8.432	418730523	883.5353 UG/L
5) L1 Aroclor-1254-4	8.812	193641333	851.7712 UG/L
6) L1 Aroclor-1254-5	9.146	367181747	916.0130 UG/L
Sum Aroclor-1254-1		1361.7E6	4420.0057 UG/L
Average Aroclor-1254-1			884.001 UG/L

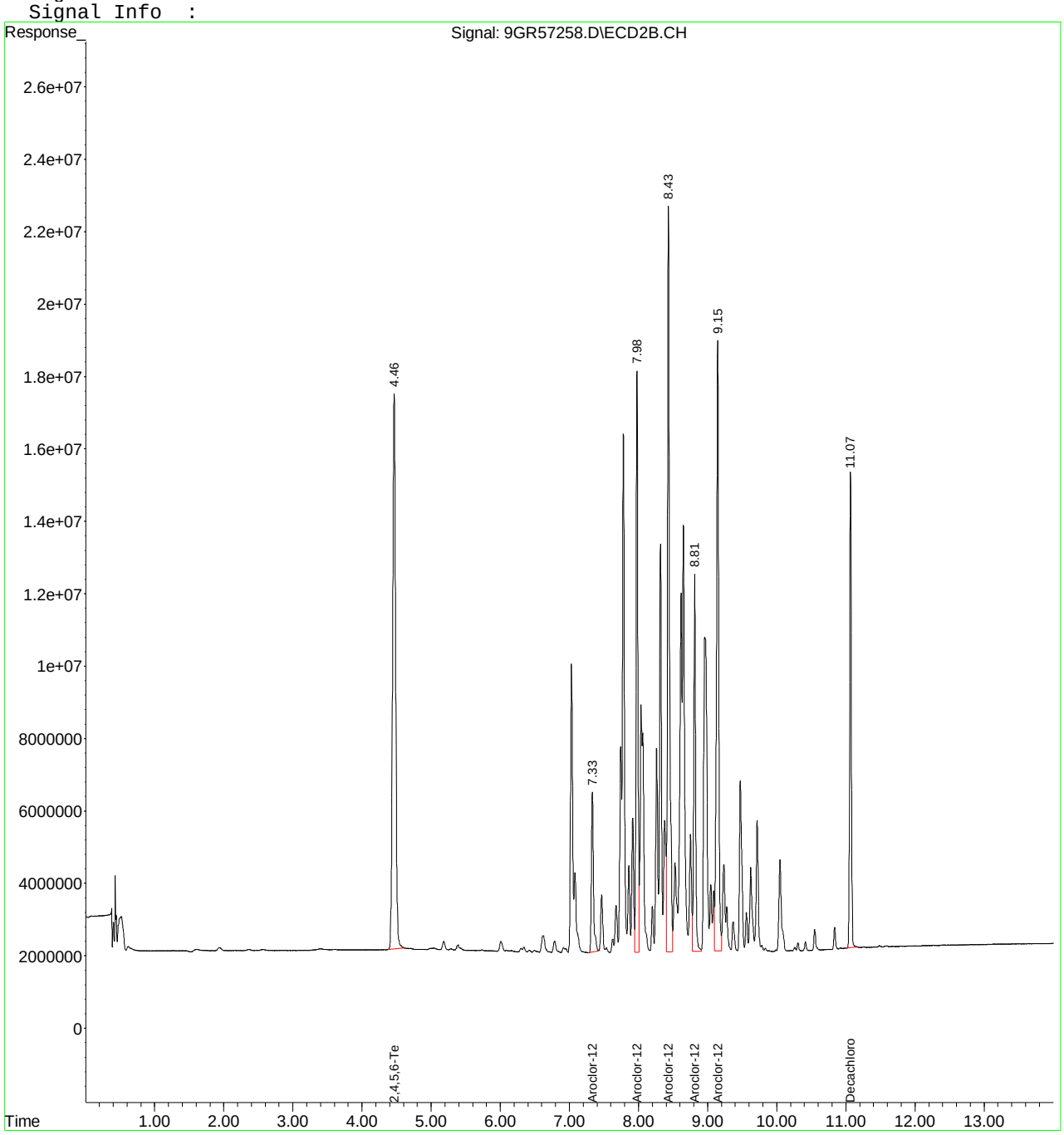
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9GR57258.D 1254R.M Thu Jun 24 08:23:41 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57258.D Vial: 9
Acq On : 23 Jun 2010 16:33 Operator: ECL
Sample : WG335138-02 1254 ICAL 1000 PPB Inst : HP9
Misc : 1,1 STD38442 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:22 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:13 2010
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57259.D Vial: 10
Acq On : 23 Jun 2010 16:51 Operator: ECL
Sample : WG335138-03 1254 ICAL 500 PPB Inst : HP9
Misc : 1,1 STD38442 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:22:29 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:27 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.482	227077852	23.6474 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	118.24%
7) S Decachlorobiphenyl	11.058	117675696	23.3323 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	116.66%
Target Compounds			
2) L1 Aroclor-1254-1	7.338	49628416	495.9531 UG/L
3) L1 Aroclor-1254-2	7.980	156885134	465.4898 UG/L
4) L1 Aroclor-1254-3	8.434	224815214	474.4054 UG/L
5) L1 Aroclor-1254-4	8.812	106497655	468.5177 UG/L
6) L1 Aroclor-1254-5	9.145	197086780	491.6891 UG/L
Sum Aroclor-1254-1		734.9E6	2396.0551 UG/L
Average Aroclor-1254-1			479.211 UG/L

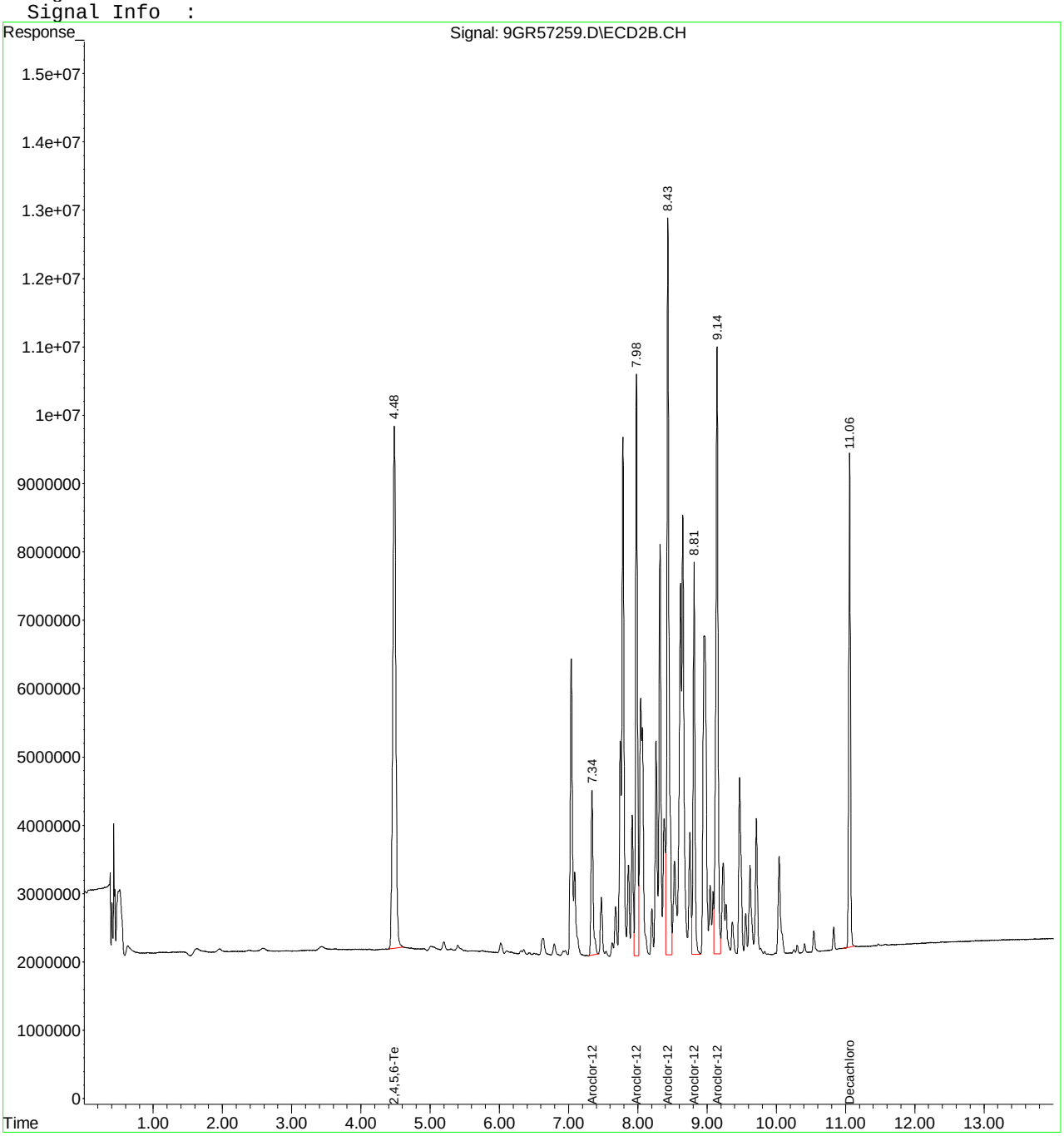
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Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57259.D Vial: 10
Acq On : 23 Jun 2010 16:51 Operator: ECL
Sample : WG335138-03 1254 ICAL 500 PPB Inst : HP9
Misc : 1,1 STD38442 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:22 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:27 2010
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57260.D Vial: 11
Acq On : 23 Jun 2010 17:09 Operator: ECL
Sample : WG335138-04 1254 ICAL 250 PPB Inst : HP9
Misc : 1,1 STD38442 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:22:41 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:40 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.464	117618672	12.2574 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery = 61.29%	
7) S Decachlorobiphenyl	11.062	62864227	12.4757 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery = 62.38%	
Target Compounds			
2) L1 Aroclor-1254-1	7.328	26185404	262.4121 UG/L
3) L1 Aroclor-1254-2	7.972	82590761	245.5232 UG/L
4) L1 Aroclor-1254-3	8.427	115430055	243.7867 UG/L
5) L1 Aroclor-1254-4	8.806	56031778	247.3057 UG/L
6) L1 Aroclor-1254-5	9.141	93657661	236.7524 UG/L
Sum Aroclor-1254-1		373.9E6	1235.7801 UG/L
Average Aroclor-1254-1			247.156 UG/L

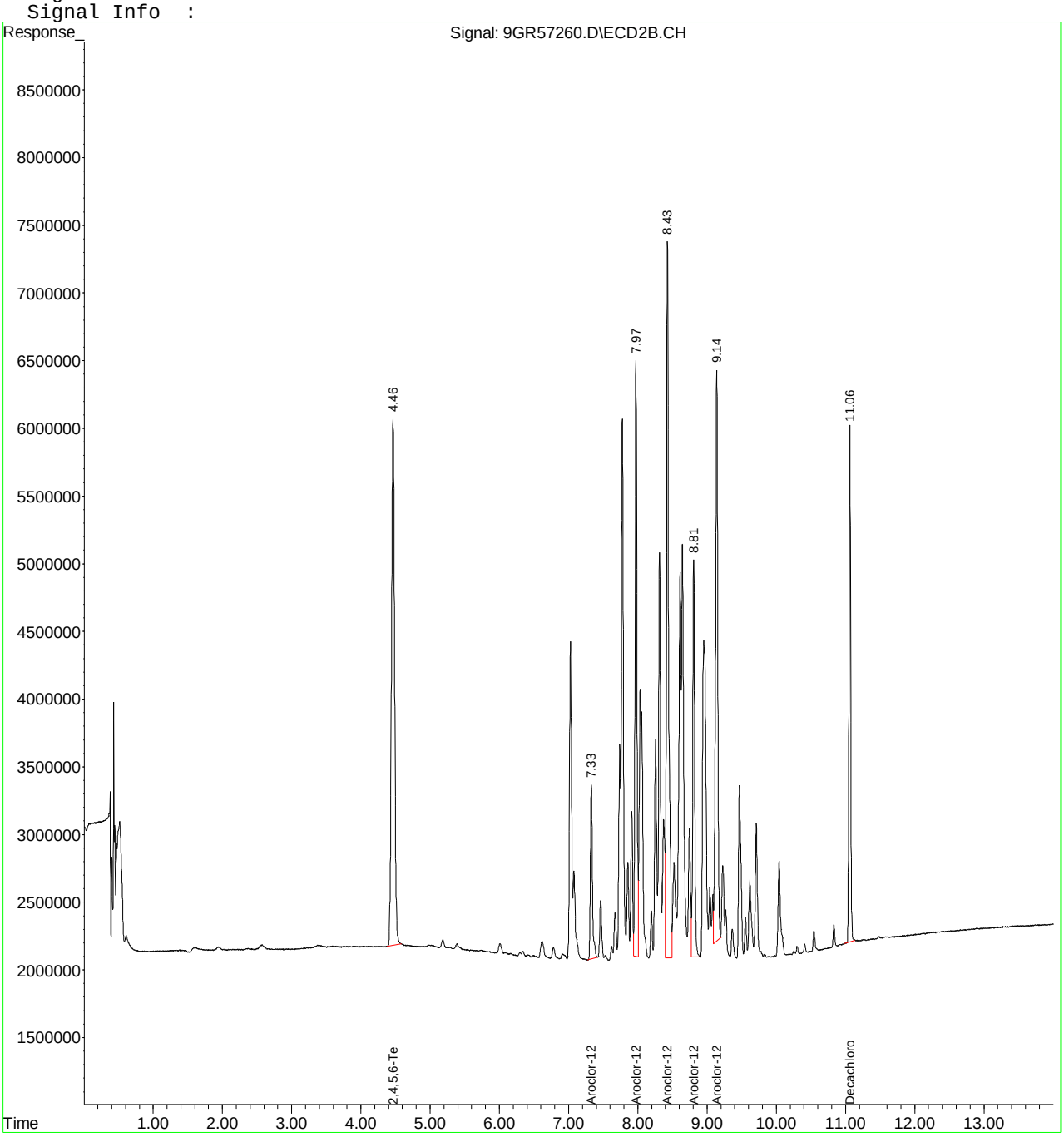
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9GR57260.D 1254R.M Thu Jun 24 08:23:42 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57260.D Vial: 11
Acq On : 23 Jun 2010 17:09 Operator: ECL
Sample : WG335138-04 1254 ICAL 250 PPB Inst : HP9
Misc : 1,1 STD38442 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:22 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:40 2010
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57261.D Vial: 12
Acq On : 23 Jun 2010 17:27 Operator: ECL
Sample : WG335138-05 1254 ICAL 100 PPB Inst : HP9
Misc : 1,1 STD38442 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:22:54 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:52 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.467	52178356	5.4377 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	27.19%#
7) S Decachlorobiphenyl	11.055	29562368	5.8668 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	29.33%#
Target Compounds			
2) L1 Aroclor-1254-1	7.329	11055604	110.7917 UG/L
3) L1 Aroclor-1254-2	7.973	39045582	116.0735 UG/L
4) L1 Aroclor-1254-3	8.427	53550885	113.0988 UG/L
5) L1 Aroclor-1254-4	8.806	26364199	116.3628 UG/L
6) L1 Aroclor-1254-5	9.140	43062704	108.8560 UG/L
Sum Aroclor-1254-1		173.1E6	565.1827 UG/L
Average Aroclor-1254-1			113.037 UG/L

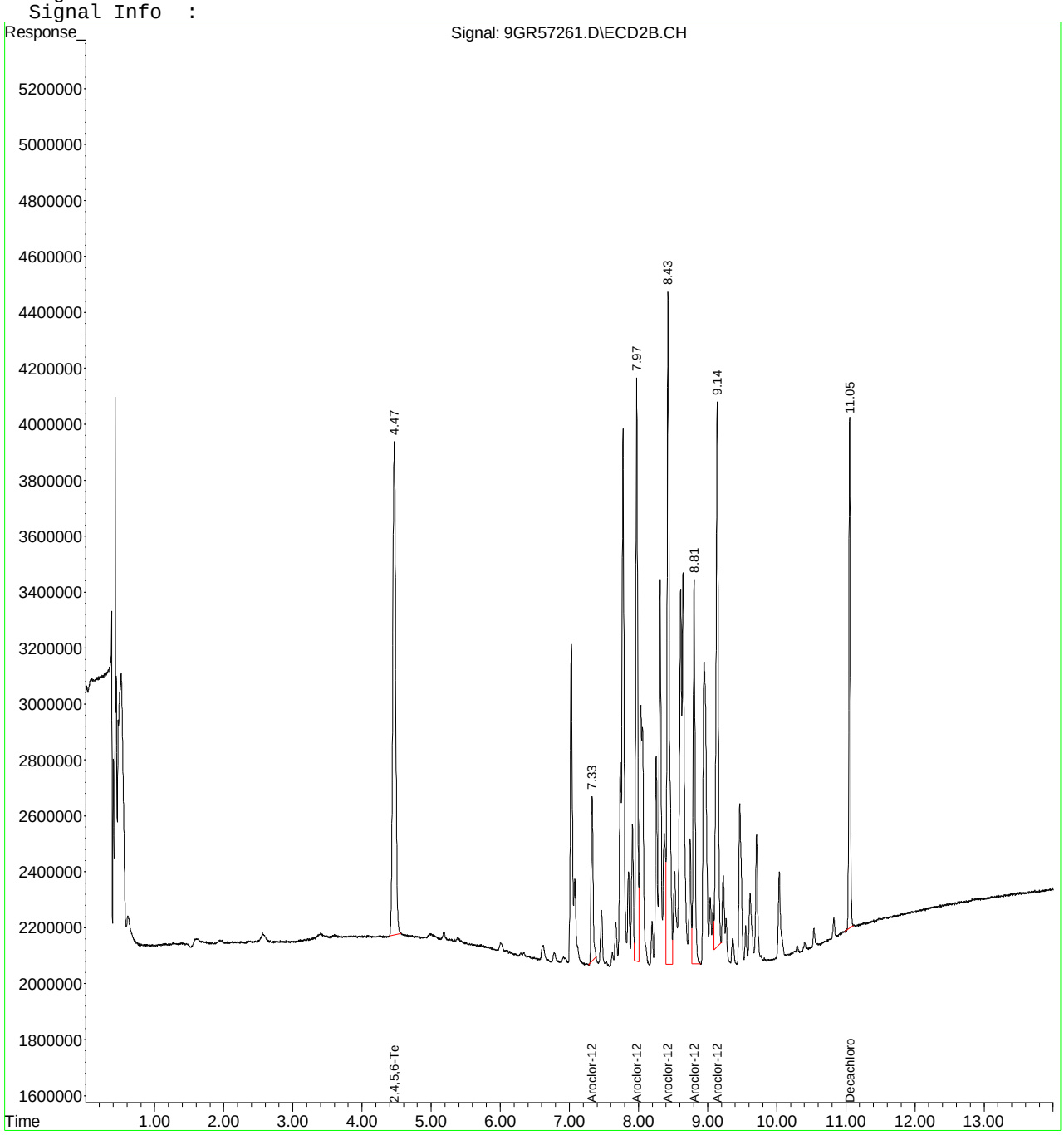
(f)=RT Delta > 1/2 Window (m)=manual int.
9GR57261.D 1254R.M Thu Jun 24 08:23:43 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57261.D Vial: 12
Acq On : 23 Jun 2010 17:27 Operator: ECL
Sample : WG335138-05 1254 ICAL 100 PPB Inst : HP9
Misc : 1,1 STD38442 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:22 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:52 2010
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57262.D Vial: 13
Acq On : 23 Jun 2010 17:45 Operator: ECL
Sample : WG335138-06 1254 ICAL 50 PPB Inst : HP9
Misc : 1,1 STD38442 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:23:13 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:52 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.464	28131993	2.9317 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	14.66%#
7) S Decachlorobiphenyl	11.059	16128763	3.2008 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	16.00%#
Target Compounds			
2) L1 Aroclor-1254-1	7.330	5609259	56.2121 UG/L
3) L1 Aroclor-1254-2	7.974	21505072	63.9296 UG/L
4) L1 Aroclor-1254-3	8.428	29423357	62.1417 UG/L
5) L1 Aroclor-1254-4	8.807	14570408	64.3089 UG/L
6) L1 Aroclor-1254-5	9.141	23283850	58.8580 UG/L
Sum Aroclor-1254-1		94391948	305.4505 UG/L
Average Aroclor-1254-1			61.090 UG/L

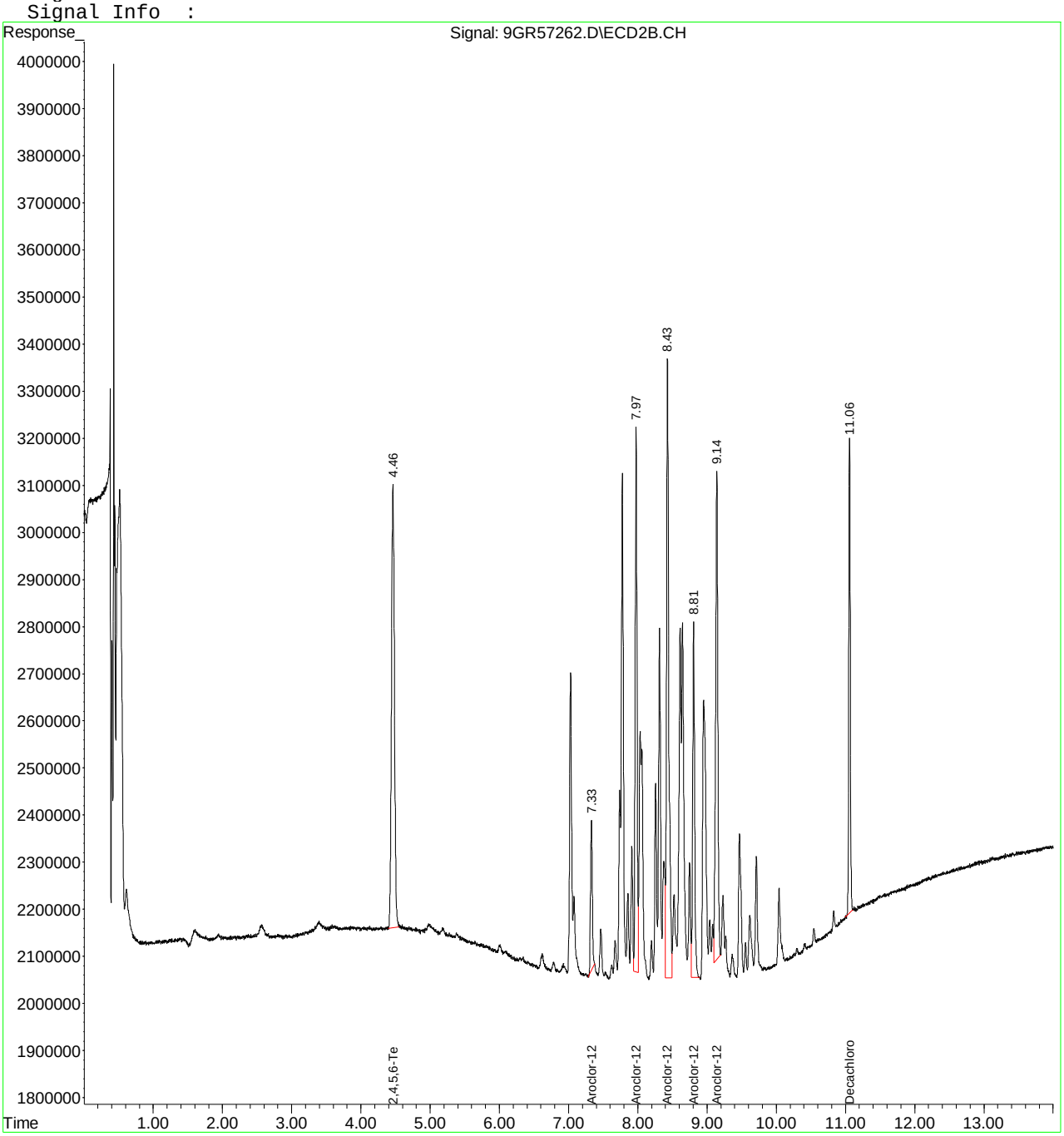
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57262.D Vial: 13
Acq On : 23 Jun 2010 17:45 Operator: ECL
Sample : WG335138-06 1254 ICAL 50 PPB Inst : HP9
Misc : 1,1 STD38442 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:23 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:52 2010
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57263.D Vial: 14
Acq On : 23 Jun 2010 18:03 Operator: ECL
Sample : WG335138-07 1254 ALT 500 PPB Inst : HP9
Misc : 1,1 STD38446 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:23:18 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:52 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.000	0	N.D. UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	0.00%#
7) S Decachlorobiphenyl	0.000	0	N.D. UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	0.00%#
Target Compounds			
2) L1 Aroclor-1254-1	7.321	57462882	575.8535 UG/L
3) L1 Aroclor-1254-2	7.965	161000162	478.6162 UG/L
4) L1 Aroclor-1254-3	8.419	227285427	480.0238 UG/L
5) L1 Aroclor-1254-4	8.799	99683749	439.9710 UG/L
6) L1 Aroclor-1254-5	9.132	188190605	475.7174 UG/L
Sum Aroclor-1254-1		733.6E6	2450.1818 UG/L
Average Aroclor-1254-1			490.036 UG/L

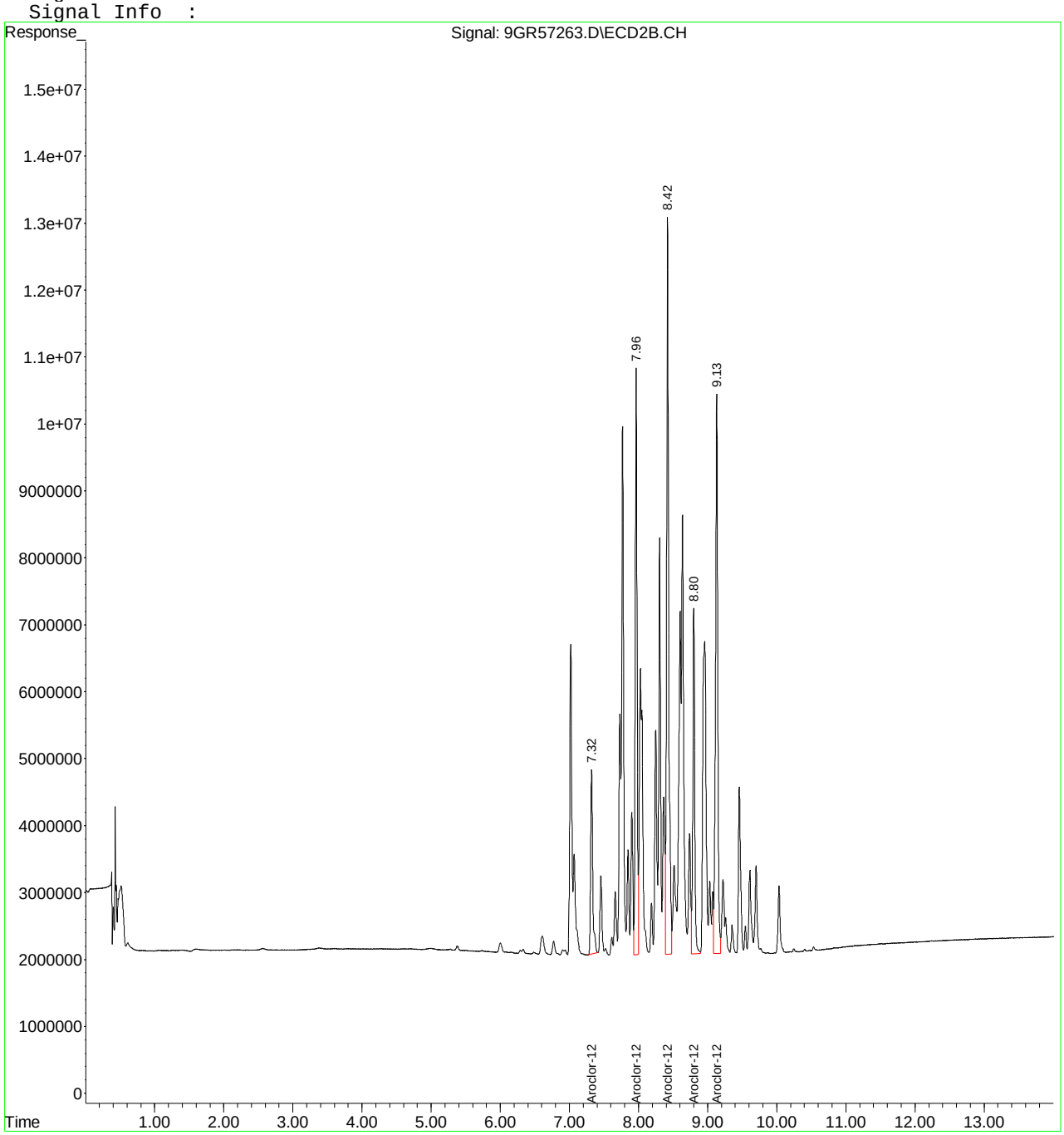
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9GR57263.D 1254R.M Thu Jun 24 08:23:44 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57263.D Vial: 14
Acq On : 23 Jun 2010 18:03 Operator: ECL
Sample : WG335138-07 1254 ALT 500 PPB Inst : HP9
Misc : 1,1 STD38446 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:23 2010 Quant Results File: 1254R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1254R.M (Chemstation Integrator)
Title : 8082 CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:22:52 2010
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Response Factor Report HP9

Method : C:\MSDCHEM\1\METHODS\1248SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:43:22 2010

Calibration Files
= = 500 =9GR57264.D
= =

		Compound	500	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro-M	9.282	9.282#E6	0.00
2)	L1	Aroclor-1248-1	1.529	1.529#E5	0.00
3)	L1	Aroclor-1248-2	2.206	2.206#E5	0.00
4)	L1	Aroclor-1248-3	2.596	2.596#E5	0.00
5)	L1	Aroclor-1248-4	3.598	3.598#E5	0.00
6)	L1	Aroclor-1248-5	1.024	1.024#E5	0.00
7)	S	Decachlorobiphenyl	4.706	4.706#E6	0.00

#) = Out of Range

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57264.D Vial: 15
Acq On : 23 Jun 2010 18:21 Operator: ECL
Sample : 1248 500 PPB Inst : HP9
Misc : 1,1 STD38443 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:43:24 2010 Quant Results File: 1248SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1248SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:43:22 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.456	232047397	25.0000 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery = 125.00%	
7) S Decachlorobiphenyl	11.055	117650931	25.0000 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery = 125.00%	
Target Compounds			
2) L1 Aroclor-1248-1	6.000	76434693	500.0000 UG/L
3) L1 Aroclor-1248-2	7.023	110277085	500.0000 UG/L
4) L1 Aroclor-1248-3	7.323	129821103	500.0000 UG/L
5) L1 Aroclor-1248-4	8.015	179922553	500.0000 UG/L
6) L1 Aroclor-1248-5	8.640	51212967	500.0000 UG/L
Sum Aroclor-1248-1		547.7E6	2500.0000 UG/L
Average Aroclor-1248-1			500.000 UG/L

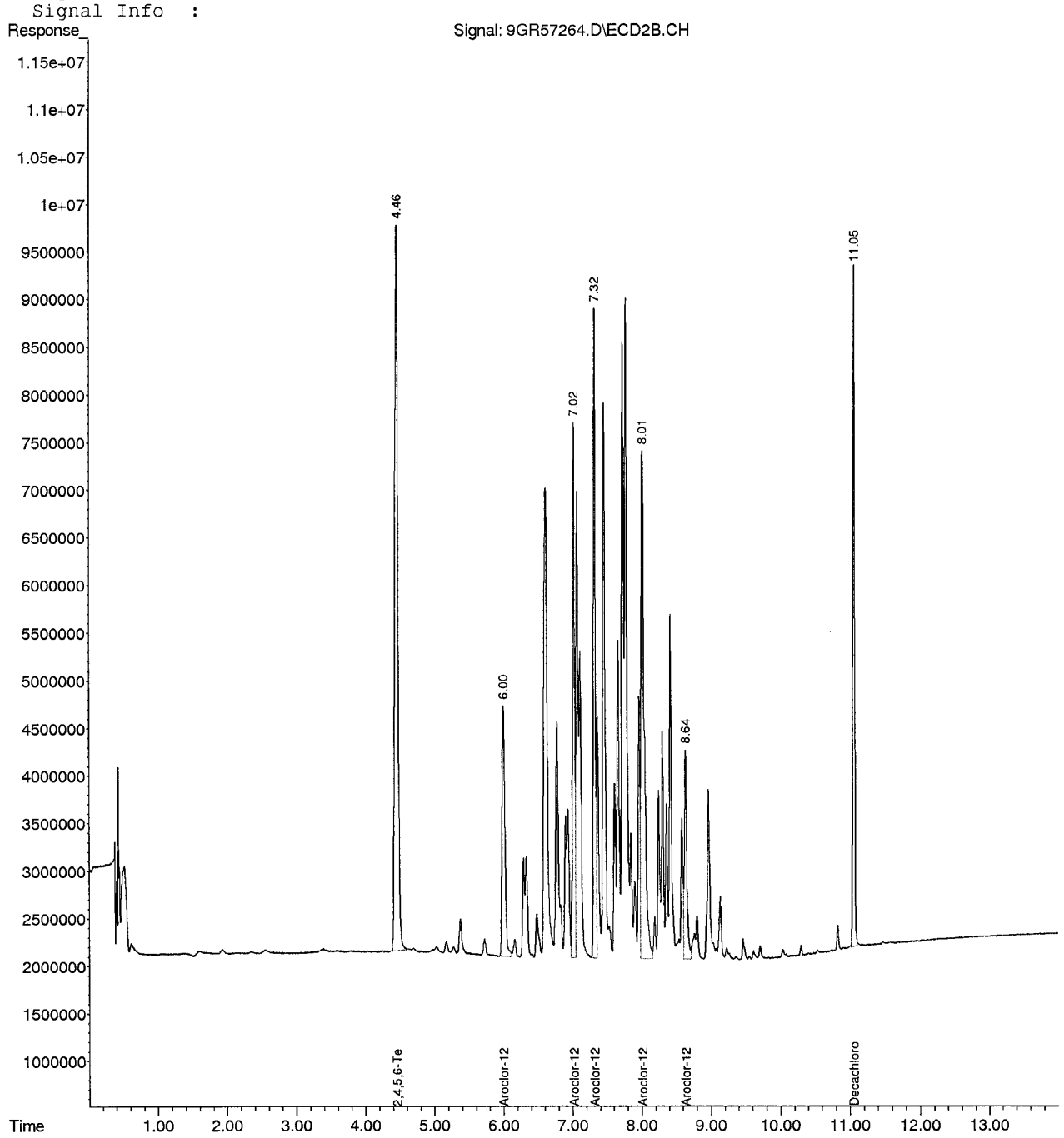
(f)=RT Delta > 1/2 Window (m)=manual int.
9GR57264.D 12[illegible] 24 08:43:48 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57264.D Vial: 15
Acq On : 23 Jun 2010 18:21 Operator: ECL
Sample : 1248 500 PPB Inst : HP9
Misc : 1,1 STD38443 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:43 2010 Quant Results File: 1248SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1248SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:43:22 2010
Response via : Single Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\062310\9GR57265.D Vial: 16
Acq On : 23 Jun 2010 18:39 Operator: ECL
Sample : 1248 ALT 500 PPB Inst : HP9
Misc : 1,1 STD37194 Multiplr: 1.00
IntFile : events.e

Method : C:\MSDCHEM\1\METHODS\1248SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:43:22 2010
Response via : Single Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1248-1	500.000	519.268	-3.9	104	0.00
3	L1	Aroclor-1248-2	500.000	519.557	-3.9	104	0.00
4	L1	Aroclor-1248-3	500.000	520.157	-4.0	104	0.00
5	L1	Aroclor-1248-4	500.000	518.871	-3.8	104	0.00
6	L1	Aroclor-1248-5	500.000	515.429	-3.1	103	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
9GR57265.D 1248SR.M Thu Jun 24 08:43:54 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57265.D Vial: 16
Acq On : 23 Jun 2010 18:39 Operator: ECL
Sample : 1248 ALT 500 PPB Inst : HP9
Misc : 1,1 STD37194 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:43:33 2010 Quant Results File: 1248SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1248SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:43:22 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.000	0	N.D. UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	0.00%#
7) S Decachlorobiphenyl	0.000	0	N.D. UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	0.00%#
Target Compounds			
2) L1 Aroclor-1248-1	5.998	79380119	519.2676 UG/L
3) L1 Aroclor-1248-2	7.021	114590510	519.5572 UG/L
4) L1 Aroclor-1248-3	7.322	135054734	520.1571 UG/L
5) L1 Aroclor-1248-4	8.013	186713194	518.8710 UG/L
6) L1 Aroclor-1248-5	8.639	52793343	515.4295 UG/L
Sum Aroclor-1248-1		568.5E6	2593.2824 UG/L
Average Aroclor-1248-1			518.656 UG/L

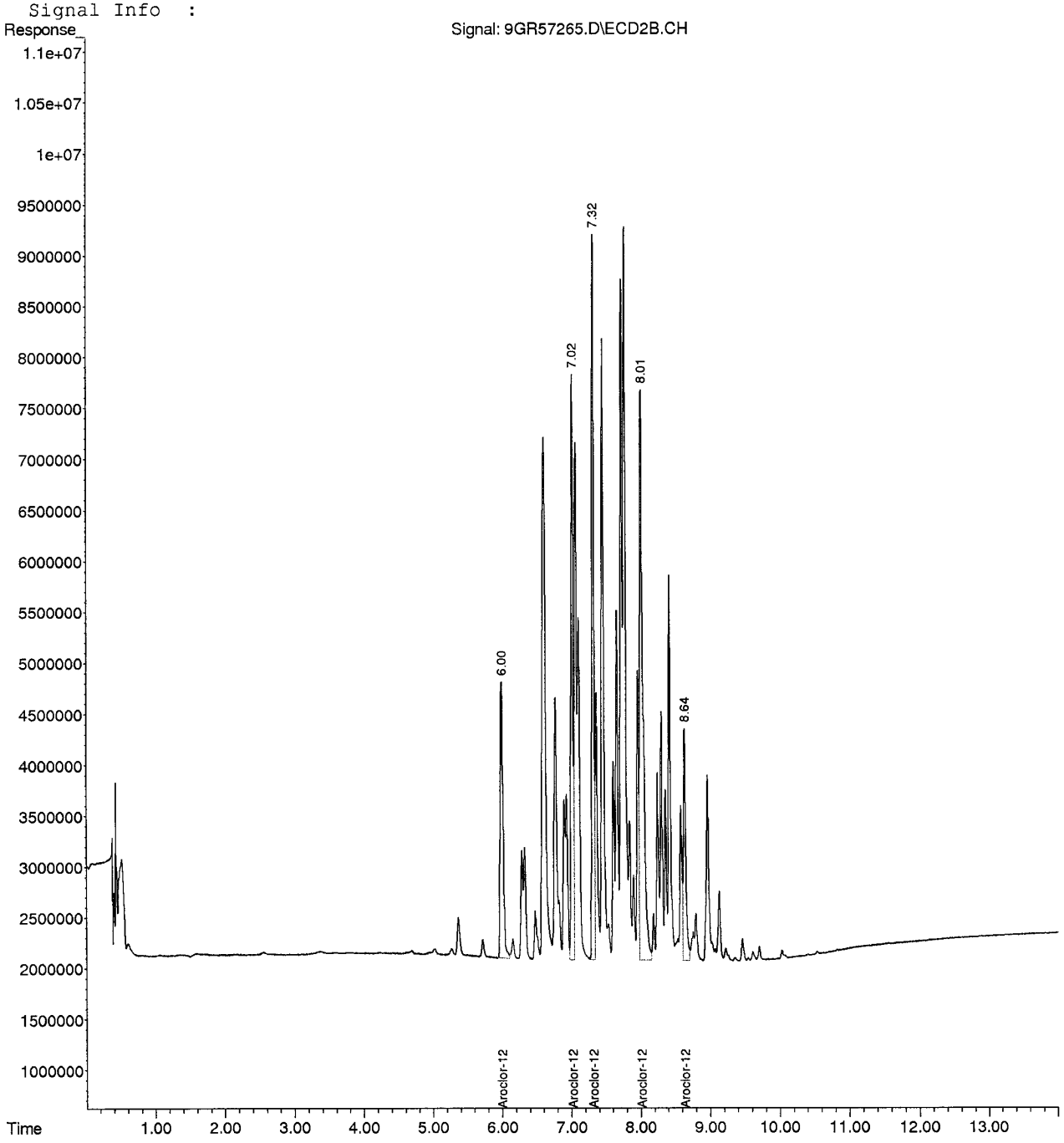
(f)=RT Delta > 1/2 Window (m)=manual int.
9GR57265.D 12 [redacted] 24 08:43:57 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57265.D Vial: 16
Acq On : 23 Jun 2010 18:39 Operator: ECL
Sample : 1248 ALT 500 PPB Inst : HP9
Misc : 1,1 STD37194 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:43 2010 Quant Results File: 1248SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1248SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:43:22 2010
Response via : Single Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Response Factor Report HP9

Method : C:\MSDCHEM\1\METHODS\1242SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:44:36 2010

Calibration Files
= = 500 =9GR57266.D
= =

		Compound	500	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro-M	9.686	9.686#E6	0.00
2)	L1	Aroclor-1242-1	1.612	1.612#E5	0.00
3)	L1	Aroclor-1242-2	2.942	2.942#E5	0.00
4)	L1	Aroclor-1242-3	5.448	5.448#E5	0.00
5)	L1	Aroclor-1242-4	2.408	2.408#E5	0.00
6)	L1	Aroclor-1242-5	1.966	1.966#E5	0.00
7)	S	Decachlorobiphenyl	4.441	4.441#E6	0.00

#) = Out of Range
1242SR.M Thu Jun 24 08:44:51 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57266.D Vial: 17
Acq On : 23 Jun 2010 18:57 Operator: ECL
Sample : 1242 500 PPB Inst : HP9
Misc : 1,1 STD38444 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:44:38 2010 Quant Results File: 1242SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1242SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:44:36 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.448	242146107	25.0000 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery = 125.00%	
7) S Decachlorobiphenyl	11.050	111014232	25.0000 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery = 125.00%	
Target Compounds			
2) L1 Aroclor-1242-1	5.370	80589077	500.0000 UG/L
3) L1 Aroclor-1242-2	5.996	147119409	500.0000 UG/L
4) L1 Aroclor-1242-3	6.609	272396293	500.0000 UG/L
5) L1 Aroclor-1242-4	6.776	120406694	500.0000 UG/L
6) L1 Aroclor-1242-5	7.452	98306412	500.0000 UG/L
Sum Aroclor-1242-1		718.8E6	2500.0000 UG/L
Average Aroclor-1242-1			500.000 UG/L

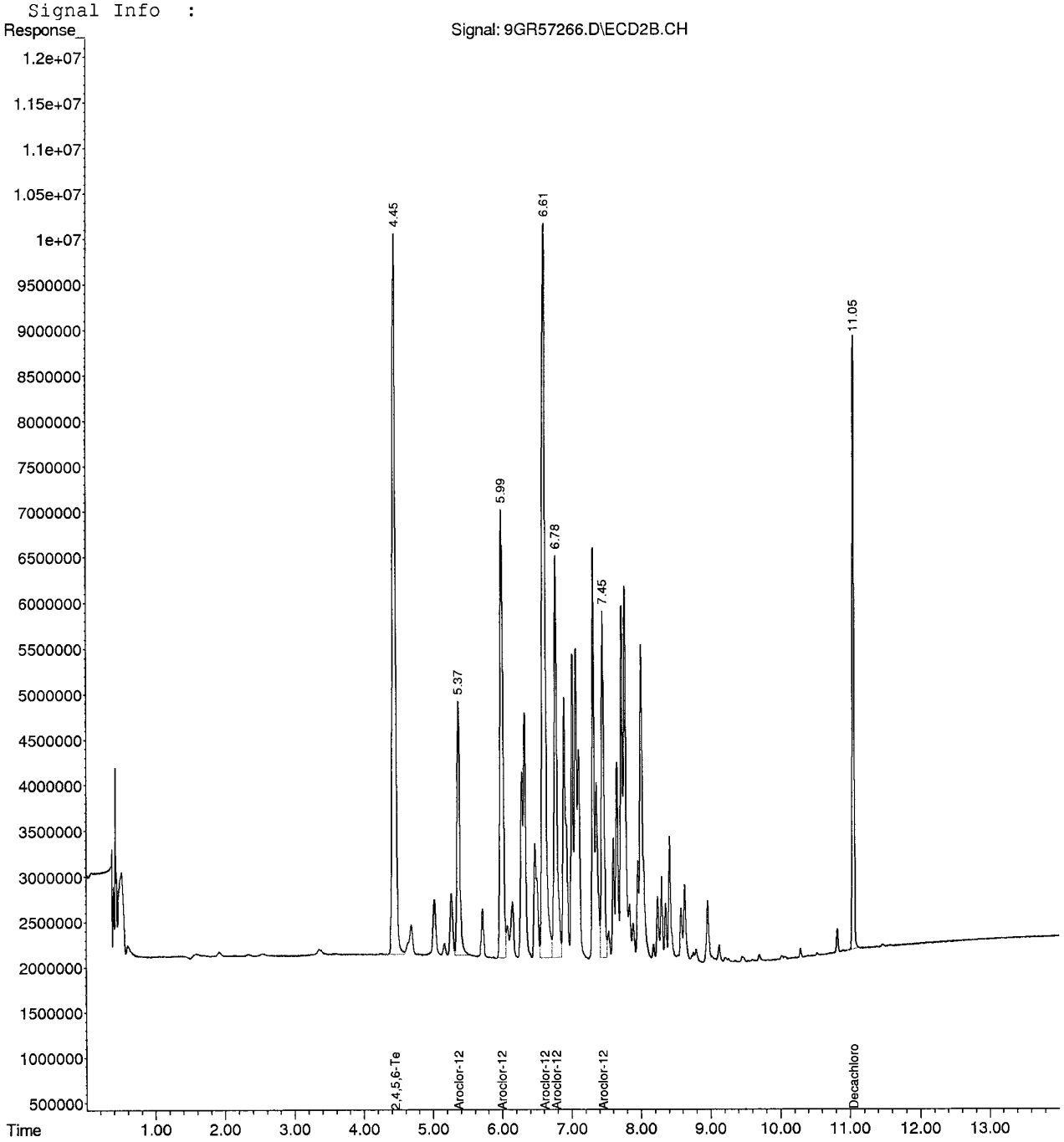
(f)=RT Delta > 1/2 Window (m)=manual int.
9GR57266.D 12 [redacted] 24 08:44:55 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57266.D Vial: 17
Acq On : 23 Jun 2010 18:57 Operator: ECL
Sample : 1242 500 PPB Inst : HP9
Misc : 1,1 STD38444 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:44 2010 Quant Results File: 1242SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1242SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:44:36 2010
Response via : Single Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\062310\9GR57267.D Vial: 18
Acq On : 23 Jun 2010 19:15 Operator: ECL
Sample : 1242 ALT 500 PPB Inst : HP9
Misc : 1,1 STD38447 Multiplr: 1.00
IntFile : events.e

Method : C:\MSDCHEM\1\METHODS\1242SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:44:36 2010
Response via : Single Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1242-1	500.000	501.737	-0.3	100	0.00
3	L1	Aroclor-1242-2	500.000	510.673	-2.1	102	0.00
4	L1	Aroclor-1242-3	500.000	502.838	-0.6	101	0.00
5	L1	Aroclor-1242-4	500.000	506.533	-1.3	101	0.00
6	L1	Aroclor-1242-5	500.000	511.487	-2.3	102	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
9GR57267.D 1242SR.M Thu Jun 24 08:44:58 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57267.D Vial: 18
Acq On : 23 Jun 2010 19:15 Operator: ECL
Sample : 1242 ALT 500 PPB Inst : HP9
Misc : 1,1 STD38447 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:44:45 2010 Quant Results File: 1242SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1242SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:44:36 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.000	0	N.D. UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	0.00%#
7) S Decachlorobiphenyl	0.000	0	N.D. UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	0.00%#
Target Compounds			
2) L1 Aroclor-1242-1	5.372	80869032	501.7369 UG/L
3) L1 Aroclor-1242-2	5.998	150259967	510.6735 UG/L
4) L1 Aroclor-1242-3	6.612	273942320	502.8378 UG/L
5) L1 Aroclor-1242-4	6.780	121980027	506.5334 UG/L
6) L1 Aroclor-1242-5	7.455	100564830	511.4866 UG/L
Sum Aroclor-1242-1		727.6E6	2533.2683 UG/L
Average Aroclor-1242-1			506.654 UG/L

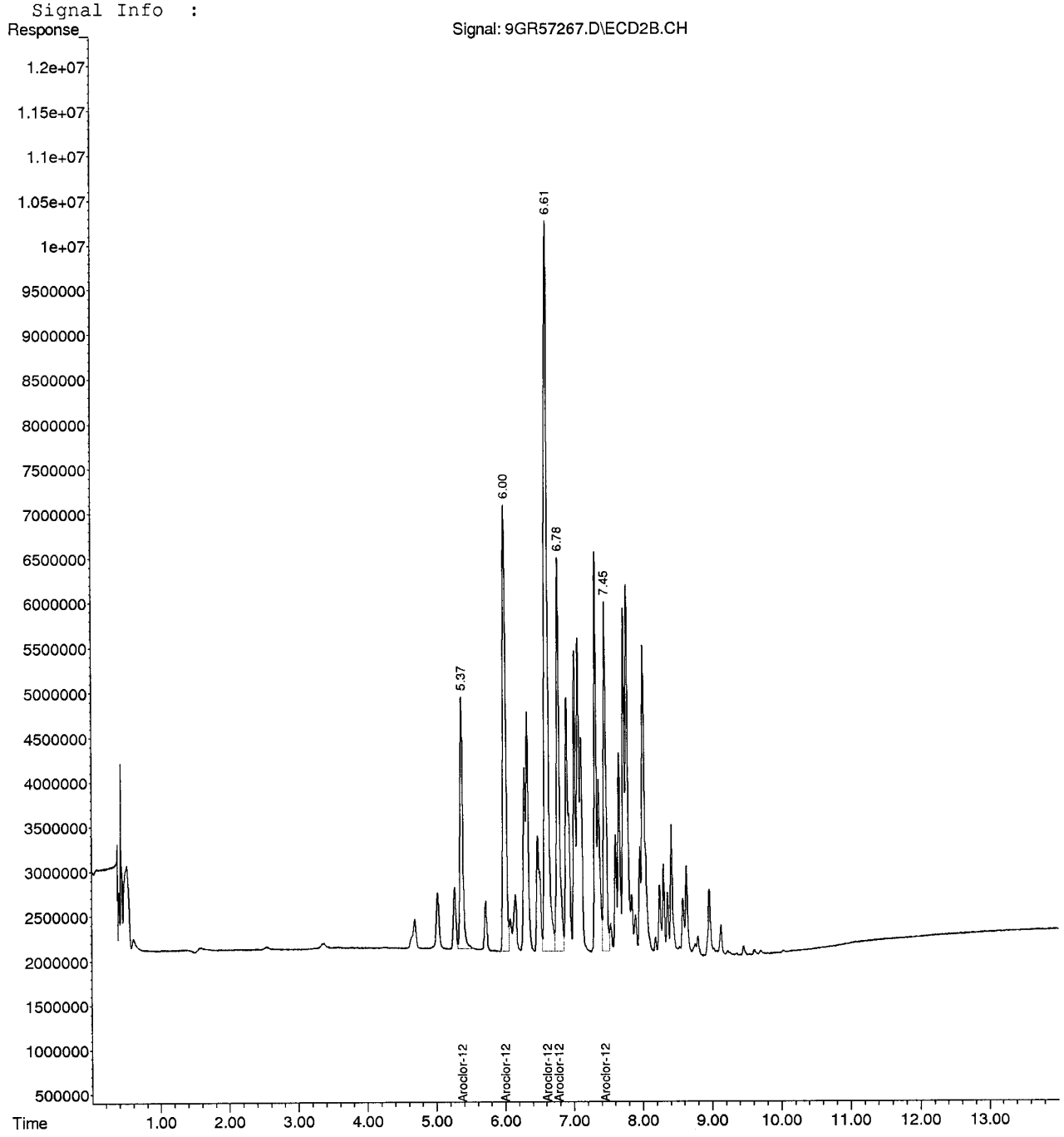
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9GR57267.D 1[illegible] 24 08:45:04 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57267.D Vial: 18
Acq On : 23 Jun 2010 19:15 Operator: ECL
Sample : 1242 ALT 500 PPB Inst : HP9
Misc : 1,1 STD38447 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:44 2010 Quant Results File: 1242SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1242SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:44:36 2010
Response via : Single Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Response Factor Report HP9

Method : C:\MSDCHEM\1\METHODS\1232SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:45:38 2010

Calibration Files
= = 500 =9GR57268.D
= =

		Compound	500	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro-M	1.036	1.036#E7	0.00
2)	L1	Aroclor-1232-1	7.049	7.049#E4	0.00
3)	L1	Aroclor-1232-2	1.959	1.959#E5	0.00
4)	L1	Aroclor-1232-3	1.855	1.855#E5	0.00
5)	L1	Aroclor-1232-4	3.169	3.169#E5	0.00
6)	L1	Aroclor-1232-5	1.189	1.189#E5	0.00
7)	S	Decachlorobiphenyl	5.012	5.012#E6	0.00

#) = Out of Range
1232SR.M Thu Jun 24 08:46:36 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57268.D Vial: 19
Acq On : 23 Jun 2010 19:33 Operator: ECL
Sample : 1232 500 PPB Inst : HP9
Misc : 1,1 STD37192 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:45:40 2010 Quant Results File: 1232SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1232SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:45:38 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.443	259043971	25.0000 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	125.00%
7) S Decachlorobiphenyl	11.050	125305687	25.0000 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	125.00%
Target Compounds			
2) L1 Aroclor-1232-1	5.022	35245493	500.0000 UG/L
3) L1 Aroclor-1232-2	5.367	97949184	500.0000 UG/L
4) L1 Aroclor-1232-3	5.992	92772102	500.0000 UG/L
5) L1 Aroclor-1232-4	6.606	158461938	500.0000 UG/L
6) L1 Aroclor-1232-5	7.449	59433761	500.0000 UG/L
Sum Aroclor-1232-1		443.9E6	2500.0000 UG/L
Average Aroclor-1232-1			500.000 UG/L

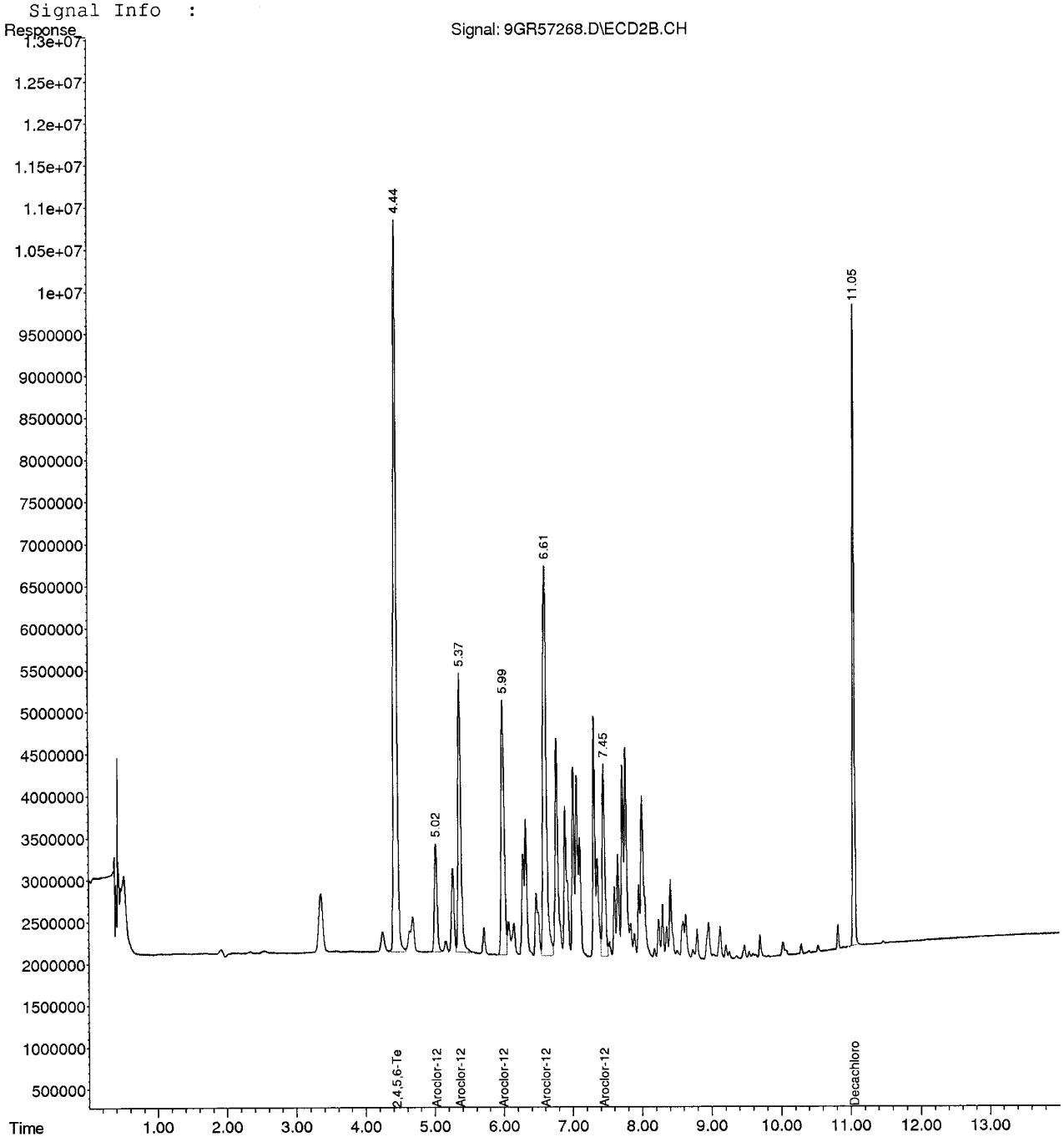
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9GR57268.D 12[illegible] 24 08:46:39 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57268.D Vial: 19
Acq On : 23 Jun 2010 19:33 Operator: ECL
Sample : 1232 500 PPB Inst : HP9
Misc : 1,1 STD37192 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:45 2010 Quant Results File: 1232SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1232SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:45:38 2010
Response via : Single Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\062310\9GR57269.D Vial: 20
Acq On : 23 Jun 2010 19:51 Operator: ECL
Sample : 1232 ALT 500 PPB Inst : HP9
Misc : 1,1 STD37195 Multiplr: 1.00
IntFile : events.e

Method : C:\MSDCHEM\1\METHODS\1232SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:45:38 2010
Response via : Single Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1232-1	500.000	637.013	-27.4#	127	0.00
3	L1	Aroclor-1232-2	500.000	603.899	-20.8#	121	0.00
4	L1	Aroclor-1232-3	500.000	514.568	-2.9	103	0.00
5	L1	Aroclor-1232-4	500.000	512.748	-2.5	103	0.00
6	L1	Aroclor-1232-5	500.000	451.347	9.7	90	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
9GR57269.D 1232SR.M Thu Jun 24 08:46:42 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57269.D Vial: 20
Acq On : 23 Jun 2010 19:51 Operator: ECL
Sample : 1232 ALT 500 PPB Inst : HP9
Misc : 1,1 STD37195 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:46:26 2010 Quant Results File: 1232SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1232SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:45:38 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.000	0	N.D. UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	0.00%#
7) S Decachlorobiphenyl	0.000	0	N.D. UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	0.00%#
Target Compounds			
2) L1 Aroclor-1232-1	5.023	44903664	637.0128 UG/L
3) L1 Aroclor-1232-2	5.370	118302886	603.8993 UG/L
4) L1 Aroclor-1232-3	5.995	95475189	514.5684 UG/L
5) L1 Aroclor-1232-4	6.609	162502175	512.7483 UG/L
6) L1 Aroclor-1232-5	7.452	53650536	451.3473 UG/L
Sum Aroclor-1232-1		474.8E6	2719.5762 UG/L
Average Aroclor-1232-1			543.915 UG/L

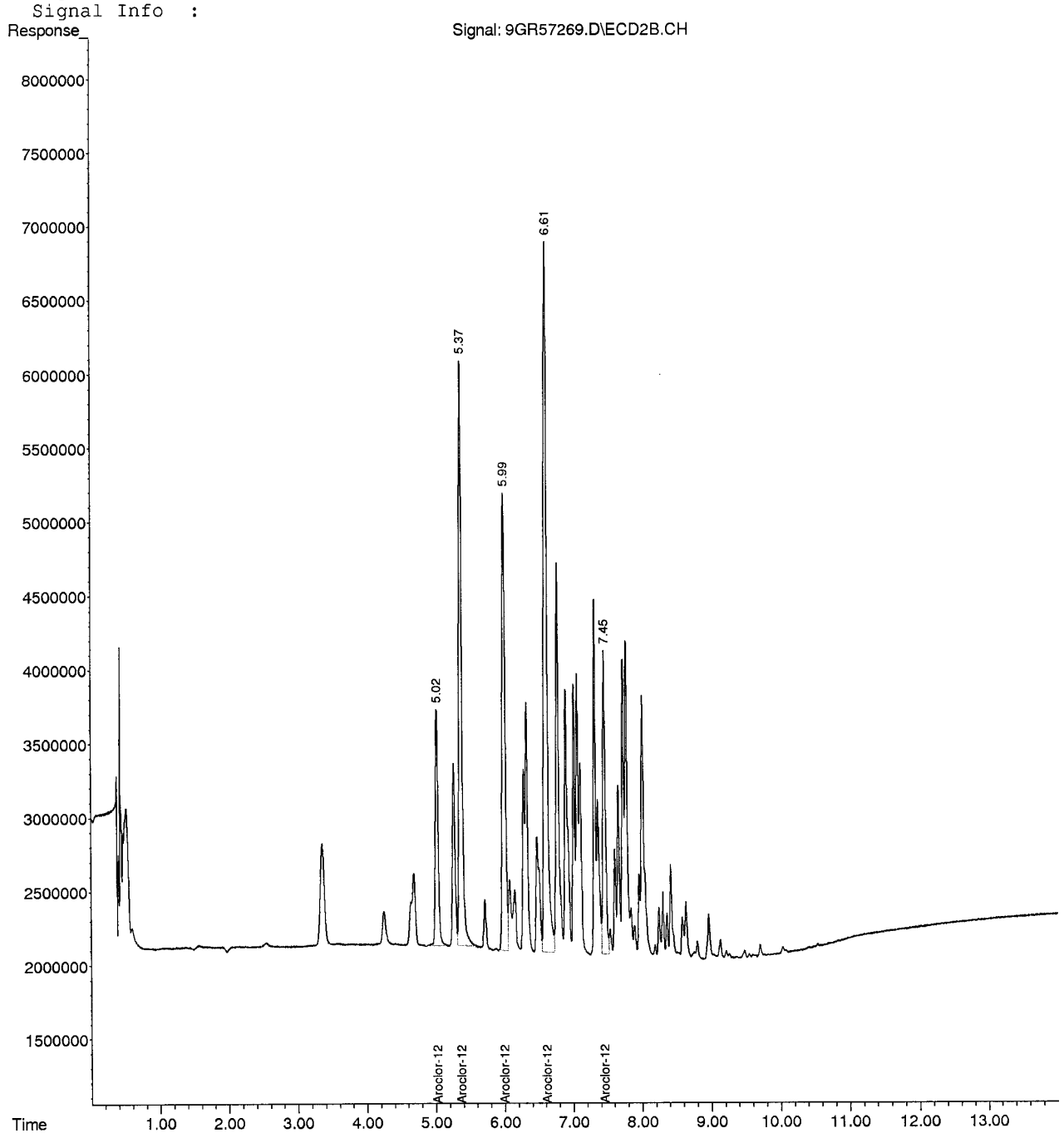
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9GR57269.D 12[redacted] 24 08:46:43 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57269.D Vial: 20
Acq On : 23 Jun 2010 19:51 Operator: ECL
Sample : 1232 ALT 500 PPB Inst : HP9
Misc : 1,1 STD37195 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:46 2010 Quant Results File: 1232SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1232SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:45:38 2010
Response via : Single Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



9GR57269.D 1232SR.M Thu Jun 24 08:46:44 2010 Page 2

Response Factor Report HP9

Method : C:\MSDCHEM\1\METHODS\1221SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:47:15 2010

Calibration Files
= = 500 =9GR57270.D
= =

		Compound	500	Avg	%RSD
1)	S	2,4,5,6-Tetrachloro-M	9.677	9.677#E6	0.00
2)	L1	Aroclor-1221-1	9.554	9.554#E4	0.00
3)	L1	Aroclor-1221-2	1.350	1.350#E5	0.00
4)	L1	Aroclor-1221-3	8.384	8.384#E4	0.00
5)	L1	Aroclor-1221-4	2.638	2.638#E5	0.00
6)	L1	Aroclor-1221-5	4.536	4.536#E4	0.00
7)	S	Decachlorobiphenyl	4.580	4.580#E6	0.00

#) = Out of Range
1221SR.M Thu Jun 24 08:47:31 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57270.D Vial: 21
Acq On : 23 Jun 2010 20:09 Operator: ECL
Sample : 1221 500 PPB Inst : HP9
Misc : 1,1 STD37193 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:47:18 2010 Quant Results File: 1221SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1221SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:47:15 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.448	241917977	25.0000 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	125.00%
7) S Decachlorobiphenyl	11.053	114496015	25.0000 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	125.00%
Target Compounds			
2) L1 Aroclor-1221-1	3.359	47768756	500.0000 UG/L
3) L1 Aroclor-1221-2	5.024	67500667	500.0000 UG/L
4) L1 Aroclor-1221-3	5.269	41918985	500.0000 UG/L
5) L1 Aroclor-1221-4	5.371	131875041	500.0000 UG/L
6) L1 Aroclor-1221-5	6.610	22678335	500.0000 UG/L
Sum Aroclor-1221-1		311.7E6	2500.0000 UG/L
Average Aroclor-1221-1			500.000 UG/L

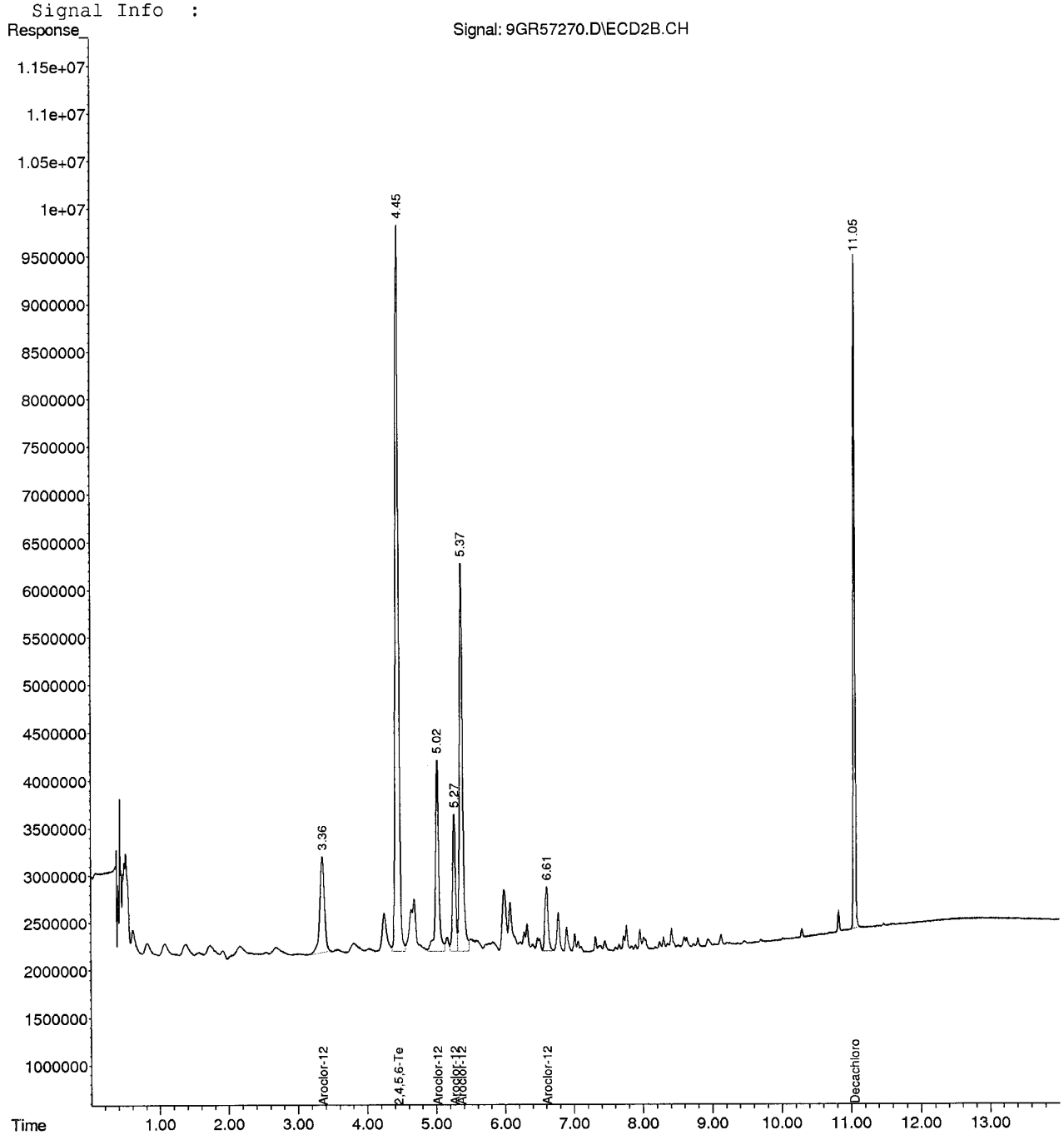
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9GR57270.D 12[illegible] 24 08:47:34 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57270.D Vial: 21
Acq On : 23 Jun 2010 20:09 Operator: ECL
Sample : 1221 500 PPB Inst : HP9
Misc : 1,1 STD37193 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:47 2010 Quant Results File: 1221SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1221SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:47:15 2010
Response via : Single Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\062310\9GR57271.D Vial: 22
Acq On : 23 Jun 2010 20:27 Operator: ECL
Sample : 1221 ALT 500 PPB Inst : HP9
Misc : 1,1 STD38445 Multiplr: 1.00
IntFile : events.e

Method : C:\MSDCHEM\1\METHODS\1221SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:47:15 2010
Response via : Single Level Calibration

Min. RRF : 15.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
2	L1	Aroclor-1221-1	500.000	446.357	10.7	89	0.00
3	L1	Aroclor-1221-2	500.000	448.996	10.2	90	0.00
4	L1	Aroclor-1221-3	500.000	463.020	7.4	93	0.00
5	L1	Aroclor-1221-4	500.000	500.909	-0.2	100	0.00
6	L1	Aroclor-1221-5	500.000	515.823	-3.2	103	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
9GR57271.D 1221SR.M Thu Jun 24 08:47:38 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57271.D Vial: 22
Acq On : 23 Jun 2010 20:27 Operator: ECL
Sample : 1221 ALT 500 PPB Inst : HP9
Misc : 1,1 STD38445 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 08:47:26 2010 Quant Results File: 1221SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1221SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:47:15 2010
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.000	0	N.D. UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	0.00%#
7) S Decachlorobiphenyl	0.000	0	N.D. UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	0.00%#
Target Compounds			
2) L1 Aroclor-1221-1	3.357	42643835	446.3570 UG/L
3) L1 Aroclor-1221-2	5.023	60615097	448.9963 UG/L
4) L1 Aroclor-1221-3	5.269	38818653	463.0199 UG/L
5) L1 Aroclor-1221-4	5.370	132114763	500.9089 UG/L
6) L1 Aroclor-1221-5	6.610	23396036	515.8235 UG/L
Sum Aroclor-1221-1		297.6E6	2375.1056 UG/L
Average Aroclor-1221-1			475.021 UG/L

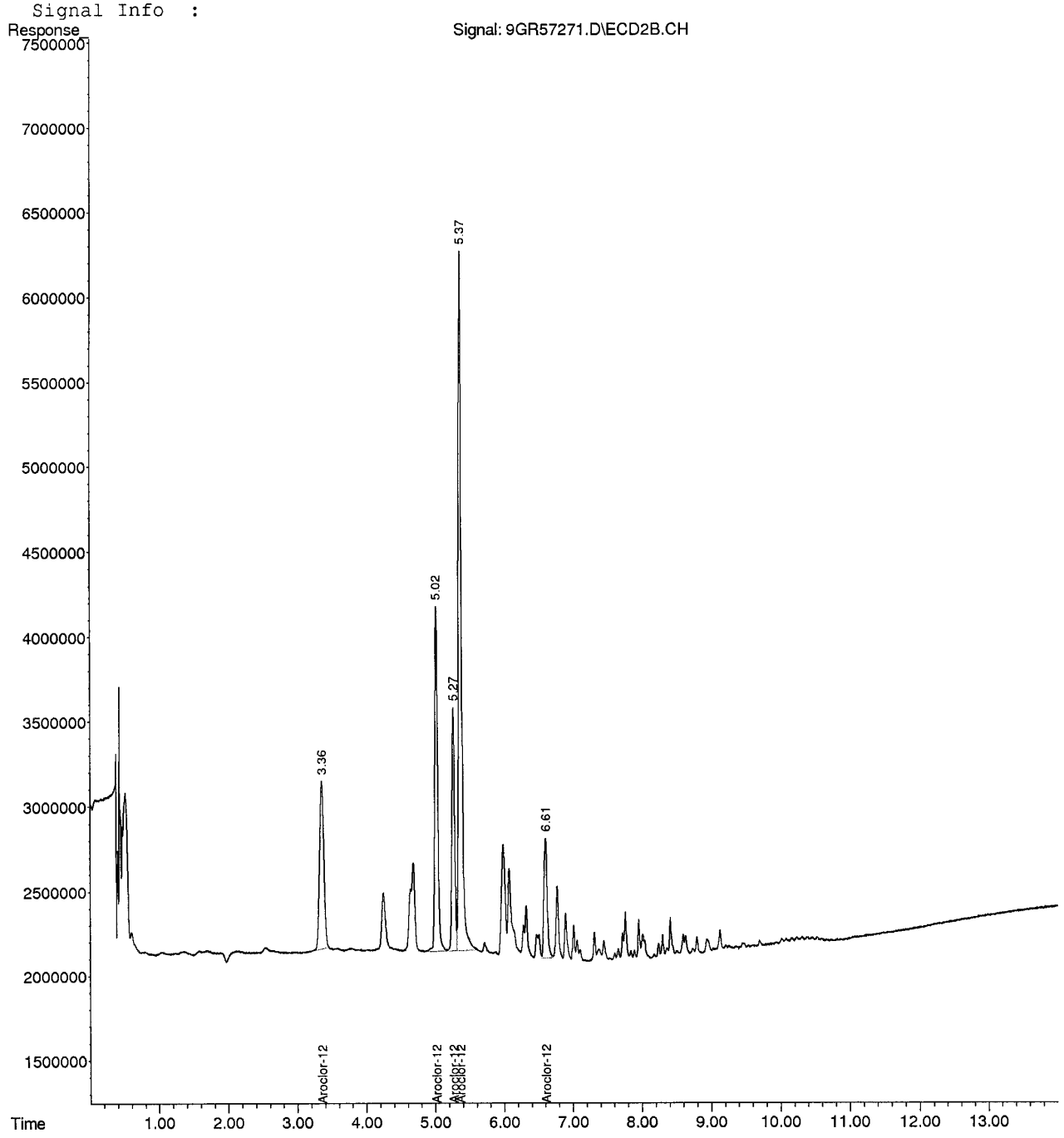
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9GR57271.D 12[redacted] 24 08:47:40 2010 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\062310\9GR57271.D Vial: 22
Acq On : 23 Jun 2010 20:27 Operator: ECL
Sample : 1221 ALT 500 PPB Inst : HP9
Misc : 1,1 STD38445 Multiplr: 1.00
IntFile : events.e
Quant Time: Jun 24 8:47 2010 Quant Results File: 1221SR.RES

Quant Method : C:\MSDCHEM\1\METHODS\1221SR.M (Chemstation Integrator)
Title : CALIBRATION June 23, 2010
Last Update : Thu Jun 24 08:47:15 2010
Response via : Single Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60435.D Vial: 2
Acq On : 18 Feb 2011 17:22 Operator: ECL
Sample : WG357030-01 1660 ICAL 2000 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03:15 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.395	1195542893	87.8834 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	439.42%#
12) S Decachlorobiphenyl	11.018	566326205	82.6991 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	413.50%#
Target Compounds			
2) L1 Aroclor-1016-1	5.323	391543818	1676.0227 UG/L
3) L1 Aroclor-1016-2	5.952	802504721	1624.3145 UG/L
4) L1 Aroclor-1016-3	6.568	1602571461	1766.8695 UG/L
5) L1 Aroclor-1016-4	6.735	703590091	1701.9895 UG/L
6) L1 Aroclor-1016-5	7.278	497813028	1755.4069 UG/L
Sum Aroclor-1016-1		3998.0E6	8524.6031 UG/L
Average Aroclor-1016-1			1704.921 UG/L
7) L2 Aroclor-1260-1	8.567	905444537	1713.9396 UG/L
8) L2 Aroclor-1260-2	8.763	1049174649	1771.0386 UG/L
9) L2 Aroclor-1260-3	9.447	671025651	1813.3286 UG/L
10) L2 Aroclor-1260-4	9.669	1408478880	1885.7755 UG/L
11) L2 Aroclor-1260-5	10.502	316287424	1829.3680 UG/L
Sum Aroclor-1260-1		4350.4E6	9013.4504 UG/L
Average Aroclor-1260-1			1802.690 UG/L

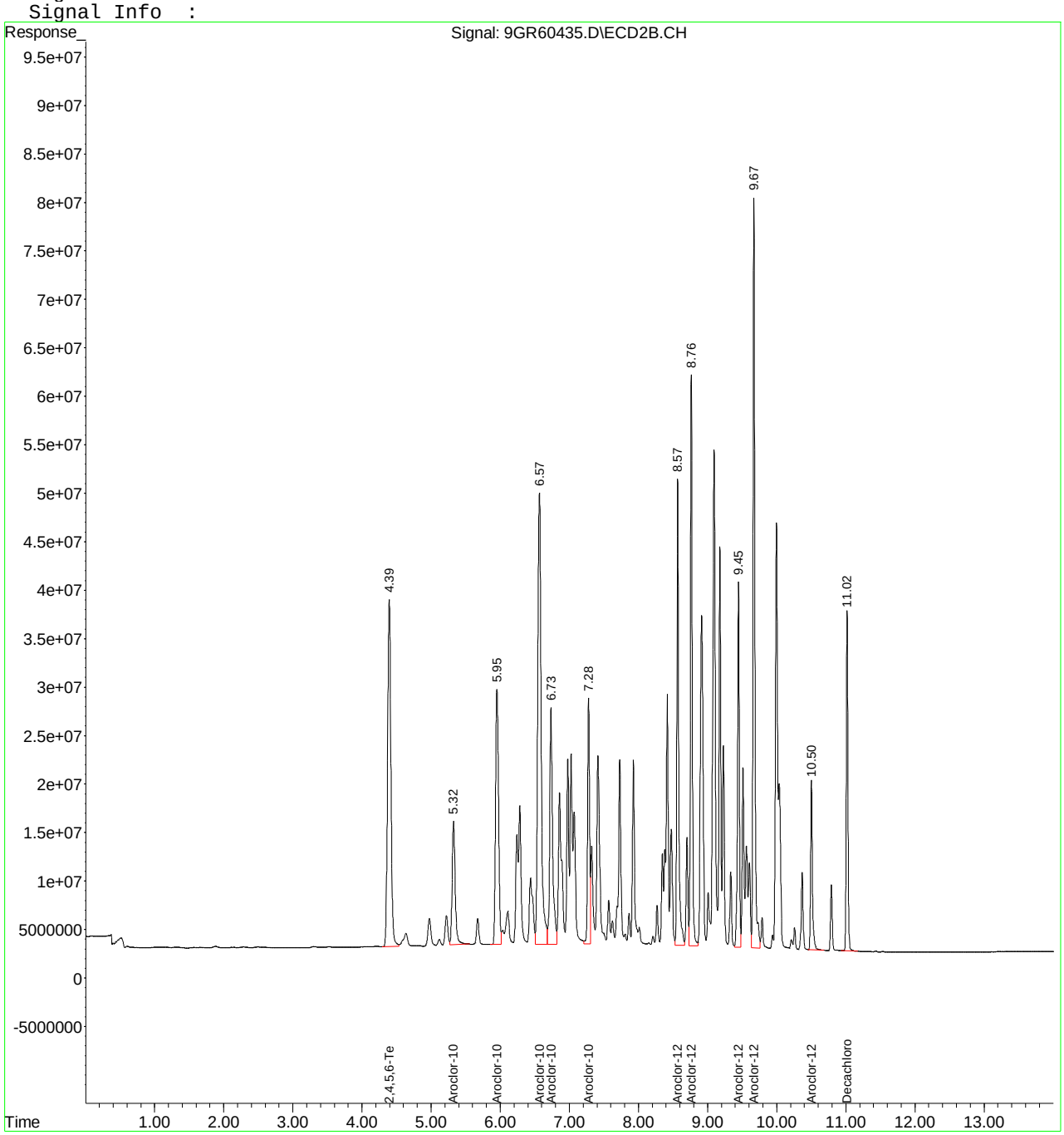
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9GR60435.D 1660R.M Sat Feb 19 12:04:12 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60435.D Vial: 2
Acq On : 18 Feb 2011 17:22 Operator: ECL
Sample : WG357030-01 1660 ICAL 2000 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60436.D Vial: 3
Acq On : 18 Feb 2011 17:39 Operator: ECL
Sample : WG357030-02 1660 ICAL 1000 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03:20 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.404	659324825	48.4664 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	242.33%#
12) S Decachlorobiphenyl	11.028	323617292	47.2569 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	236.28%#
Target Compounds			
2) L1 Aroclor-1016-1	5.332	227700571	974.6836 UG/L
3) L1 Aroclor-1016-2	5.961	464161119	939.4881 UG/L
4) L1 Aroclor-1016-3	6.578	918936772	1013.1476 UG/L
5) L1 Aroclor-1016-4	6.746	412690661	998.3017 UG/L
6) L1 Aroclor-1016-5	7.290	284673012	1003.8246 UG/L
Sum Aroclor-1016-1		2308.2E6	4929.4455 UG/L
Average Aroclor-1016-1			985.889 UG/L
7) L2 Aroclor-1260-1	8.578	514138531	973.2263 UG/L
8) L2 Aroclor-1260-2	8.774	592698151	1000.4924 UG/L
9) L2 Aroclor-1260-3	9.458	377842297	1021.0522 UG/L
10) L2 Aroclor-1260-4	9.680	784361371	1050.1609 UG/L
11) L2 Aroclor-1260-5	10.513	179602130	1038.7969 UG/L
Sum Aroclor-1260-1		2448.6E6	5083.7288 UG/L
Average Aroclor-1260-1			1016.746 UG/L

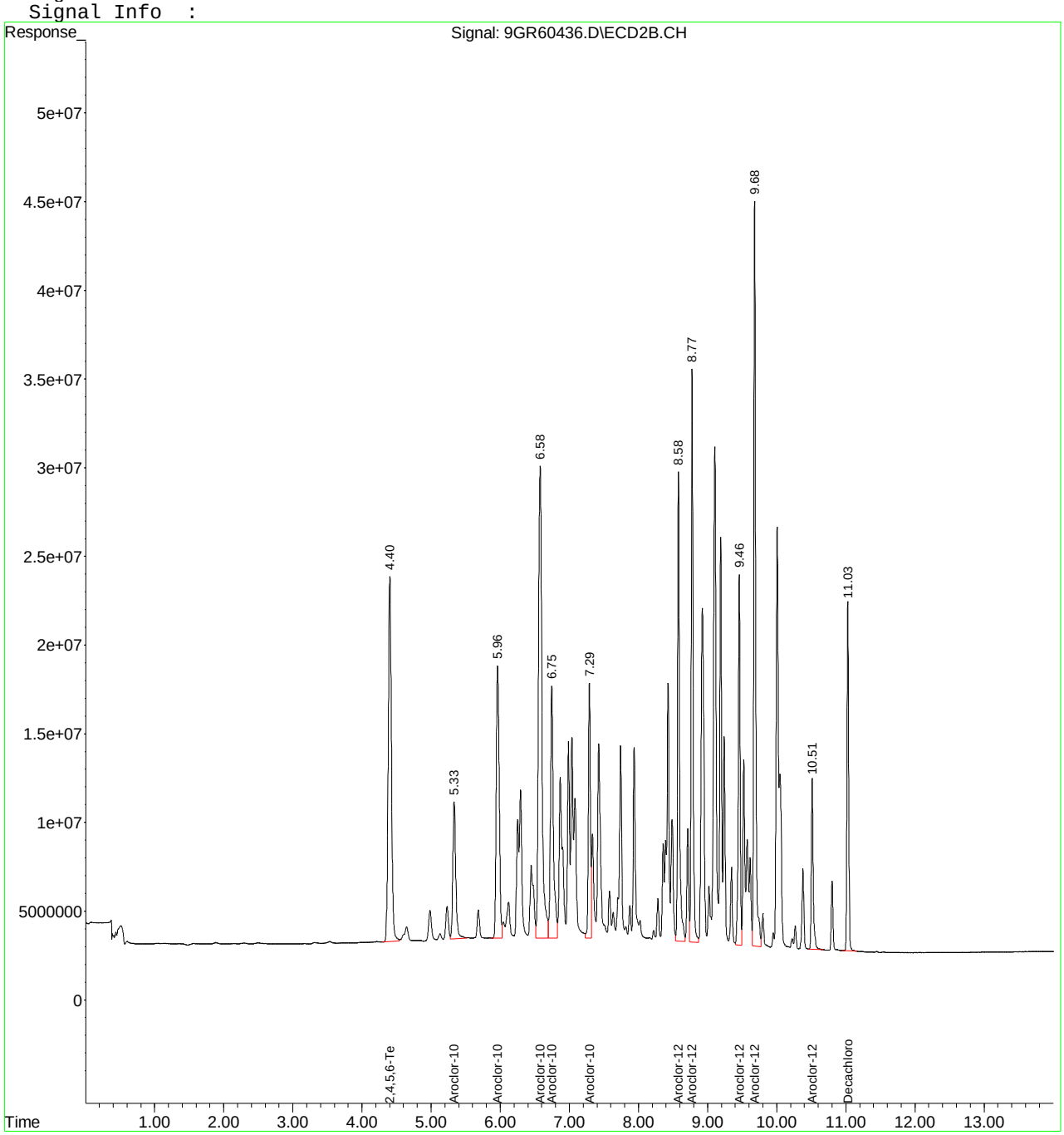
(f)=RT Delta > 1/2 Window (m)=manual int.
9GR60436.D 1660R.M Sat Feb 19 12:04:13 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60436.D Vial: 3
Acq On : 18 Feb 2011 17:39 Operator: ECL
Sample : WG357030-02 1660 ICAL 1000 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60437.D Vial: 4
Acq On : 18 Feb 2011 17:57 Operator: ECL
Sample : WG357030-03 1660 ICAL 500 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03:24 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.402	329113313	24.1929 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	120.96%
12) S Decachlorobiphenyl	11.022	165674207	24.1929 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	120.96%
Target Compounds			
2) L1 Aroclor-1016-1	5.329	113745189	486.8919 UG/L
3) L1 Aroclor-1016-2	5.957	237649882	481.0167 UG/L
4) L1 Aroclor-1016-3	6.574	455360787	502.0451 UG/L
5) L1 Aroclor-1016-4	6.741	214095627	517.8989 UG/L
6) L1 Aroclor-1016-5	7.284	143825322	507.1622 UG/L
Sum Aroclor-1016-1		1164.7E6	2495.0147 UG/L
Average Aroclor-1016-1			499.003 UG/L
7) L2 Aroclor-1260-1	8.572	252147157	477.2959 UG/L
8) L2 Aroclor-1260-2	8.769	285363329	481.7020 UG/L
9) L2 Aroclor-1260-3	9.452	181537976	490.5744 UG/L
10) L2 Aroclor-1260-4	9.674	370724156	496.3529 UG/L
11) L2 Aroclor-1260-5	10.507	87856968	508.1540 UG/L
Sum Aroclor-1260-1		1177.6E6	2454.0792 UG/L
Average Aroclor-1260-1			490.816 UG/L

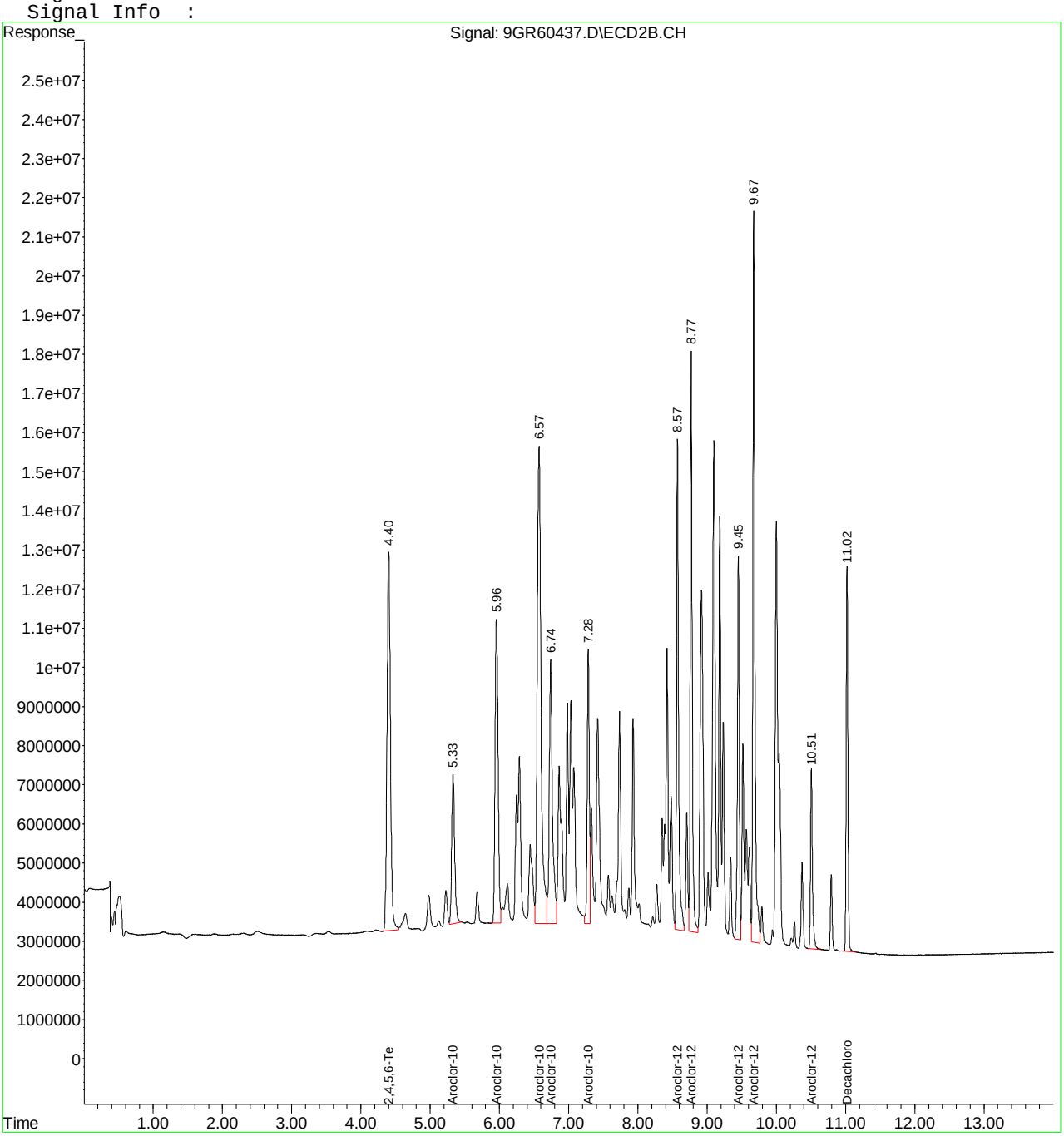
(f)=RT Delta > 1/2 Window (m)=manual int.
9GR60437.D 1660R.M Sat Feb 19 12:04:13 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60437.D Vial: 4
Acq On : 18 Feb 2011 17:57 Operator: ECL
Sample : WG357030-03 1660 ICAL 500 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60438.D Vial: 5
Acq On : 18 Feb 2011 18:15 Operator: ECL
Sample : WG357030-04 1660 ICAL 250 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03:29 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.404	171358622	12.5964 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery = 62.98%	
12) S Decachlorobiphenyl	11.025	85381848	12.4681 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery = 62.34%	
Target Compounds			
2) L1 Aroclor-1016-1	5.333	59338318	254.0006 UG/L
3) L1 Aroclor-1016-2	5.961	130743049	264.6312 UG/L
4) L1 Aroclor-1016-3	6.577	226620088	249.8535 UG/L
5) L1 Aroclor-1016-4	6.745	106332530	257.2192 UG/L
6) L1 Aroclor-1016-5	7.288	68869989	242.8519 UG/L
Sum Aroclor-1016-1		591.9E6	1268.5565 UG/L
Average Aroclor-1016-1			253.711 UG/L
7) L2 Aroclor-1260-1	8.575	128156240	242.5903 UG/L
8) L2 Aroclor-1260-2	8.772	143657393	242.4980 UG/L
9) L2 Aroclor-1260-3	9.455	89132117	240.8638 UG/L
10) L2 Aroclor-1260-4	9.678	182611078	244.4932 UG/L
11) L2 Aroclor-1260-5	10.510	42726536	247.1251 UG/L
Sum Aroclor-1260-1		586.3E6	1217.5705 UG/L
Average Aroclor-1260-1			243.514 UG/L

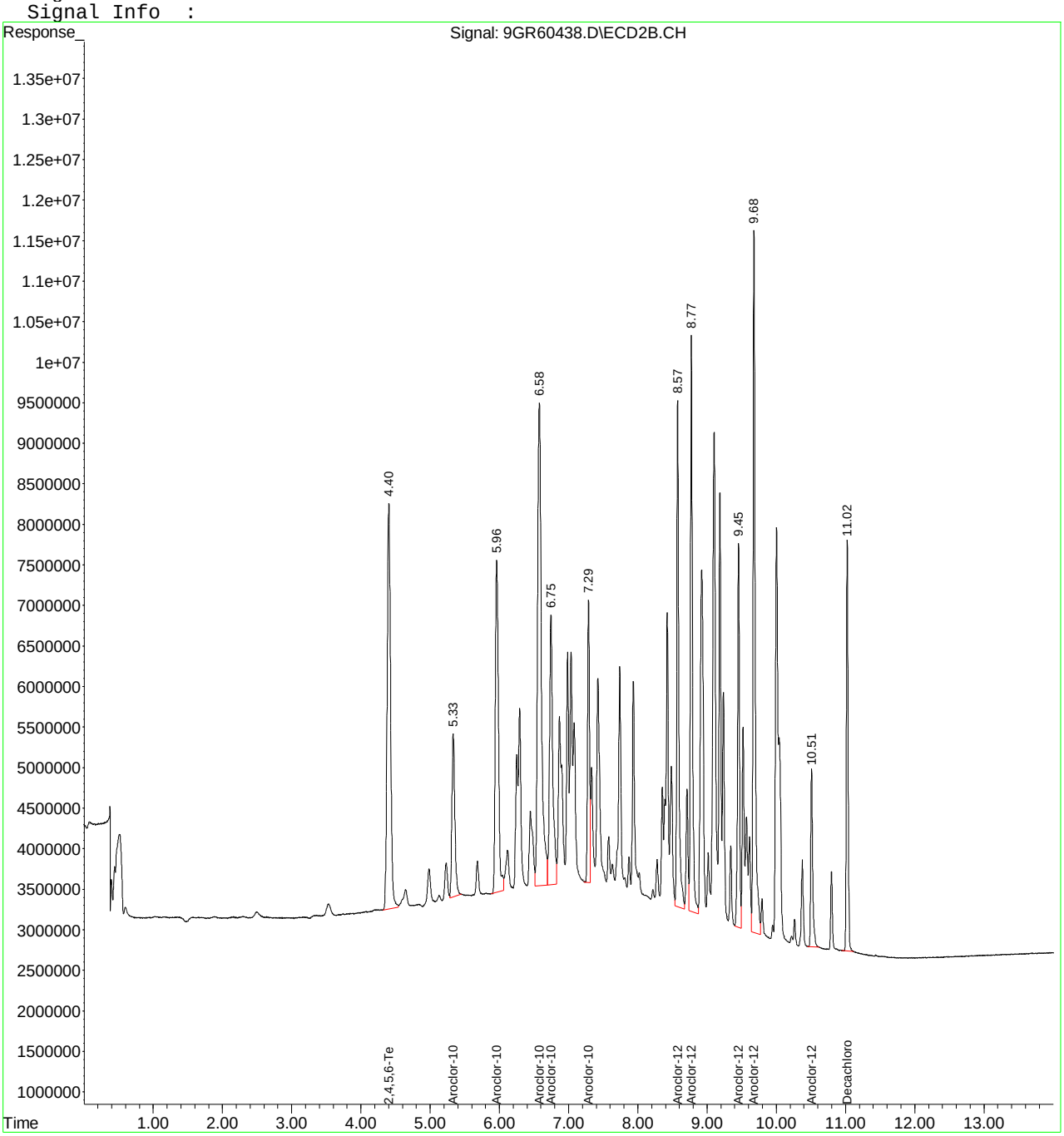
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60438.D Vial: 5
Acq On : 18 Feb 2011 18:15 Operator: ECL
Sample : WG357030-04 1660 ICAL 250 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60439.D Vial: 6
Acq On : 18 Feb 2011 18:33 Operator: ECL
Sample : WG357030-05 1660 ICAL 100 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03:33 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.409	72246592	5.3108 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	26.55%#
12) S Decachlorobiphenyl	11.023	36939540	5.3942 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	26.97%#
Target Compounds			
2) L1 Aroclor-1016-1	5.334	25110036	107.4848 UG/L
3) L1 Aroclor-1016-2	5.963	52692398	106.6524 UG/L
4) L1 Aroclor-1016-3	6.578	92709637	102.2144 UG/L
5) L1 Aroclor-1016-4	6.746	43265285	104.6590 UG/L
6) L1 Aroclor-1016-5	7.288	29752260	104.9135 UG/L
Sum Aroclor-1016-1		243.5E6	525.9241 UG/L
Average Aroclor-1016-1			105.185 UG/L
7) L2 Aroclor-1260-1	8.575	58247230	110.2577 UG/L
8) L2 Aroclor-1260-2	8.771	63802375	107.7003 UG/L
9) L2 Aroclor-1260-3	9.454	37816193	102.1916 UG/L
10) L2 Aroclor-1260-4	9.677	73370910	98.2344 UG/L
11) L2 Aroclor-1260-5	10.509	17375454	100.4975 UG/L
Sum Aroclor-1260-1		250.6E6	518.8816 UG/L
Average Aroclor-1260-1			103.776 UG/L

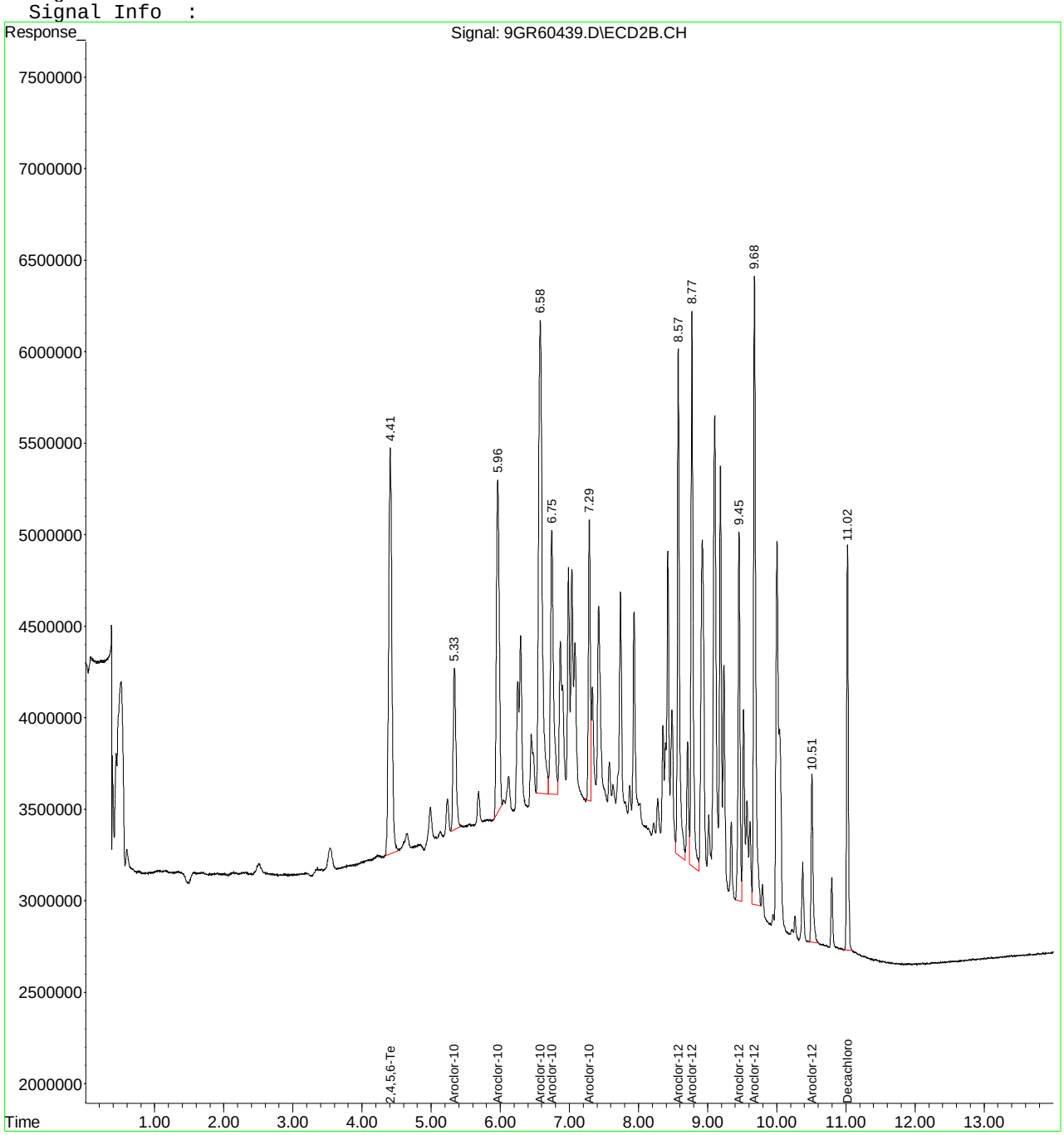
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60439.D Vial: 6
Acq On : 18 Feb 2011 18:33 Operator: ECL
Sample : WG357030-05 1660 ICAL 100 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60440.D Vial: 7
Acq On : 18 Feb 2011 18:51 Operator: ECL
Sample : WG357030-06 1660 ICAL 50 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03:01 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.405	37894920	2.7856 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	13.93%#
12) S Decachlorobiphenyl	11.029	20267971	2.9597 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	14.80%#
Target Compounds			
2) L1 Aroclor-1016-1	5.333	13113634	56.1336 UG/L
3) L1 Aroclor-1016-2	5.961	28686776	58.0636 UG/L
4) L1 Aroclor-1016-3	6.576	48877494	53.8885 UG/L
5) L1 Aroclor-1016-4	6.746	21484822	51.9719 UG/L
6) L1 Aroclor-1016-5	7.288	15364885	54.1802 UG/L
Sum Aroclor-1016-1		127.5E6	274.2379 UG/L
Average Aroclor-1016-1			54.848 UG/L
7) L2 Aroclor-1260-1	8.576	30172169	57.1137 UG/L
8) L2 Aroclor-1260-2	8.773	32688654	55.1794 UG/L
9) L2 Aroclor-1260-3	9.457	20459490	55.2882 UG/L
10) L2 Aroclor-1260-4	9.680	39358784	52.6964 UG/L
11) L2 Aroclor-1260-5	10.513	8962286	51.8368 UG/L
Sum Aroclor-1260-1		131.6E6	272.1145 UG/L
Average Aroclor-1260-1			54.423 UG/L

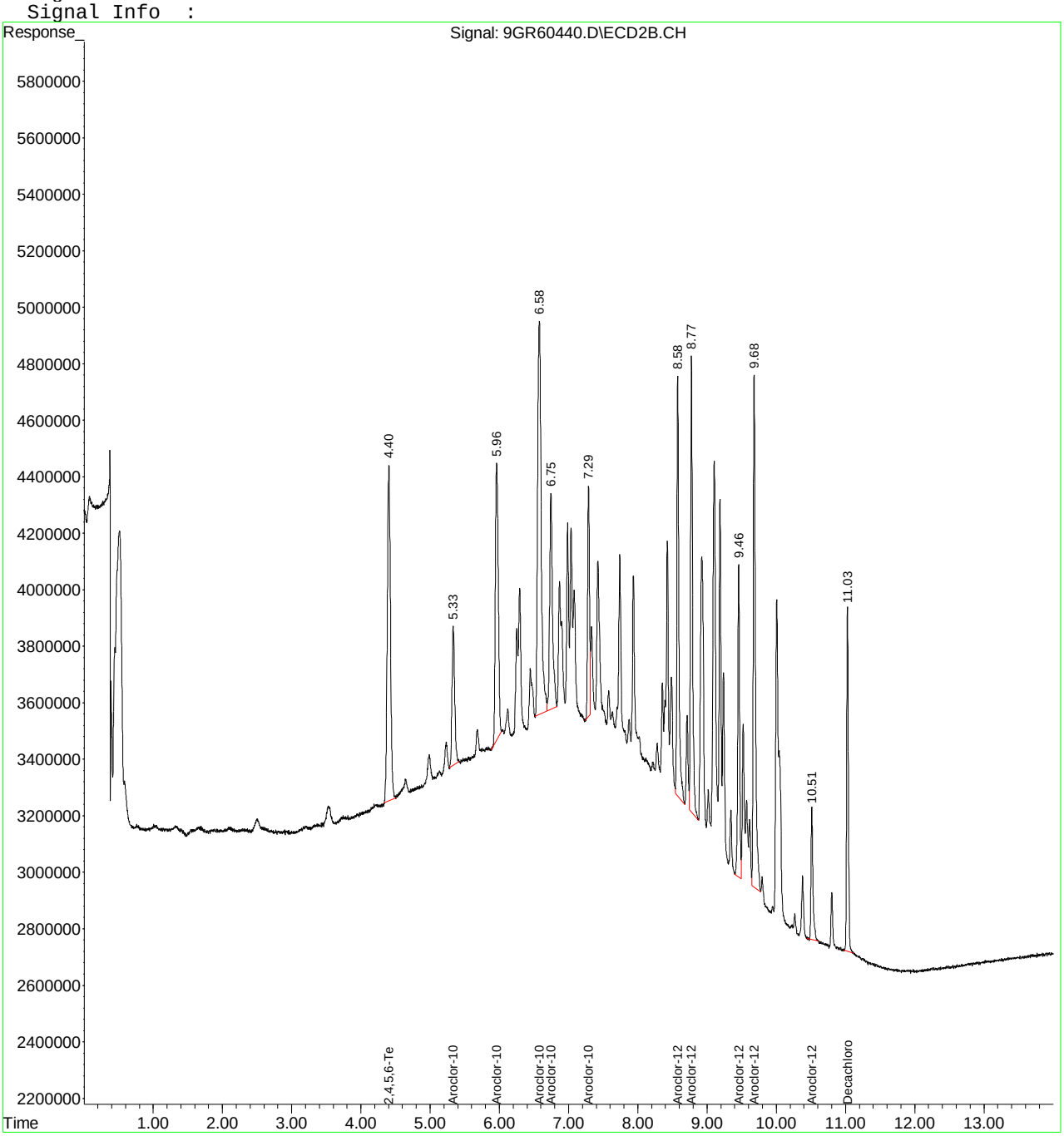
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60440.D Vial: 7
Acq On : 18 Feb 2011 18:51 Operator: ECL
Sample : WG357030-06 1660 ICAL 50 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60441.D Vial: 8
Acq On : 18 Feb 2011 19:09 Operator: ECL
Sample : WG357030-07 1660 ICAL 250 PPB Inst : HP9
Misc : 1,1 STD42874 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03:42 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	0.000	0	N.D. UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	0.00%#
12) S Decachlorobiphenyl	0.000	0	N.D. UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	0.00%#
Target Compounds			
2) L1 Aroclor-1016-1	5.332	54658432	233.9681 UG/L
3) L1 Aroclor-1016-2	5.958	112567552	227.8430 UG/L
4) L1 Aroclor-1016-3	6.574	198562720	218.9197 UG/L
5) L1 Aroclor-1016-4	6.741	92883819	224.6866 UG/L
6) L1 Aroclor-1016-5	7.283	61357351	216.3606 UG/L
Sum Aroclor-1016-1		520.0E6	1121.7780 UG/L
Average Aroclor-1016-1			224.356 UG/L
7) L2 Aroclor-1260-1	8.569	116177194	219.9148 UG/L
8) L2 Aroclor-1260-2	8.766	132634374	223.8908 UG/L
9) L2 Aroclor-1260-3	9.449	89322906	241.3794 UG/L
10) L2 Aroclor-1260-4	9.672	186468624	249.6580 UG/L
11) L2 Aroclor-1260-5	10.504	49194224	284.5334 UG/L
Sum Aroclor-1260-1		573.8E6	1219.3765 UG/L
Average Aroclor-1260-1			243.875 UG/L

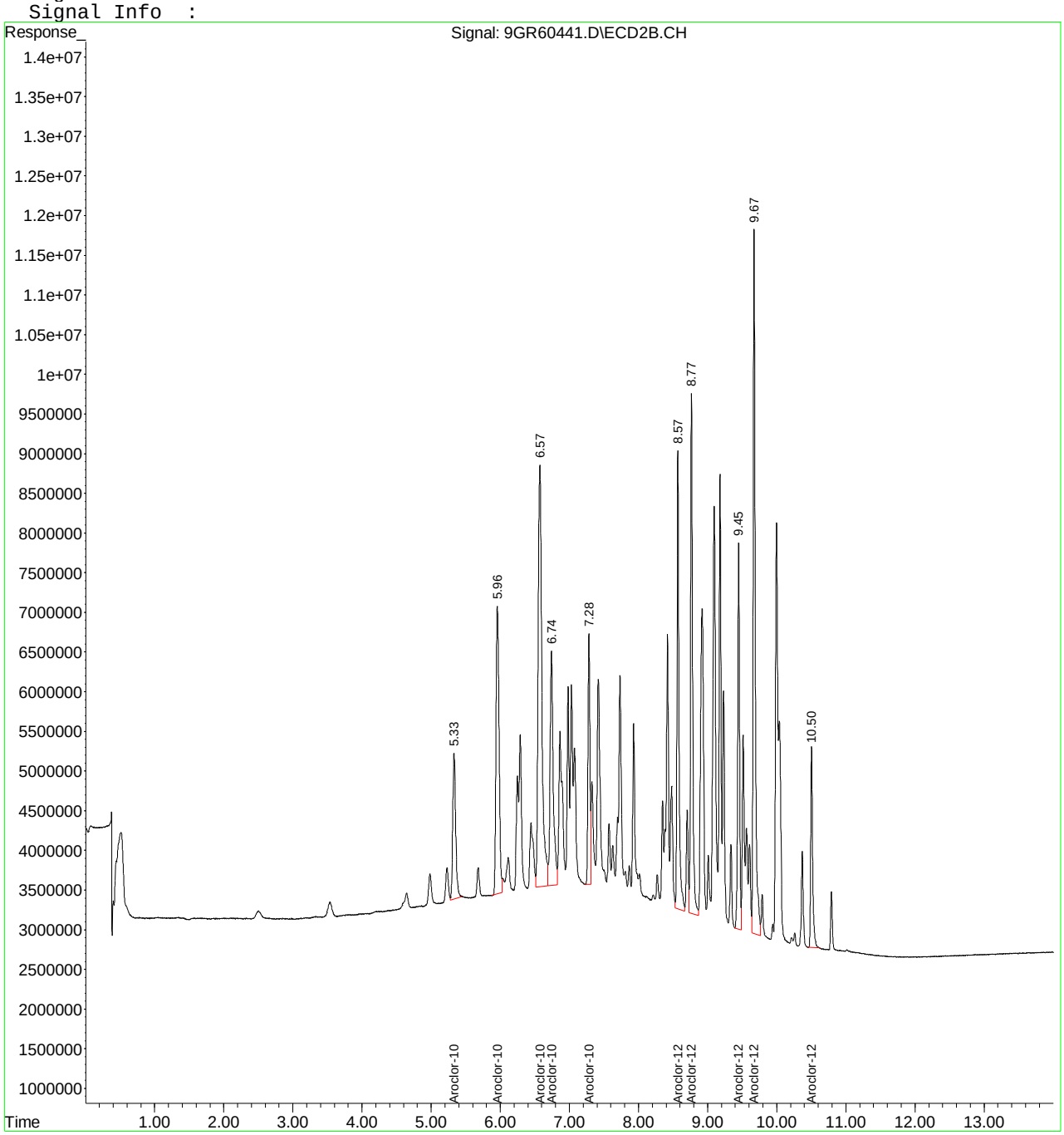
(f)=RT Delta > 1/2 Window (m)=manual int.
9GR60441.D 1660R.M Sat Feb 19 12:04:16 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\021811\9GR60441.D Vial: 8
Acq On : 18 Feb 2011 19:09 Operator: ECL
Sample : WG357030-07 1660 ICAL 250 PPB Inst : HP9
Misc : 1,1 STD42874 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 19 12:03 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\022311\9GR60542.D Vial: 2
Acq On : 23 Feb 2011 12:23 Operator: ECL
Sample : WG357362-01 1660 CCV 500 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 23 13:23:59 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.405	310937301	22.8568 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	114.28%
12) S Decachlorobiphenyl	11.015	156643188	22.8742 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	114.37%
Target Compounds			
2) L1 Aroclor-1016-1	5.330	115163493	492.9630 UG/L
3) L1 Aroclor-1016-2	5.958	232926682	471.4566 UG/L
4) L1 Aroclor-1016-3	6.572	472876667	521.3567 UG/L
5) L1 Aroclor-1016-4	6.740	205663510	497.5015 UG/L
6) L1 Aroclor-1016-5	7.282	143950381	507.6032 UG/L
Sum Aroclor-1016-1		1170.6E6	2490.8811 UG/L
Average Aroclor-1016-1			498.176 UG/L
7) L2 Aroclor-1260-1	8.567	272181922	515.2203 UG/L
8) L2 Aroclor-1260-2	8.762	313079446	528.4876 UG/L
9) L2 Aroclor-1260-3	9.445	197811063	534.5495 UG/L
10) L2 Aroclor-1260-4	9.667	388901934	520.6906 UG/L
11) L2 Aroclor-1260-5	10.499	90055388	520.8694 UG/L
Sum Aroclor-1260-1		1262.0E6	2619.8175 UG/L
Average Aroclor-1260-1			523.963 UG/L

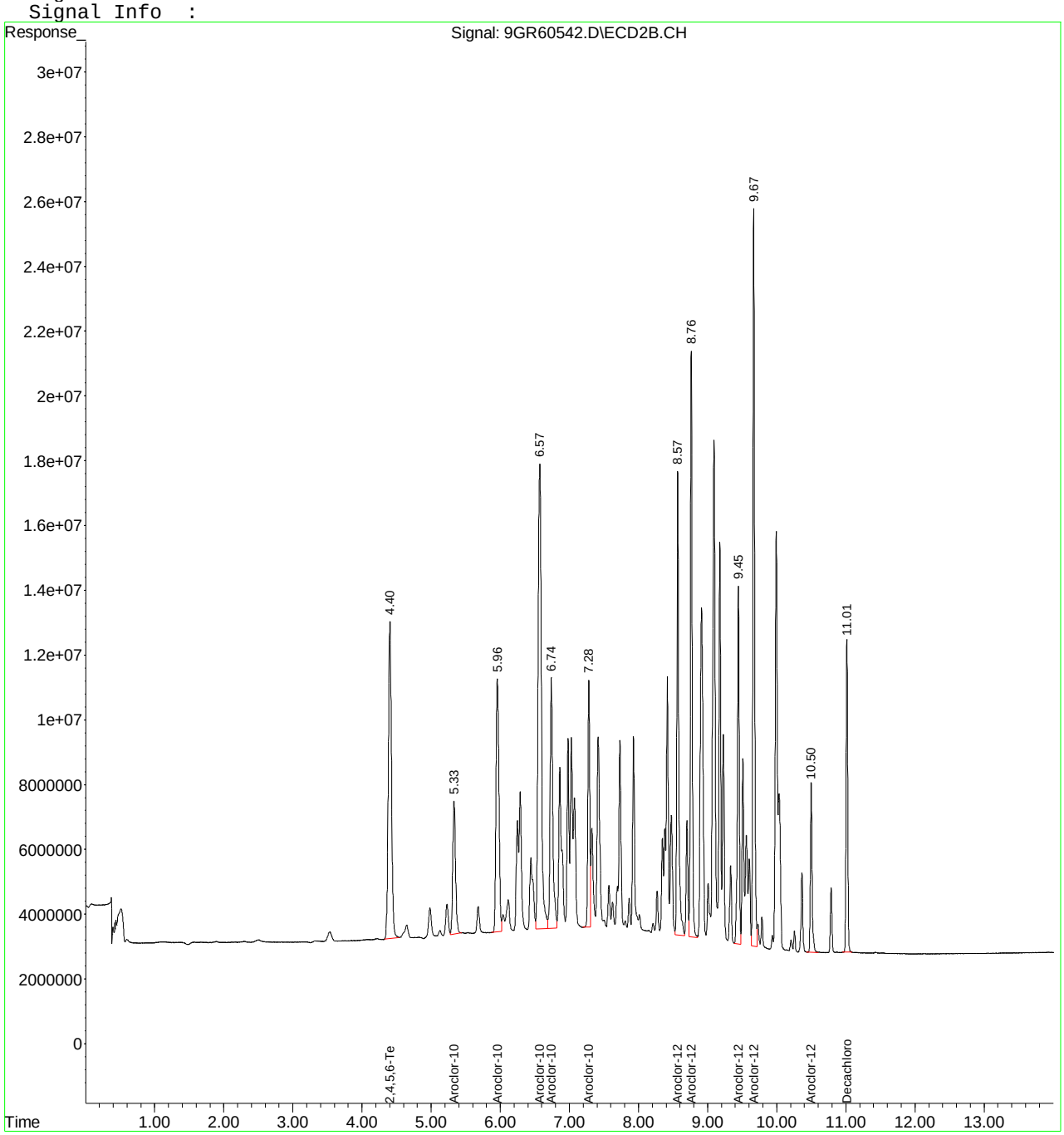
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9GR60542.D 1660R.M Wed Feb 23 13:24:12 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\022311\9GR60542.D Vial: 2
Acq On : 23 Feb 2011 12:23 Operator: ECL
Sample : WG357362-01 1660 CCV 500 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 23 13:23 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\022311\9GR60555.D Vial: 12
Acq On : 23 Feb 2011 17:06 Operator: ECL
Sample : WG357362-02 1660 CCV 250 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 23 17:33:44 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.409	161590638	11.8784 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	59.39%
12) S Decachlorobiphenyl	11.023	80521388	11.7583 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	58.79%
Target Compounds			
2) L1 Aroclor-1016-1	5.333	60849256	260.4683 UG/L
3) L1 Aroclor-1016-2	5.960	123041141	249.0422 UG/L
4) L1 Aroclor-1016-3	6.576	246573932	271.8531 UG/L
5) L1 Aroclor-1016-4	6.743	106663406	258.0196 UG/L
6) L1 Aroclor-1016-5	7.285	73493686	259.1562 UG/L
Sum Aroclor-1016-1		610.6E6	1298.5392 UG/L
Average Aroclor-1016-1			259.708 UG/L
7) L2 Aroclor-1260-1	8.572	137639105	260.5407 UG/L
8) L2 Aroclor-1260-2	8.768	158773210	268.0140 UG/L
9) L2 Aroclor-1260-3	9.452	96493420	260.7565 UG/L
10) L2 Aroclor-1260-4	9.674	184736307	247.3386 UG/L
11) L2 Aroclor-1260-5	10.506	45934755	265.6810 UG/L
Sum Aroclor-1260-1		623.6E6	1302.3308 UG/L
Average Aroclor-1260-1			260.466 UG/L

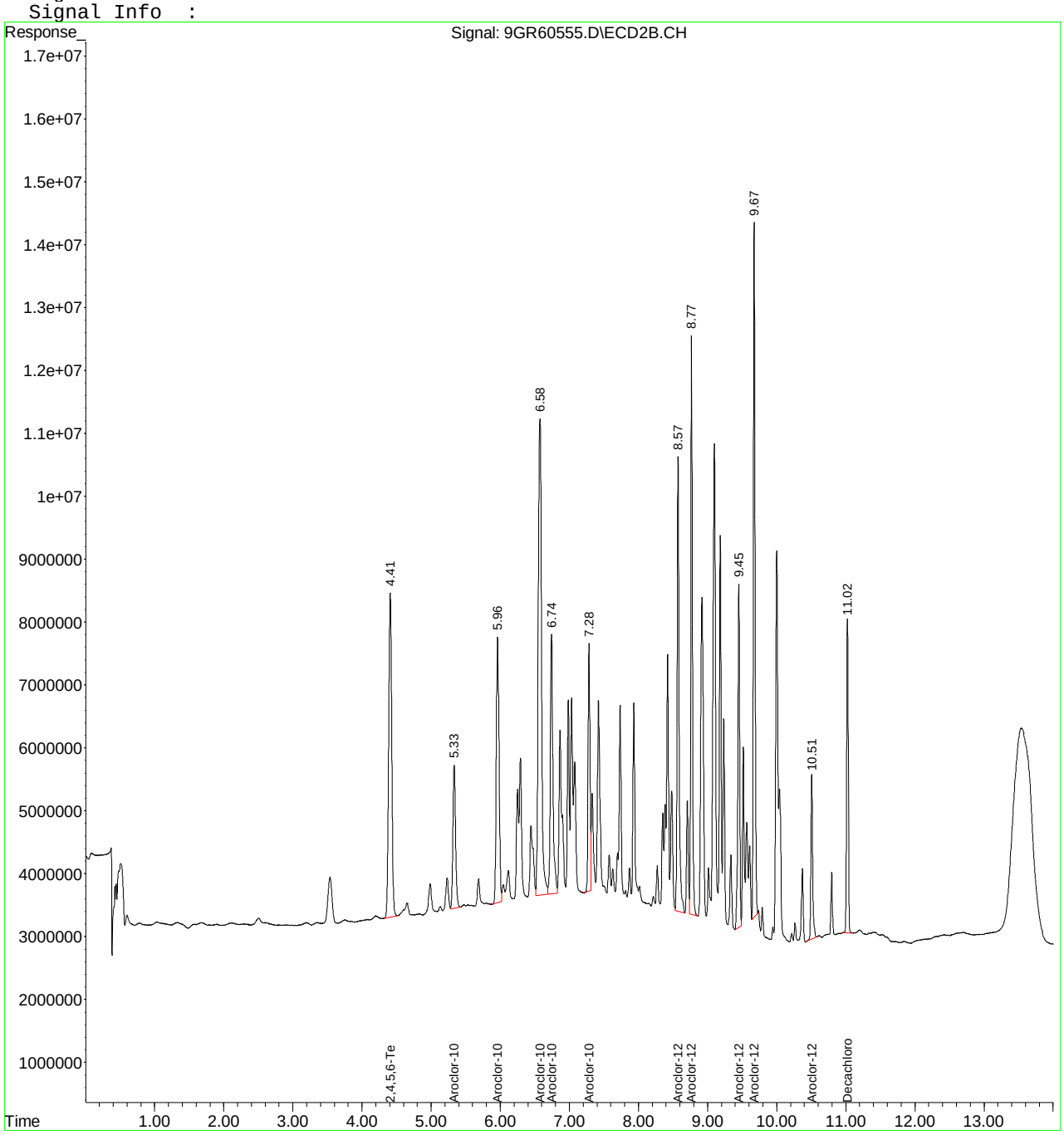
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9GR60555.D 1660R.M Thu Feb 24 08:09:39 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\022311\9GR60555.D Vial: 12
Acq On : 23 Feb 2011 17:06 Operator: ECL
Sample : WG357362-02 1660 CCV 250 PPB Inst : HP9
Misc : 1,1 STD43286 Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 23 17:33 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



RETENTION TIME WINDOWS

Lab Name: Microbac Laboratories

Instrument ID: HP-9 Rear Column
GC Column: RTx-CLP II

	STANDARD #1	STANDARD #2	STANDARD #3
Date Run	2/9/2009	2/12/2009	2/16/2009
File #	9GR50598	9GR50611	9GR50623

COMPOUND	STD #1 RT	STD #2 RT	STD #3 RT	RT WIN
AR 1016 #1	5.495	5.501	5.484	0.026
AR 1016 #2	6.116	6.121	6.106	0.023
AR 1016 #3	6.722	6.727	6.716	0.017
AR 1016 #4	6.890	6.894	6.883	0.017
AR 1016 #5	7.429	7.432	7.423	0.014
AR 1260 #1	8.713	8.716	8.709	0.011
AR 1260 #2	8.906	8.908	8.901	0.011
AR 1260 #3	9.594	9.597	9.590	0.011
AR 1260 #4	9.813	9.816	9.809	0.011
AR 1260 #5	10.649	10.652	10.646	0.009
2,4,5,6-Tetrachloro-m-xylene	4.579	4.587	4.567	0.030
Decachlorobiphenyl	11.175	11.179	11.172	0.011

2.1.1.5 Raw QC Data

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\022311\9GR60543.D Vial: 3
Acq On : 23 Feb 2011 13:30 Operator: ECL
Sample : WG357085-01 BLANK Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 24 08:11:56 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.397	185604264	13.6436 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery =	68.22%
12) S Decachlorobiphenyl	11.017	112631312	16.4472 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery =	82.24%
Target Compounds			
2) L1 Aroclor-1016-1	0.000	0	N.D. UG/L
3) L1 Aroclor-1016-2	0.000	0	N.D. UG/L
4) L1 Aroclor-1016-3	0.000	0	N.D. UG/L
5) L1 Aroclor-1016-4	0.000	0	N.D. UG/L
6) L1 Aroclor-1016-5	0.000	0	N.D. UG/L
Sum Aroclor-1016-1		0	N.D. UG/L
Average Aroclor-1016-1			0.000 UG/L
7) L2 Aroclor-1260-1	0.000	0	N.D. UG/L
8) L2 Aroclor-1260-2	0.000	0	N.D. UG/L
9) L2 Aroclor-1260-3	0.000	0	N.D. UG/L
10) L2 Aroclor-1260-4	0.000	0	N.D. UG/L
11) L2 Aroclor-1260-5	0.000	0	N.D. UG/L
Sum Aroclor-1260-1		0	N.D. UG/L
Average Aroclor-1260-1			0.000 UG/L

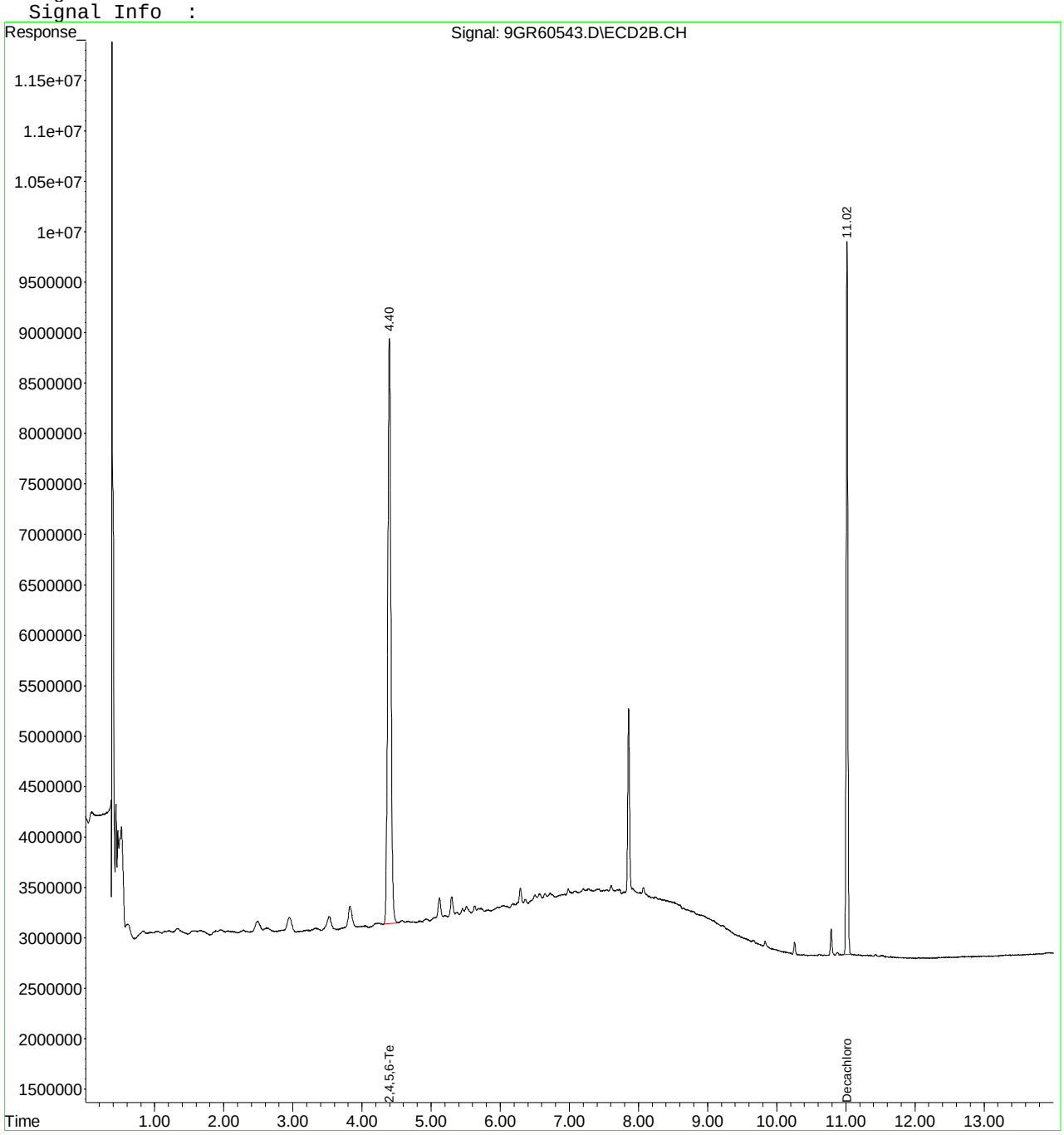
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Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\022311\9GR60543.D Vial: 3
Acq On : 23 Feb 2011 13:30 Operator: ECL
Sample : WG357085-01 BLANK Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 24 8:11 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\022311\9GR60544.D Vial: 4
Acq On : 23 Feb 2011 13:48 Operator: ECL
Sample : WG357085-02 LCS Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 24 08:12:02 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.398	203029996	14.9246 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery = 74.62%	
12) S Decachlorobiphenyl	11.032	71628595	10.4597 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery = 52.30%	
Target Compounds			
2) L1 Aroclor-1016-1	5.329	58312206	249.6083 UG/L
3) L1 Aroclor-1016-2	5.959	105594111	213.7284 UG/L
4) L1 Aroclor-1016-3	6.576	223908707	246.8642 UG/L
5) L1 Aroclor-1016-4	6.744	95853323	231.8699 UG/L
6) L1 Aroclor-1016-5	7.288	67262139	237.1823 UG/L
Sum Aroclor-1016-1		550.9E6	1179.2530 UG/L
Average Aroclor-1016-1			235.851 UG/L
7) L2 Aroclor-1260-1	8.579	135871106	257.1940 UG/L
8) L2 Aroclor-1260-2	8.775	153752685	259.5392 UG/L
9) L2 Aroclor-1260-3	9.460	94947567	256.5791 UG/L
10) L2 Aroclor-1260-4	9.682	179409742	240.2070 UG/L
11) L2 Aroclor-1260-5	10.514	43443771	251.2735 UG/L
Sum Aroclor-1260-1		607.4E6	1264.7927 UG/L
Average Aroclor-1260-1			252.959 UG/L

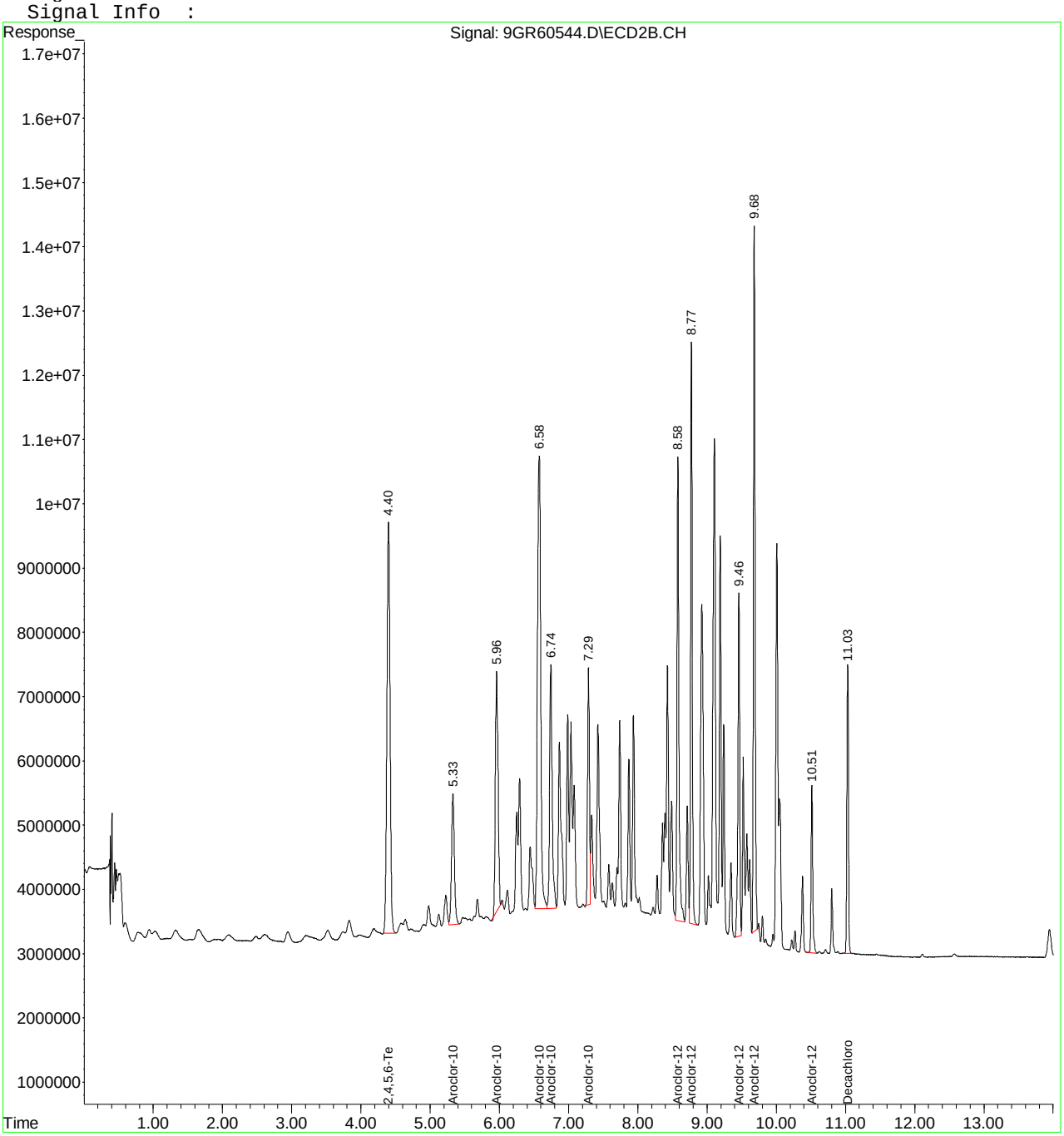
(f)=RT Delta > 1/2 Window (m)=manual int.
9GR60544.D 1660R.M Thu Feb 24 08:14:25 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\022311\9GR60544.D Vial: 4
Acq On : 23 Feb 2011 13:48 Operator: ECL
Sample : WG357085-02 LCS Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 24 8:12 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\022311\9GR60545.D Vial: 5
Acq On : 23 Feb 2011 14:06 Operator: ECL
Sample : WG357085-03 LCS DUP Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 24 08:12:12 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Initial Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
1) S 2,4,5,6-Tetrachloro-M-Xyle	4.394	191626093	14.0863 UG/L
Spiked Amount 20.000	Range 30 - 132	Recovery = 70.43%	
12) S Decachlorobiphenyl	11.013	105758445	15.4436 UG/L
Spiked Amount 20.000	Range 36 - 144	Recovery = 77.22%	
Target Compounds			
2) L1 Aroclor-1016-1	5.321	57088851	244.3717 UG/L
3) L1 Aroclor-1016-2	5.948	117461199	237.7480 UG/L
4) L1 Aroclor-1016-3	6.566	243304777	268.2488 UG/L
5) L1 Aroclor-1016-4	6.733	105793843	255.9161 UG/L
6) L1 Aroclor-1016-5	7.275	76369993	269.2987 UG/L
Sum Aroclor-1016-1		600.0E6	1275.5832 UG/L
Average Aroclor-1016-1			255.117 UG/L
7) L2 Aroclor-1260-1	8.562	158140944	299.3491 UG/L
8) L2 Aroclor-1260-2	8.759	182182149	307.5290 UG/L
9) L2 Aroclor-1260-3	9.442	115783006	312.8832 UG/L
10) L2 Aroclor-1260-4	9.664	227213454	304.2101 UG/L
11) L2 Aroclor-1260-5	10.496	52740396	305.0440 UG/L
Sum Aroclor-1260-1		736.1E6	1529.0155 UG/L
Average Aroclor-1260-1			305.803 UG/L

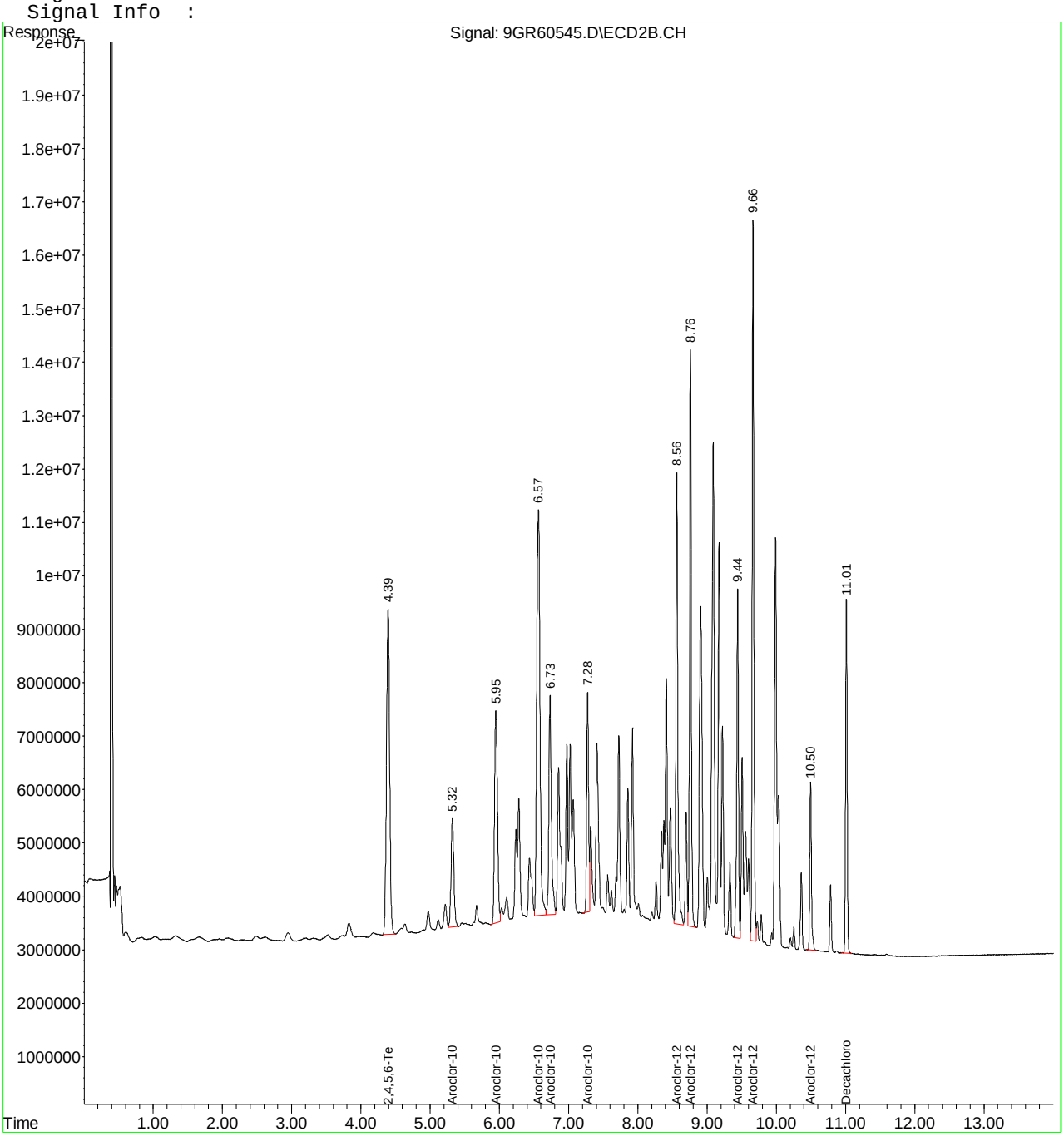
(f)=RT Delta > 1/2 Window (m)=manual int.
9GR60545.D 1660R.M Thu Feb 24 08:14:25 2011 Page 1

Quantitation Report (Not Reviewed)

Data File : C:\MSDCHEM\1\DATA\022311\9GR60545.D Vial: 5
Acq On : 23 Feb 2011 14:06 Operator: ECL
Sample : WG357085-03 LCS DUP Inst : HP9
Misc : 1,1 WATER Multiplr: 1.00
IntFile : events.e
Quant Time: Feb 24 8:12 2011 Quant Results File: 1660R.RES

Quant Method : C:\MSDCHEM\1\METHODS\1660R.M (Chemstation Integrator)
Title : 8082 CALIBRATION February 18 2011
Last Update : Sat Feb 19 12:02:59 2011
Response via : Multiple Level Calibration
DataAcq Meth : 8082R.M

Volume Inj. :
Signal Phase :
Signal Info :



2.2 Metals Data

2.2.1 Metals I C P Data

2.2.1.1 Summary Data

Login Number: L11020492

Department: Metals

Analyst: Pierce Morris

METHOD

Preparation: SW-846 3005/3015

Analysis: SW-846 6010

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: WG357117 - The interference check sample A analyzed on 22-FEB-2011 at 11:00 yielded a result for zinc that exceeded the absolute value of the limit of detection. All QA/QC and the client sample were reanalyzed for zinc on a later calibration.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: WG357117 - The continuing calibration blank analyzed on 22-FEB-2011 at 11:18 yielded a result for lead that exceeded the absolute value of the limit of detection. All QA/QC and the client sample were reanalyzed for lead on a later calibration.

WG357223 - The continuing calibration blank analyzed on 22-FEB-2011 at 15:06 yielded a result for lead that exceeded the absolute value of the limit of detection. All QA/QC and the client sample were reanalyzed for lead on a later calibration.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG357117 - All acceptance criteria were met.

WG357223 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 21982
Approved By: Sheri Pfalzgraf

LABORATORY REPORT

L11020492

03/03/11 15:59

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-POND-21711-W	L11020492-01	6010B	1	18-FEB-11
SWMU-57-POND-21711-W	L11020492-01	6010B	1	18-FEB-11
SWMU-57-POND-21711-W	L11020492-02	6010B	1	18-FEB-11
SWMU-57-POND-21711-W	L11020492-02	6010B	1	18-FEB-11

Microbac Laboratories Inc.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number: **L11020492-01**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Leachate**
Workgroup Number: **WG357223**
Collect Date: **02/17/2011 14:45**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/22/2011 09:59**
Cal Date: **02/22/2011 10:33**
Run Date: **02/22/2011 17:06**
File ID: **P2.022211.170646**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Antimony, TCLP	7440-36-0		U	1	.5		
Arsenic, TCLP	7440-38-2		U	.1	.05	D004	5
Barium, TCLP	7440-39-3		U	.1	.05	D005	100
Beryllium, TCLP	7440-41-7		U	.02	.01		
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Nickel, TCLP	7440-02-0		U	.4	.2		
Selenium, TCLP	7782-49-2		U	.1	.05	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5
Thallium, TCLP	7440-28-0		U	10	5		
Vanadium, TCLP	7440-62-2		U	.1	.05		

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number:	L11020492-01	PrePrep Method:	1311	Instrument:	PE-ICP2
Client ID:	SWMU-57-POND-21711-W	Prep Method:	3015	Prep Date:	02/22/2011 09:59
Matrix:	Leachate	Analytical Method:	6010B	Cal Date:	02/23/2011 09:44
Workgroup Number:	WG357223	Analyst:	PDM	Run Date:	02/23/2011 19:15
Collect Date:	02/17/2011 14:45	Dilution:	1	File ID:	P2.022311.191522
Sample Tag:	02	Units:	mg/L		

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Lead, TCLP	7439-92-1		U	.05	.025	D008	5

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number: **L11020492-02**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Water**
Workgroup Number: **WG357117**
Collect Date: **02/17/2011 14:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/21/2011 10:48**
Cal Date: **02/22/2011 10:33**
Run Date: **02/22/2011 14:33**
File ID: **P2.022211.143342**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Aluminum, Total	7429-90-5	0.115		0.100	0.0500
Arsenic, Total	7440-38-2	0.00945	J	0.0100	0.00500
Barium, Total	7440-39-3	0.00913	J	0.0100	0.00500
Beryllium, Total	7440-41-7		U	0.0100	0.00500
Cadmium, Total	7440-43-9		U	0.0100	0.00500
Calcium, Total	7440-70-2	10.9		0.200	0.100
Chromium, Total	7440-47-3		U	0.0200	0.0100
Cobalt, Total	7440-48-4		U	0.0200	0.0100
Copper, Total	7440-50-8	0.0547		0.0200	0.0100
Iron, Total	7439-89-6	0.961		0.100	0.0500
Magnesium, Total	7439-95-4	5.11		0.500	0.250
Manganese, Total	7439-96-5	0.247		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.0200
Potassium, Total	7440-09-7	4.46		1.00	0.500
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	4.68		0.500	0.250
Vanadium, Total	7440-62-2		U	0.0100	0.00500

J Estimated value ; the analyte concentration was less than the low standard (LOQ)
U Analyte was not detected. The concentration is below the reported LOD.

Microbac Laboratories Inc.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number: **L11020492-02**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Water**
Workgroup Number: **WG357117**
Collect Date: **02/17/2011 14:45**
Sample Tag: **02**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/21/2011 10:48**
Cal Date: **02/23/2011 09:44**
Run Date: **02/23/2011 20:49**
File ID: **P2.022311.204950**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Lead, Total	**7439-92-1**	**0.00639**		**0.00500**	**0.00250**
Zinc, Total	**7440-66-6**	**0.449**		**0.0200**	**0.0100**

2.2.1.2 QC Summary Data

Example 6010 Calculations
Perkin Elmer Optima 4300 DV

1.0 Initial Calibration (ICAL) Parameters
The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system in ug/mL (ppm)	0.1
Vf = Final volume (mL)	50
Vi = Initial volume (mL)	50
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in ug/mL (mg/L)	0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (mg/L) (ppm)	0.1
Vf = Final volume (mL)	50
Vi = Initial weight (g)	1
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in ug/g (mg/kg)	5

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:	**Example:**
Cx = Concentration calculated as received (wet basis)	5
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (mg/kg)	6.25

TCLP Non-Volatile

Analyst(s): Ruc
Date: 02-21-11
Filter Lot #: H11368979

Agitator Speed 30 ± 2 rpm ☑

Analyst/Date		Analyst/Date	
Ruc 2-21-11		Ruc 2-22-11	
Time On	Temp On °C	Time Off	Temp Off °C
1400	23	715	23

Jug #	Sample #	Tests	Method	Fluid #	Matrix*	%Solid	Size Reduction Yes	Size Reduction No	Int. Wt. (g)	Fluid Vol. (mL)
D	02-408-04	ME	1311	FI-814	S/S	100		✓	100.00	2000
D	05	"	"	"	"	"		"	100.02	"
G9	02-491-01	SV	"	"	S	"		"	100.05	"
G14	02-521-01	Pest Herb	"	"	S/S	"		"	100.08	"
G29	02-535-01	"	"	F2-271	S	"		"	25.01 *	500
N/A	FBLK(1)	"	"	FI-814	N/A	N/A		"	2000	2000
"	FBLK(2)	"	"	F2-271	N/A	N/A		"	"	"
"	02-408-01	"	"	Filtered	W	<.5		"	100	100
"	02	"	"	"	W	"		"	"	"
"	02-492-01	"	"	"	W	"		"	"	"
D	02-489-02	ME	1312	SFI-355	S/S	100		✓	100.03	2000
D	04	"	"	"	"	"		✓	100.02	"
D	06	"	"	"	"	"		✓	100.08	"
N/A	FBLK	"	"	"	N/A	N/A		✓	2000	"

Ruc 2-21-11

*Matrix Code = (S-solid) (SS-sand, soil or sludge) (P-paint) (O-organic) (W-water or waste)
Agitator speed is 30 ± 2 rpm unless otherwise noted.

Comments: *SV 02-535-01 had only ~64g of MATERIAL - Notified TSR(A.B.) And was instructed to Proceed w/Reduced Volume - Ruc 2-21-11
Filtered SV(S) Processed @ 8:30 - Ruc

Peer Review By: _____ Supervisor Review: _____

Microbac Laboratories Inc.
Metals Digest Log

Workgroup:	WG357047	SOP:	ME401 Revison 13
Analyst:	REK	Spike Solution:	STD39933
Spike Analyst:	REK	Spike Witness:	VC
Method:	3005A	ICP;WG353481 Filter Lot	COA15138
Run Date:	02/21/2011 10:48	HNO3 Lot #:	COA15168
Hotblock Start Temp:	94.8 @ 05:55	HCL Lot #:	COA15185
Hotblock End Temp:	95 @ 09:55	Digestion Tubes Lot #:	COA15251

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG357047-02	BLANK	1	50 mL	50 mL		
2	WG357047-03	LCS	1	50 mL	50 mL	5 mL	
3	L11020475-01	SAMP	1	50 mL	50 mL		02/28/11
4	L11020475-02	SAMP	1	50 mL	50 mL		02/28/11
5	L11020475-03	SAMP	1	50 mL	50 mL		02/28/11
6	L11020475-04	SAMP	1	50 mL	50 mL		02/28/11
7	L11020475-05	SAMP	1	50 mL	50 mL		02/28/11
8	L11020475-06	SAMP	1	50 mL	50 mL		02/28/11
9	L11020486-02	SAMP	1	50 mL	50 mL		03/04/11
10	WG357047-01	REF	1	50 mL	50 mL		
11	L11020486-07	RS02	1	50 mL	50 mL		03/04/11
12	WG357047-04	MS	1	50 mL	50 mL	5 mL	
13	L11020486-08	MS02	1	50 mL	50 mL	5 mL	03/04/11
14	WG357047-05	MSD	1	50 mL	50 mL	5 mL	
15	L11020486-09	SD02	1	50 mL	50 mL	5 mL	03/04/11
16	L11020486-14	SAMP	1	50 mL	50 mL		03/04/11
17	L11020486-17	SAMP	1	50 mL	50 mL		03/04/11
18	L11020486-20	SAMP	1	50 mL	50 mL		03/04/11
19	L11020486-23	SAMP	1	50 mL	50 mL		03/04/11
20	L11020486-26	SAMP	1	50 mL	50 mL		03/04/11
21	L11020486-29	SAMP	1	50 mL	50 mL		03/04/11
22	L11020487-01	SAMP	1	50 mL	50 mL		02/25/11
23	L11020487-02	SAMP	1	50 mL	50 mL		02/25/11
24	L11020487-03	SAMP	1	50 mL	50 mL		02/25/11
25	L11020492-02	SAMP	1	50 mL	50 mL		02/25/11
26	L11020507-01	SAMP	1	50 mL	50 mL		03/04/11
27	L11020507-02	SAMP	1	50 mL	50 mL		03/04/11

L11020486-14	filter sx w/coa15138
L11020486-20	filter sx w/coa15138
L11020486-23	filter sx w/coa15138
L11020487-01	filter sx w/coa15138
L11020487-02	filter sx w/coa15138
L11020487-03	filter sx w/coa15138
L11020507-01	filter sx w/coa15138

HB_DIG - Modified 09/30/2009
PDF ID: 1924401
Report generated: 02/21/2011 10:48

Microbac Laboratories Inc.
Metals Digest Log

Workgroup:	WG357047	**SOP:**	ME401 Revison 13
Analyst:	REK	**Spike Solution:**	STD39933
Spike Analyst:	REK	**Spike Witness:**	VC
Method:	3005A	**ICP;WG353481 Filter Lot**	COA15138
Run Date:	02/21/2011 10:48	**HNO3 Lot #:**	COA15168
Hotblock Start Temp:	94.8 @ 05:55	**HCL Lot #:**	COA15185
Hotblock End Temp:	95 @ 09:55	**Digestion Tubes Lot #:**	COA15251

Analyst: 

Reviewer: 

HB_DIG - Modified 09/30/2009
PDF ID: 1924401
Report generated: 02/21/2011 10:48

Microbac Laboratories Inc.
Microwave Digestion Log

Workgroup: WG357204
Analyst: VC
Spike Analyst: VC
Run Date: 02/22/2011 09:59
Method: 3015
Balance: BAL016
Instrument: MW-2

SOP: ME407 Revison 11
Spike Solution: STD39932
Spike Witness: ERP
HNO3 Lot #: COA15168
Digestion Tubes Lot #: COA15251

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG357204-02	BLANK	17	5 mL	50 mL	206.019 g	206.01 g		
2	WG357124-01	FBLK1	17	5 mL	50 mL	210.152 g	210.127 g		
3	WG357124-02	FBLK2	17	5 mL	50 mL	209.958 g	209.944 g		
4	WG357204-03	LCS	17	5 mL	50 mL	210.652 g	210.645 g	5 mL	
5	L11020408-01	SAMP	17	5 mL	50 mL	209.735 g	209.729 g		02/25/11
6	L11020408-02	SAMP	17	5 mL	50 mL	208.402 g	208.401 g		02/25/11
7	L11020408-04	SAMP	17	5 mL	50 mL	208.752 g	208.739 g		02/25/11
8	L11020408-05	SAMP	17	5 mL	50 mL	210.662 g	210.659 g		02/25/11
9	L11020491-01	SAMP	17	5 mL	50 mL	213.036 g	213.033 g		03/03/11
10	L11020492-01	SAMP	17	5 mL	50 mL	210.212 g	210.21 g		02/25/11
11	WG357204-01	REF	17	5 mL	50 mL	209.419 g	209.407 g		
12	L11020535-01	SAMP	17	5 mL	50 mL	209.419 g	209.407 g		02/23/11
13	WG357204-04	MS	17	5 mL	50 mL	210.091 g	210.081 g	5 mL	
14	WG357204-05	MSD	17	5 mL	50 mL	212.325 g	212.312 g	5 mL	

Analyst: Vicki Collins

Reviewer: Erin Potter

MW_DIG - Modified 09/30/2009
PDF ID: 1925480
Report generated: 02/23/2011 10:23

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022211H3.CSV
Analyst1: PDM Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 36528

Calibration Std: STD43840 ICV Std: STD43946 Post Spike: STD39932
ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44052
CCV: STD44102 LLCCV:

Workgroups: 357117,357223,357225,357224

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.022211.100722	WG357338-01	Calibration Point		1		02/22/11 10:07
2	P2.022211.101400	WG357338-02	Calibration Point		1		02/22/11 10:14
3	P2.022211.102037	WG357338-03	Calibration Point		1		02/22/11 10:20
4	P2.022211.102716	WG357338-04	Calibration Point		1		02/22/11 10:27
5	P2.022211.103356	WG357338-05	Calibration Point		1		02/22/11 10:33
6	P2.022211.104040	WG357338-06	Initial Calibration Verification		1		02/22/11 10:40
7	P2.022211.104728	WG357338-07	Initial Calib Blank		1		02/22/11 10:47
8	P2.022211.105408	WG357338-08	Low Level Continuing Calibra		1		02/22/11 10:54
9	P2.022211.110052	WG357338-09	Interference Check		1		02/22/11 11:00
10	P2.022211.110633	WG357338-10	Interference Check		1		02/22/11 11:06
11	P2.022211.111218	WG357338-11	CCV		1		02/22/11 11:12
12	P2.022211.111857	WG357338-12	CCB		1		02/22/11 11:18
13	P2.022211.112536	WG357047-02	Method/Prep Blank	50/50	1		02/22/11 11:25
14	P2.022211.113215	WG357047-03	Laboratory Control S	50/50	1		02/22/11 11:32
15	P2.022211.113856	WG357047-01	Reference Sample		1	L11020486-07	02/22/11 11:38
16	P2.022211.114535	WG357047-04	Matrix Spike	50/50	1	L11020486-07	02/22/11 11:45
17	P2.022211.115215	WG357047-05	Matrix Spike Duplica	50/50	1	L11020486-07	02/22/11 11:52
18	P2.022211.115901	L11020487-01	1102-247-1	50/50	1		02/22/11 11:59
19	P2.022211.120538	WG357117-01	Post Digestion Spike		1	L11020487-01	02/22/11 12:05
20	P2.022211.121125	WG357117-02	Serial Dilution		5	L11020487-01	02/22/11 12:11
21	P2.022211.121807	L11020487-02	1102-247-2	50/50	1		02/22/11 12:18
22	P2.022211.122446	L11020487-03	1102-247-3	50/50	1		02/22/11 12:24
23	P2.022211.123127	WG357338-13	CCV		1		02/22/11 12:31
24	P2.022211.123805	WG357338-14	CCB		1		02/22/11 12:38
25	P2.022211.124442	WG357338-15	Low Level Continuing Calibra		1		02/22/11 12:44
26	P2.022211.125122	L11020475-01	11228-W0001	50/50	1		02/22/11 12:51
27	P2.022211.125803	L11020475-02	11571-W0001	50/50	1		02/22/11 12:58
28	P2.022211.130442	L11020475-03	11572-W0001	50/50	1		02/22/11 13:04
29	P2.022211.131119	L11020475-04	11576-W0001	50/50	1		02/22/11 13:11
30	P2.022211.131757	L11020475-05	11577-W0001	50/50	1		02/22/11 13:17
31	P2.022211.132436	L11020475-06	11582-W0001	50/50	1		02/22/11 13:24
32	P2.022211.133113	L11020486-02	MW2A.258.14	50/50	1		02/22/11 13:31
33	P2.022211.133752	L11020486-14	MW4A.258.14	50/50	1		02/22/11 13:37
34	P2.022211.134433	L11020486-17	MW5A.258.14	50/50	1		02/22/11 13:44

Page: 1 Approved: February 23, 2011

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022211H3.CSV
Analyst1: PDM Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 36528

Calibration Std: STD43840 ICV Std: STD43946 Post Spike: STD39932
ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44052
CCV: STD44102 LLCCV:

Workgroups: 357117,357223,357225,357224

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.022211.135111	L11020486-20	OW1A.258.14	50/50	1		02/22/11 13:51
36	P2.022211.135757	WG357338-16	CCV		1		02/22/11 13:57
37	P2.022211.140443	WG357338-17	CCB		1		02/22/11 14:04
38	P2.022211.141121	L11020486-23	OW1A2.258.14	50/50	1		02/22/11 14:11
39	P2.022211.142019	L11020486-26	OW2A.258.14	50/50	1		02/22/11 14:20
40	P2.022211.142658	L11020486-29	OW3A.258.14	50/50	1		02/22/11 14:26
41	P2.022211.143342	L11020492-02	SWMU-57-POND-21711-W	50/50	1		02/22/11 14:33
42	P2.022211.144025	L11020507-01	TW-56S	50/50	1		02/22/11 14:40
43	P2.022211.144607	L11020507-02	TW-56S	50/50	1		02/22/11 14:46
44	P2.022211.145249	FLT_BLK	FLT_BLK		1		02/22/11 14:52
45	P2.022211.145933	WG357338-18	CCV		1		02/22/11 14:59
46	P2.022211.150611	WG357338-19	CCB		1		02/22/11 15:06
47	P2.022211.151246	WG357204-02	Method/Prep Blank	5/50	1		02/22/11 15:12
48	P2.022211.151927	WG357204-03	Laboratory Control S	5/50	1		02/22/11 15:19
49	P2.022211.152606	WG357124-01	TCLP Fluid Blank 1		1		02/22/11 15:26
50	P2.022211.153248	WG357124-02	TCLP Fluid Blank 2		1		02/22/11 15:32
51	P2.022211.153930	L11020408-04	R-S1-020111-05	5/50	1		02/22/11 15:39
52	P2.022211.154611	L11020408-05	R-S1-011001-01	5/50	1		02/22/11 15:46
53	P2.022211.155255	L11020491-01	ACETONE TRENCH SOLID	5/50	1		02/22/11 15:52
54	P2.022211.155942	WG357223-01	Post Digestion Spike		1	L11020491-01	02/22/11 15:59
55	P2.022211.160628	WG357338-20	CCV		1		02/22/11 16:06
56	P2.022211.161310	WG357338-21	CCB		1		02/22/11 16:13
57	P2.022211.161949	WG357223-02	Serial Dilution		5	L11020491-01	02/22/11 16:19
58	P2.022211.162631	L11020521-01	DS021811		1		02/22/11 16:26
59	P2.022211.163316	WG357204-01	Reference Sample		1	L11020535-01	02/22/11 16:33
60	P2.022211.163956	WG357204-04	Matrix Spike	5/50	1	L11020535-01	02/22/11 16:39
61	P2.022211.164639	WG357204-05	Matrix Spike Duplica	5/50	1	L11020535-01	02/22/11 16:46
62	P2.022211.165319	L11020408-01	R-S1-020711-07/04/06	5/50	1		02/22/11 16:53
63	P2.022211.170005	L11020408-02	R-S1-011011-02/03	5/50	1		02/22/11 17:00
64	P2.022211.170646	L11020492-01	SWMU-57-POND-21711-W	5/50	1		02/22/11 17:06
65	P2.022211.171325	WG357338-22	CCV		1		02/22/11 17:13
66	P2.022211.172007	WG357338-23	CCB		1		02/22/11 17:20
67	P2.022211.172647	WG356894-02	Method/Prep Blank	50/50	1		02/22/11 17:26
68	P2.022211.173326	WG356894-03	Laboratory Control S	50/50	1		02/22/11 17:33

 Approved: February 23, 2011

Sheri L. Babgard

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022211H3.CSV
Analyst1: PDM Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 36528

Calibration Std: STD43840 ICV Std: STD43946 Post Spike: STD39932
ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44052
CCV: STD44102 LLCCV:

Workgroups: 357117,357223,357225,357224

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	P2.022211.174007	WG356894-01	Reference Sample		10	L11020445-01	02/22/11 17:40
70	P2.022211.174645	WG356894-04	Duplicate	50/50	10	L11020445-01	02/22/11 17:46
71	P2.022211.175325	WG356894-05	Matrix Spike	50/50	10	L11020445-01	02/22/11 17:53
72	P2.022211.180009	L11020445-02	012	50/50	10		02/22/11 18:00
73	P2.022211.180654	L11020445-03	016	50/50	10		02/22/11 18:06
74	P2.022211.181336	L11020445-04	016	50/50	10		02/22/11 18:13
75	P2.022211.182023	L11020445-05	017	50/50	10		02/22/11 18:20
76	P2.022211.182704	L11020445-06	017	50/50	10		02/22/11 18:27
77	P2.022211.183343	WG357338-24	CCV		1		02/22/11 18:33
78	P2.022211.184022	WG357338-25	CCB		1		02/22/11 18:40
79	P2.022211.184658	L11020450-01	OUTFALL 003	50/50	1		02/22/11 18:46
80	P2.022211.185339	WG357225-01	Post Digestion Spike		1	L11020450-01	02/22/11 18:53
81	P2.022211.190026	WG357225-02	Serial Dilution		5	L11020450-01	02/22/11 19:00
82	P2.022211.190704	L11020450-02	OUTFALL 009	50/50	1		02/22/11 19:07
83	P2.022211.191348	L11020467-05	001/COMP.	50/50	1		02/22/11 19:13
84	P2.022211.192045	WG357338-26	CCV		1		02/22/11 19:20
85	P2.022211.192724	WG357338-27	CCB		1		02/22/11 19:27
86	P2.022211.193405	WG357152-02	Method/Prep Blank	50/50	1		02/22/11 19:34
87	P2.022211.194046	WG357152-03	Laboratory Control S	50/50	1		02/22/11 19:40
88	P2.022211.194821	L11020512-02	BRD-MW25-021711	50/50	1		02/22/11 19:48
89	P2.022211.195506	WG357224-01	Post Digestion Spike		1	L11020512-02	02/22/11 19:55
90	P2.022211.200155	WG357224-02	Serial Dilution		5	L11020512-02	02/22/11 20:01
91	P2.022211.200834	L11020513-01	BRD-EQ2-021811	50/50	1		02/22/11 20:08
92	P2.022211.201514	L11020513-02	BRD-OW226-021811	50/50	1		02/22/11 20:15
93	P2.022211.202202	L11020513-03	BRD-OW226P-021811	50/50	1		02/22/11 20:22
94	P2.022211.202846	L11020513-04	BRD-F2D1-021811	50/50	1		02/22/11 20:28
95	P2.022211.203525	WG357152-01	Reference Sample		1	L11020513-06	02/22/11 20:35
96	P2.022211.204211	WG357338-28	CCV		1		02/22/11 20:42
97	P2.022211.204851	WG357338-29	CCB		1		02/22/11 20:48
98	P2.022211.205532	WG357152-04	Matrix Spike	50/50	1	L11020513-06	02/22/11 20:55
99	P2.022211.210221	WG357152-05	Matrix Spike Duplica	50/50	1	L11020513-06	02/22/11 21:02
100	P2.022211.210905	L11020517-01	PSO2-GW-021811	50/50	1		02/22/11 21:09
101	P2.022211.211452	L11020533-01	LH18/24-SP650-6443-GRAB	50/50	1		02/22/11 21:14
102	P2.022211.212143	L11020533-02	LH18/24-SP650-6443-COMP	50/50	1		02/22/11 21:21

 Approved: February 23, 2011

Sheri L. Babgard

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022211H3.CSV

Analyst1: PDM Analyst2: N/A

Method: 6010 SOP: ME600E Rev: 10

Maintenance Log ID: 36528

Calibration Std: STD43840 ICV Std: STD43946 Post Spike: STD39932

ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44052

CCV: STD44102 LLCCV:

Workgroups: 357117,357223,357225,357224

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	P2.022211.212839	L11020537-01	10112-W0001	50/50	1		02/22/11 21:28
104	P2.022211.213518	L11020537-02	10116-W0001	50/50	1		02/22/11 21:35
105	P2.022211.214201	L11020537-03	10116-W0002	50/50	1		02/22/11 21:42
106	P2.022211.214843	L11020537-04	10116-W0003	50/50	1		02/22/11 21:48
107	P2.022211.215617	L11020537-05	10116-W0004	50/50	1		02/22/11 21:56
108	P2.022211.220302	WG357338-30	CCV		1		02/22/11 22:03
109	P2.022211.220946	WG357338-31	CCB		1		02/22/11 22:09
110	P2.022211.221623	L11020537-06	10116-W0005	50/50	1		02/22/11 22:16
111	P2.022211.222309	L11020537-07	10116-W0006	50/50	1		02/22/11 22:23
112	P2.022211.222951	L11020537-08	13073-W0001	50/50	1		02/22/11 22:29
113	P2.022211.223630	WG357338-32	ICSA		1		02/22/11 22:36
114	P2.022211.224209	WG357338-33	ICSAB		1		02/22/11 22:42
115	P2.022211.224750	WG357338-34	CCV		1		02/22/11 22:47
116	P2.022211.225427	WG357338-35	CCB		1		02/22/11 22:54

 Approved: February 23, 2011

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022311HR.CSV
Analyst1: PDM Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 36542

Calibration Std: STD44101 ICV Std: STD43946 Post Spike: STD39932
ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44052
CCV: STD44102 LLCCV:

Workgroups: 352834,357379,357405,357406,357407,357223,357117,357224

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.022311.091744	WG357414-01	Calibration Point		1		02/23/11 09:17
2	P2.022311.092421	WG357414-02	Calibration Point		1		02/23/11 09:24
3	P2.022311.093103	WG357414-03	Calibration Point		1		02/23/11 09:31
4	P2.022311.093743	WG357414-04	Calibration Point		1		02/23/11 09:37
5	P2.022311.094423	WG357414-05	Calibration Point		1		02/23/11 09:44
6	P2.022311.095111	WG357414-06	Initial Calibration Verification		1		02/23/11 09:51
7	P2.022311.095752	WG357414-07	Initial Calib Blank		1		02/23/11 09:57
8	P2.022311.100429	WG357414-08	Interference Check		1		02/23/11 10:04
9	P2.022311.101011	WG357414-09	Interference Check		1		02/23/11 10:10
10	P2.022311.101555	WG357414-10	CCV		1		02/23/11 10:15
11	P2.022311.102234	WG357414-11	CCB		1		02/23/11 10:22
12	P2.022311.102915	WG357153-02	Method/Prep Blank	50/50	1		02/23/11 10:29
13	P2.022311.103555	WG357153-03	Laboratory Control S	50/50	1		02/23/11 10:35
14	P2.022311.104239	WG357153-01	Reference Sample		1	L11020504-01	02/23/11 10:42
15	P2.022311.104822	WG357153-04	Duplicate	50/50	1	L11020504-01	02/23/11 10:48
16	P2.022311.105409	WG357153-05	Matrix Spike	50/50	1	L11020504-01	02/23/11 10:54
17	P2.022311.105955	L11020522-01	1102-227-1	50/50	1		02/23/11 10:59
18	P2.022311.110633	L11020522-03	1102-228-1	50/50	1		02/23/11 11:06
19	P2.022311.111329	WG357234-01	Post Digestion Spike		1	L11020522-03	02/23/11 11:13
20	P2.022311.112014	WG357234-02	Serial Dilution		5	L11020522-03	02/23/11 11:20
21	P2.022311.112656	L11020523-11	1102-241-1	50/50	1		02/23/11 11:26
22	P2.022311.113346	WG357414-12	CCV		1		02/23/11 11:33
23	P2.022311.114029	WG357414-13	CCB		1		02/23/11 11:40
24	P2.022311.114706	L11020524-01	1102-184-1	50/50	1		02/23/11 11:47
25	P2.022311.115352	L11020524-02	1102-239-1	50/50	1		02/23/11 11:53
26	P2.022311.120034	L11020524-04	1102-240-1	50/50	1		02/23/11 12:00
27	P2.022311.120712	WG357414-14	CCV		1		02/23/11 12:07
28	P2.022311.121357	WG357414-15	CCB		1		02/23/11 12:13
29	P2.022311.125622	WG357322-02	Method/Prep Blank	5/50	1		02/23/11 12:56
30	P2.022311.130300	WG357322-03	Laboratory Control S	5/50	1		02/23/11 13:03
31	P2.022311.130938	WG357257-01	Fluid Blank		1		02/23/11 13:09
32	P2.022311.131621	WG357322-01	Reference Sample		1	L11020542-01	02/23/11 13:16
33	P2.022311.132302	WG357379-01	Post Digestion Spike		1	L11020542-01	02/23/11 13:23
34	P2.022311.132945	WG357379-02	Serial Dilution		5	L11020542-01	02/23/11 13:29

Page: 1 Approved: February 24, 2011

Sheri L. Babcock

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022311HR.CSV

Analyst1: PDM Analyst2: N/A

Method: 6010 SOP: ME600E Rev: 10

Maintenance Log ID: 36542

Calibration Std: STD44101 ICV Std: STD43946 Post Spike: STD39932

ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44052

CCV: STD44102 LLCCV:

Workgroups: 352834,357379,357405,357406,357407,357223,357117,357224

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.022311.133628	WG357322-04	Matrix Spike	5/50	1	L11020542-01	02/23/11 13:36
36	P2.022311.134310	WG357322-05	Matrix Spike Duplica	5/50	1	L11020542-01	02/23/11 13:43
37	P2.022311.134954	WG357414-16	CCV		1		02/23/11 13:49
38	P2.022311.135633	WG357414-17	CCB		1		02/23/11 13:56
39	P2.022311.143500	WG357296-02	Method/Prep Blank	50/50	1		02/23/11 14:35
40	P2.022311.144814	WG357296-03	Laboratory Control S	50/50	1		02/23/11 14:48
41	P2.022311.145427	WG357296-01	Reference Sample		1	L11020562-01	02/23/11 14:54
42	P2.022311.150116	WG357296-04	Duplicate	50/50	1	L11020562-01	02/23/11 15:01
43	P2.022311.150755	WG357296-05	Matrix Spike	50/50	1	L11020562-01	02/23/11 15:07
44	P2.022311.151439	L11020586-01	001	50/50	1		02/23/11 15:14
45	P2.022311.152123	WG357405-01	Post Digestion Spike		1	L11020586-01	02/23/11 15:21
46	P2.022311.152808	WG357405-02	Serial Dilution		5	L11020586-01	02/23/11 15:28
47	P2.022311.153545	WG357414-18	CCV		1		02/23/11 15:35
48	P2.022311.154224	WG357414-19	CCB		1		02/23/11 15:42
49	P2.022311.154900	WG357295-01	Method/Prep Blank	1/50	1		02/23/11 15:49
50	P2.022311.155545	WG357295-02	Laboratory Control S	1/50	1		02/23/11 15:55
51	P2.022311.160224	WG357295-03	Laboratory Control S	1/50	1		02/23/11 16:02
52	P2.022311.160902	L11020439-01	24451 WW SLUDGE	1/50	1		02/23/11 16:09
53	P2.022311.161546	WG357406-01	Post Digestion Spike		1	L11020439-01	02/23/11 16:15
54	P2.022311.162230	WG357406-02	Serial Dilution		1	L11020439-01	02/23/11 16:22
55	P2.022311.162910	WG357414-20	CCV		1		02/23/11 16:29
56	P2.022311.163616	WG357414-21	CCB		1		02/23/11 16:36
57	P2.022311.164259	WG357312-03	Method/Prep Blank	50/50	1		02/23/11 16:42
58	P2.022311.164940	WG357312-04	Laboratory Control S	50/50	1		02/23/11 16:49
59	P2.022311.165621	WG357312-01	Reference Sample		1	L11020568-01	02/23/11 16:56
60	P2.022311.170300	WG357312-05	Matrix Spike Duplica	50/50	1	L11020568-01	02/23/11 17:03
61	P2.022311.170944	WG357312-06	Matrix Spike	50/50	1	L11020568-01	02/23/11 17:09
62	P2.022311.171633	WG357312-02	Reference Sample		1	L11020569-01	02/23/11 17:16
63	P2.022311.172312	WG357312-07	Matrix Spike Duplica	50/50	1	L11020569-01	02/23/11 17:23
64	P2.022311.172955	WG357312-08	Matrix Spike	50/50	1	L11020569-01	02/23/11 17:29
65	P2.022311.173640	L11020571-01	SWMU-57-21711-EB	50/50	1		02/23/11 17:36
66	P2.022311.174319	L11020571-02	SWMU-57-21711-FB	50/50	1		02/23/11 17:43
67	P2.022311.174959	WG357414-22	CCV		1		02/23/11 17:49
68	P2.022311.175639	WG357414-23	CCB		1		02/23/11 17:56

Page: 2 Approved: February 24, 2011

Esther L. Babgard

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022311HR.CSV
Analyst1: PDM Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 36542

Calibration Std: STD44101 ICV Std: STD43946 Post Spike: STD39932
ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44052
CCV: STD44102 LLCCV:

Workgroups: 352834,357379,357405,357406,357407,357223,357117,357224

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	P2.022311.180322	L11020574-01	SWMU-57-1DM-21811-W	50/50	1		02/23/11 18:03
70	P2.022311.180908	WG357407-01	Post Digestion Spike		1	L11020574-01	02/23/11 18:09
71	P2.022311.181457	WG357407-02	Serial Dilution		5	L11020574-01	02/23/11 18:14
72	P2.022311.182136	L11020579-01	LH18/24-SP650-6445-GRAB	50/50	1		02/23/11 18:21
73	P2.022311.182823	L11020579-02	LH18/24-SP650-6445-COMP	50/50	1		02/23/11 18:28
74	P2.022311.183512	WG357414-24	CCV		1		02/23/11 18:35
75	P2.022311.184151	WG357414-25	CCB		1		02/23/11 18:41
76	P2.022311.184833	WG357204-02	Method/Prep Blank	5/50	1		02/23/11 18:48
77	P2.022311.185513	WG357204-03	Laboratory Control S	5/50	1		02/23/11 18:55
78	P2.022311.190156	WG357124-01	TCLP Fluid Blank 1		1		02/23/11 19:01
79	P2.022311.190841	WG357124-02	TCLP Fluid Blank 2		1		02/23/11 19:08
80	P2.022311.191522	L11020492-01	SWMU-57-POND-21711-W	5/50	1		02/23/11 19:15
81	P2.022311.192202	WG357223-03	Post Digestion Spike		1	L11020492-01	02/23/11 19:22
82	P2.022311.192845	WG357223-04	Serial Dilution		5	L11020492-01	02/23/11 19:28
83	P2.022311.193523	WG357204-01	Reference Sample		1	L11020535-01	02/23/11 19:35
84	P2.022311.194202	WG357204-04	Matrix Spike	5/50	1	L11020535-01	02/23/11 19:42
85	P2.022311.194844	WG357204-05	Matrix Spike Duplica	5/50	1	L11020535-01	02/23/11 19:48
86	P2.022311.195529	WG357414-26	CCV		1		02/23/11 19:55
87	P2.022311.200213	WG357414-27	CCB		1		02/23/11 20:02
88	P2.022311.200850	WG357047-02	Method/Prep Blank	50/50	1		02/23/11 20:08
89	P2.022311.201532	WG357047-03	Laboratory Control S	50/50	1		02/23/11 20:15
90	P2.022311.202215	WG357047-01	Reference Sample		1	L11020486-07	02/23/11 20:22
91	P2.022311.202854	WG357047-04	Matrix Spike	50/50	1	L11020486-07	02/23/11 20:28
92	P2.022311.203541	WG357047-05	Matrix Spike Duplica	50/50	1	L11020486-07	02/23/11 20:35
93	P2.022311.204221	L11020475-01	11228-W0001	50/50	1		02/23/11 20:42
94	P2.022311.204950	L11020492-02	SWMU-57-POND-21711-W	50/50	1		02/23/11 20:49
95	P2.022311.205634	WG357117-03	Post Digestion Spike		1	L11020492-02	02/23/11 20:56
96	P2.022311.210314	WG357117-04	Serial Dilution		5	L11020492-02	02/23/11 21:03
97	P2.022311.210956	WG357414-28	CCV		1		02/23/11 21:09
98	P2.022311.211634	WG357414-29	CCB		1		02/23/11 21:16
99	P2.022311.212311	L11020517-01	PSO2-GW-021811	50/50	5		02/23/11 21:23
100	P2.022311.212958	WG357414-30	Interference Check		1		02/23/11 21:29
101	P2.022311.213540	WG357414-31	Interference Check		1		02/23/11 21:35
102	P2.022311.214125	WG357414-32	CCV		1		02/23/11 21:41

Page: 3 Approved: February 24, 2011

Sheri L. Babgard

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022311HR.CSV

Analyst1: PDM Analyst2: N/A

Method: 6010 SOP: ME600E Rev: 10

Maintenance Log ID: 36542

Calibration Std: STD44101 ICV Std: STD43946 Post Spike: STD39932

ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44052

CCV: STD44102 LLCCV:

Workgroups: 352834,357379,357405,357406,357407,357223,357117,357224

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	P2.022311.214805	WG357414-33	CCB		1		02/23/11 21:48

 Approved: February 24, 2011

Esther L. Babgard

Microbac

Microbac Laboratories Inc.

Data Checklist

Date: 22-FEB-2011
Analyst: PDM
Analyst: NA
Method: 6010
Instrument: PE-ICP2
Curve Workgroup: 357338
Runlog ID: 39161
Analytical Workgroups: 357117,357223,357225,357224

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0475,0487,0492,0507,0408,0535,0445
	0517,0533,0537
Client Forms	X
Level X	
Level 3	0517,0533
Level 4	0475,0492,0507,0408,0537
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	PDM
Secondary Reviewer	SLP
Comments	

Primary Reviewer:
23-FEB-2011
Pierce Morris

Secondary Reviewer:
23-FEB-2011
Sheri L. Babcock

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-23-2011 14:40:57

Microbac Laboratories Inc.

Data Checklist

Date: 23-FEB-2011
Analyst: PDM
Analyst: NA
Method: 6010
Instrument: PE-ICP2
Curve Workgroup: 357414
Runlog ID: 39181
Analytical Workgroups: 352834,357379,357405,357406,357407,357223,357117,357224

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0522,0523,0524,0542,0439,0568,0569
	0571,0574,0579,0492,0475,0517
Client Forms	X
Level X	
Level 3	0568,0569,0579,0517
Level 4	0542,0571,0574,0492,0475
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	PDM
Secondary Reviewer	SLP
Comments	

Primary Reviewer:
24-FEB-2011
Pierce Morris

Secondary Reviewer:
24-FEB-2011
Sheri L. Babcock

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-24-2011 13:00:44

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method 6010B AAB#: WG357117

Login Number: L11020492

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-POND-21711-W	02	02/17/11					02/21/11	3.8	180		02/22/11	5	180	
SWMU-57-POND-21711-W	02	02/17/11					02/21/11	3.8	180		02/23/11	6.3	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1926696
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method 6010B **AAB#:** WG357223

Login Number: L11020492

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-POND-21711-W	01	02/17/11	02/21/11	3.7			02/22/11	4.8	180		02/23/11	2.4	180	
SWMU-57-POND-21711-W	01	02/17/11	02/21/11	3.7			02/22/11	4.8	180		02/22/11	1.4	180	

*** = SEE PROJECT QAPP REQUIREMENTS**

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1926696
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L11020492
Work Group: WG357117
Blank File ID: P2.022211.112536
Blank Sample ID: WG357047-02
Prep Date: 02/21/11 10:48
Instrument ID: PE-ICP2
Analyzed Date: 02/22/11 11:25
Method: 6010B
Analyst: PDM

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357047-03	P2.022211.113215	02/22/11 11:32	01
SWMU-57-POND-21711-W	L11020492-02	P2.022211.143342	02/22/11 14:33	01
LCS	WG357047-03	P2.022311.201532	02/23/11 20:15	02
SWMU-57-POND-21711-W	L11020492-02	P2.022311.204950	02/23/11 20:49	02

Report Name: BLANK_SUMMARY
PDF File ID: 1926697
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L11020492
Work Group: WG357117
Blank File ID: P2.022311.200850
Blank Sample ID: WG357047-02
Prep Date: 02/21/11 10:48
Instrument ID: PE-ICP2
Analyzed Date: 02/23/11 20:08
Method: 6010B
Analyst: PDM

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357047-03	P2.022211.113215	02/22/11 11:32	01
SWMU-57-POND-21711-W	L11020492-02	P2.022211.143342	02/22/11 14:33	01
LCS	WG357047-03	P2.022311.201532	02/23/11 20:15	02
SWMU-57-POND-21711-W	L11020492-02	P2.022311.204950	02/23/11 20:49	02

Report Name: BLANK_SUMMARY
PDF File ID: 1926697
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L11020492	Work Group:	WG357223
Blank File ID:	P2.022211.151246	Blank Sample ID:	WG357204-02
Prep Date:	02/22/11 09:59	Instrument ID:	PE-ICP2
Analyzed Date:	02/22/11 15:12	Method:	6010B
Analyst:	PDM		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357204-03	P2.022211.151927	02/22/11 15:19	01
SWMU-57-POND-21711-W	L11020492-01	P2.022211.170646	02/22/11 17:06	01
LCS	WG357204-03	P2.022311.185513	02/23/11 18:55	02
SWMU-57-POND-21711-W	L11020492-01	P2.022311.191522	02/23/11 19:15	02

Report Name: BLANK_SUMMARY
PDF File ID: 1926697
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L11020492
Blank File ID: P2.022311.184833
Prep Date: 02/22/11 09:59
Analyzed Date: 02/23/11 18:48
Analyst: PDM

Work Group: WG357223
Blank Sample ID: WG357204-02
Instrument ID: PE-ICP2
Method: 6010B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357204-03	P2.022211.151927	02/22/11 15:19	01
SWMU-57-POND-21711-W	L11020492-01	P2.022211.170646	02/22/11 17:06	01
LCS	WG357204-03	P2.022311.185513	02/23/11 18:55	02
SWMU-57-POND-21711-W	L11020492-01	P2.022311.191522	02/23/11 19:15	02

Report Name: BLANK_SUMMARY
PDF File ID: 1926697
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L11020492 Prep Date:02/21/11 10:48 Sample ID:WG357047-02
Instrument ID:PE-ICP2 Run Date:02/22/11 11:25 Prep Method:3005A
File ID:P2.022211.112536 Analyst:PDM Method:6010B
Workgroup (AAB#):WG357117 Matrix:Water Units:mg/L
Contract #: Cal ID:PE-ICP-22-FEB-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Arsenic, Total	0.00500	0.0100	0.00500	1	U
Barium, Total	0.00500	0.0100	0.00500	1	U
Beryllium, Total	0.00500	0.0100	0.00500	1	U
Cadmium, Total	0.00500	0.0100	0.00500	1	U
Calcium, Total	0.100	0.200	0.100	1	U
Chromium, Total	0.0100	0.0200	0.0100	1	U
Cobalt, Total	0.0100	0.0200	0.0100	1	U
Copper, Total	0.0100	0.0200	0.0100	1	U
Iron, Total	0.0500	0.100	0.0500	1	U
Magnesium, Total	0.250	0.500	0.250	1	U
Manganese, Total	0.00500	0.0100	0.00500	1	U
Nickel, Total	0.0200	0.0400	0.0200	1	U
Potassium, Total	0.500	1.00	0.500	1	U
Silver, Total	0.00500	0.0100	0.00500	1	U
Sodium, Total	0.250	0.500	0.250	1	U
Vanadium, Total	0.00500	0.0100	0.00500	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1926698
24-FEB-2011 09:42

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11020492 Prep Date: 02/21/11 10:48 Sample ID: WG357047-02
Instrument ID: PE-ICP2 Run Date: 02/23/11 20:08 Prep Method: 3005A
File ID: P2.022311.200850 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG357117 Matrix: Water Units: mg/L
Contract #: Cal ID: PE-ICP-23-FEB-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Lead, Total	0.00250	0.00500	0.00250	1	U
Zinc, Total	0.0100	0.0200	0.0100	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1926698
24-FEB-2011 09:42

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11020492 Prep Date: 02/22/11 09:59 Sample ID: WG357204-02
Instrument ID: PE-ICP2 Run Date: 02/22/11 15:12 Prep Method: 3015
File ID: P2.022211.151246 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG357223 Matrix: Leachate Units: mg/L
Contract #: Cal ID: PE-ICP-22-FEB-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Antimony, TCLP	0.500	1.00	0.500	1	U
Arsenic, TCLP	0.0500	0.100	0.0500	1	U
Barium, TCLP	0.0500	0.100	0.0500	1	U
Beryllium, TCLP	0.0100	0.0200	0.0100	1	U
Cadmium, TCLP	0.0500	0.100	0.0500	1	U
Chromium, TCLP	0.100	0.200	0.100	1	U
Nickel, TCLP	0.200	0.400	0.200	1	U
Selenium, TCLP	0.0500	0.100	0.0500	1	U
Silver, TCLP	0.0500	0.100	0.0500	1	U
Thallium, TCLP	5.00	10.0	5.00	1	U
Vanadium, TCLP	0.0500	0.100	0.0500	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1926698
24-FEB-2011 09:42

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11020492 Prep Date: 02/22/11 09:59 Sample ID: WG357204-02
Instrument ID: PE-ICP2 Run Date: 02/23/11 18:48 Prep Method: 3015
File ID: P2.022311.184833 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG357223 Matrix: Leachate Units: mg/L
Contract #: Cal ID: PE-ICP-23-FEB-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Lead, TCLP	0.0250	0.0500	0.0250	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1926698
24-FEB-2011 09:42

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357047-03
Instrument ID: PE-ICP2 Run Time: 11:32 Prep Method: 3005A
File ID: P2.022211.113215 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG357117 Matrix: Water Units: mg/L
QC Key: DOD4 Lot#: STD39933 Cal ID: PE-ICP-22-FEB-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Total	5.00	5.00	100	80 - 120	
Arsenic, Total	0.200	0.186	92.8	80 - 120	
Barium, Total	0.500	0.494	98.8	80 - 120	
Beryllium, Total	0.0250	0.0246	98.2	80 - 120	
Cadmium, Total	0.0250	0.0241	96.2	80 - 120	
Calcium, Total	5.00	4.89	97.8	80 - 120	
Chromium, Total	0.250	0.242	96.9	80 - 120	
Cobalt, Total	0.100	0.0962	96.2	80 - 120	
Copper, Total	0.250	0.243	97.4	80 - 120	
Iron, Total	2.00	1.92	96.0	80 - 120	
Magnesium, Total	5.00	4.88	97.6	80 - 120	
Manganese, Total	0.250	0.249	99.5	80 - 120	
Nickel, Total	0.250	0.246	98.4	80 - 120	
Potassium, Total	25.0	24.3	97.1	80 - 120	
Silver, Total	0.200	0.198	98.8	80 - 120	
Sodium, Total	25.0	24.2	96.8	80 - 120	
Vanadium, Total	0.500	0.487	97.3	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1926699
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357047-03
Instrument ID: PE-ICP2 Run Time: 20:15 Prep Method: 3005A
File ID: P2.022311.201532 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG357117 Matrix: Water Units: mg/L
QC Key: DOD4 Lot#: STD39933 Cal ID: PE-ICP-23-FEB-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Lead, Total	0.250	0.243	97.1	80 - 120	
Zinc, Total	0.500	0.486	97.1	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1926699
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357204-03
Instrument ID: PE-ICP2 Run Time: 15:19 Prep Method: 3015
File ID: P2.022211.151927 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG357223 Matrix: Leachate Units: mg/L
QC Key: DOD4 Lot#: STD39932 Cal ID: PE-ICP-22-FEB-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, TCLP	6.00	5.90	98.3	80 - 120	
Arsenic, TCLP	2.00	1.89	94.3	80 - 120	
Barium, TCLP	5.00	4.92	98.4	80 - 120	
Beryllium, TCLP	0.250	0.242	96.8	80 - 120	
Cadmium, TCLP	0.250	0.242	96.7	80 - 120	
Chromium, TCLP	2.50	2.44	97.4	80 - 120	
Nickel, TCLP	2.50	2.42	96.9	80 - 120	
Selenium, TCLP	2.00	1.87	93.4	80 - 120	
Silver, TCLP	2.00	2.01	100	80 - 120	
Thallium, TCLP	2.50	2.46	98.5	80 - 120	
Vanadium, TCLP	5.00	4.88	97.7	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1926699
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357204-03
Instrument ID: PE-ICP2 Run Time: 18:55 Prep Method: 3015
File ID: P2.022311.185513 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG357223 Matrix: Leachate Units: mg/L
QC Key: DOD4 Lot#: STD39932 Cal ID: PE-ICP-23-FEB-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Lead, TCLP	2.50	2.39	95.5	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1926699
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11020492 Cal ID:PE-ICP2- Worknum:WG357117
Instrument ID:PE-ICP2 Contract #: Method:6010B
Parent ID:WG357047-01 File ID:P2.022211.113856 Dil:1 Matrix:WATER
Sample ID:WG357047-04 MS File ID:P2.022211.114535 Dil:1 Units:mg/L
Sample ID:WG357047-05 MSD File ID:P2.022211.115215 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum, Total	0.605	5.00	5.79	104	5.00	5.82	104	0.430	80 - 120	20	
Arsenic, Total	ND	0.200	0.191	95.7	0.200	0.193	96.3	0.619	80 - 120	20	
Barium, Total	0.0223	0.500	0.526	101	0.500	0.530	102	0.780	80 - 120	20	
Beryllium, Total	ND	0.0250	0.0250	100	0.0250	0.0253	101	0.990	80 - 120	20	
Cadmium, Total	ND	0.0250	0.0245	98.0	0.0250	0.0246	98.4	0.433	80 - 120	20	
Calcium, Total	0.826	5.00	6.01	104	5.00	6.01	104	0.0721	80 - 120	20	
Chromium, Total	ND	0.250	0.253	101	0.250	0.254	102	0.502	80 - 120	20	
Cobalt, Total	ND	0.100	0.0996	99.6	0.100	0.100	100	0.641	80 - 120	20	
Copper, Total	ND	0.250	0.250	100	0.250	0.249	99.7	0.252	80 - 120	20	
Iron, Total	0.619	2.00	2.88	113	2.00	2.92	115	1.44	80 - 120	20	
Magnesium, Total	0.669	5.00	5.68	100	5.00	5.79	103	1.94	80 - 120	20	
Manganese, Total	0.0230	0.250	0.293	108	0.250	0.294	108	0.397	80 - 120	20	
Nickel, Total	ND	0.250	0.256	102	0.250	0.256	103	0.357	80 - 120	20	
Potassium, Total	0.746	25.0	25.5	99.2	25.0	25.5	99.1	0.109	80 - 120	20	
Silver, Total	ND	0.200	0.202	101	0.200	0.202	101	0.0904	80 - 120	20	
Sodium, Total	1.75	25.0	26.8	100	25.0	26.8	100	0.111	80 - 120	20	
Vanadium, Total	ND	0.500	0.500	100	0.500	0.502	100	0.288	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008
PDF File ID:1926700
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11020492 Cal ID:PE-ICP2- Worknum:WG357117
Instrument ID:PE-ICP2 Contract #: Method:6010B
Parent ID:WG357047-01 File ID:P2.022311.202215 Dil:1 Matrix:WATER
Sample ID:WG357047-04 MS File ID:P2.022311.202854 Dil:1 Units:mg/L
Sample ID:WG357047-05 MSD File ID:P2.022311.203541 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Lead, Total	ND	0.250	0.248	99.3	0.250	0.248	99.4	0.0421	80 - 120	20	
Zinc, Total	ND	0.500	0.494	98.7	0.500	0.491	98.2	0.565	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008
PDF File ID:1926700
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11020492 Cal ID:PE-ICP2- Worknum:WG357223
Instrument ID:PE-ICP2 Contract #: Method:6010B
Parent ID:WG357204-01 File ID:P2.022211.163316 Dil:1 Matrix:WATER
Sample ID:WG357204-04 MS File ID:P2.022211.163956 Dil:1 Units:mg/L
Sample ID:WG357204-05 MSD File ID:P2.022211.164639 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony	ND	6.00	5.86	97.7	6.00	5.72	95.3	2.56	80 - 120	20	
Arsenic, TCLP	ND	2.00	1.88	93.8	2.00	1.85	92.3	1.61	80 - 120	20	
Barium, TCLP	0.542	5.00	5.37	96.5	5.00	5.20	93.1	3.27	80 - 120	20	
Beryllium	ND	0.250	0.243	97.2	0.250	0.237	94.8	2.45	80 - 120	20	
Cadmium, TCLP	ND	0.250	0.229	91.6	0.250	0.225	90.0	1.74	80 - 120	20	
Chromium, TCLP	ND	2.50	2.42	96.7	2.50	2.34	93.6	3.21	80 - 120	20	
Nickel	ND	2.50	2.35	94.1	2.50	2.30	91.9	2.40	80 - 120	20	
Selenium, TCLP	0.233	2.00	2.08	92.3	2.00	2.06	91.4	0.878	80 - 120	20	
Silver, TCLP	0.0503	2.00	2.03	98.8	2.00	1.98	96.3	2.44	80 - 120	20	
Thallium	ND	2.50	2.98	119	2.50	2.98	119	0.00270	80 - 120	20	
Vanadium	ND	5.00	4.96	99.2	5.00	4.78	95.5	3.76	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008
PDF File ID:1926700
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11020492 Cal ID:PE-ICP2- Worknum:WG357223
Instrument ID:PE-ICP2 Contract #: Method:6010B
Parent ID:WG357204-01 File ID:P2.022311.193523 Dil:1 Matrix:WATER
Sample ID:WG357204-04 MS File ID:P2.022311.194202 Dil:1 Units:mg/L
Sample ID:WG357204-05 MSD File ID:P2.022311.194844 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Lead, TCLP	0.0524	2.50	2.35	91.8	2.50	2.40	94.0	2.37	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008
PDF File ID:1926700
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.
Serial Dilution Report

Login: L11020492 **Worknum:** WG357117
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG357117-02 **File ID:** P2.022211.121125 **Dil:** 5 **Units:** mg/L
Sample: L11020487-01 **File ID:** P2.022211.115901 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	3.06		3.165		3.43	
Antimony	-.0017		ND			
Arsenic	.00516	F	ND	U		
Barium	.0779	X	.0795	X	2.05	
Beryllium	ND	U	ND	U		
Cadmium	ND	U	ND	U		
Calcium	.693	X	.805	F	16.20	
Chromium	.017	F	ND	U		
Cobalt	ND	U	ND	U		
Copper	.0103	F	ND	U		
Iron	12.5		13.25		6.00	
Lead	ND	U	ND	U		
Magnesium	.358	F	ND	U		
Manganese	.0385	X	.0422	F	9.61	
Nickel	ND	U	ND	U		
Potassium	ND	U	ND	U		
Selenium	.00667		ND			
Silver	ND	U	ND	U		
Sodium	.908	X	ND	U		
Thallium	.000189		ND			
Vanadium	.0206	X	ND	U		
Zinc	.0117	F	ND	U		

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 50 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 50 times the MDL.

SERIAL_DIL - Modified 09/22/2008
PDF File ID: 1926694
02/24/2011 09:42

Microbac Laboratories Inc.
Serial Dilution Report

Login: L11020492 **Worknum:** WG357223
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG357223-04 **File ID:** P2.022311.192845 **Dil:** 5 **Units:** mg/L
Sample: L11020492-01 **File ID:** P2.022311.191522 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	.0731		ND			
Antimony	ND	U	ND	U		
Arsenic	ND	U	ND	U		
Barium	ND	U	ND	U		
Beryllium	ND	U	ND	U		
Cadmium	ND	U	ND	U		
Calcium	1.1		ND			
Chromium	ND	U	ND	U		
Cobalt	-.00021		ND			
Copper	.00654		ND			
Iron	.15		ND			
Lead	ND	U	ND	U		
Magnesium	.541		ND			
Manganese	.0207		ND			
Nickel	ND	U	ND	U		
Potassium	.477		ND			
Selenium	ND	U	ND	U		
Silver	ND	U	ND	U		
Sodium	.679		ND			
Thallium	ND	U	ND	U		
Vanadium	ND	U	ND	U		
Zinc	.0376		ND			

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 50 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 50 times the MDL.

SERIAL_DIL - Modified 09/22/2008
PDF File ID: 1926694
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Microbac Laboratories Inc.
Serial Dilution Report

Login: L11020492 **Worknum:** WG357223
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG357223-02 **File ID:** P2.022211.161949 **Dil:** 5 **Units:** mg/L
Sample: L11020491-01 **File ID:** P2.022211.155255 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	.0614		ND			
Antimony	ND	U	ND	U		
Arsenic	ND	U	ND	U		
Barium	.0348	X	.03345	F	3.88	
Beryllium	ND	U	ND	U		
Cadmium	ND	U	ND	U		
Calcium	19.9		ND			
Chromium	ND	U	ND	U		
Cobalt	.00577		ND			
Copper	9.93		ND			
Iron	.115		ND			
Lead	ND	U	ND	U		
Magnesium	1.31		ND			
Manganese	.259		ND			
Nickel	1.68		1.715		2.08	
Potassium	.599		ND			
Selenium	ND	U	ND	U		
Silver	ND	U	ND	U		
Sodium	146		ND			
Thallium	ND	U	ND	U		
Vanadium	ND	U	ND	U		
Zinc	.431		ND			

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 50 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 50 times the MDL.

SERIAL_DIL - Modified 09/22/2008
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Microbac Laboratories Inc.
Serial Dilution Report

Login: L11020492 **Worknum:** WG357117
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG357117-04 **File ID:** P2.022311.210314 **Dil:** 5 **Units:** mg/L
Sample: L11020492-02 **File ID:** P2.022311.204950 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	.11	X	ND	U		
Antimony	.0273		ND			
Arsenic	.00838	F	ND	U		
Barium	.00864	F	ND	U		
Beryllium	ND	U	ND	U		
Cadmium	ND	U	ND	U		
Calcium	10.6		10.6		0.00	
Chromium	ND	U	ND	U		
Cobalt	ND	U	ND	U		
Copper	.0505	X	.053	F	4.95	
Iron	.902	X	.95	X	5.32	
Lead	.00639	X	ND	U		
Magnesium	4.88	X	5.15	X	5.53	
Manganese	.241	X	.2385	X	1.04	
Nickel	ND	U	ND	U		
Potassium	4.42	X	4.55	F	2.94	
Selenium	-.00235		ND			
Silver	ND	U	ND	U		
Sodium	4.62	X	4.78	X	3.46	
Thallium	.012		ND			
Vanadium	ND	U	ND	U		
Zinc	.449	X	.4385	X	2.34	

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 50 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 50 times the MDL.

SERIAL_DIL - Modified 09/22/2008
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Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11020492 **Worknum:** WG357117
Instrument ID: PE-ICP2 **Method:** 6010B
Post Spike ID: WG357117-01 **File ID:** P2.022211.120538 **Dil:** 1 **Units:** mg/L
Sample ID: L11020487-01 **File ID:** P2.022211.115901 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	7.95		3.06		5	103.9	75 - 125	
ARSENIC	0.202		0.00516	F	.2	98.5	75 - 125	
BARIUM	0.585		0.0779		.5	102.9	75 - 125	
BERYLLIUM	0.0265		0	U	.025	106.1	75 - 125	
CADMIUM	0.0246		0	U	.025	98.4	75 - 125	
CALCIUM	5.74		0.693		5	102.3	75 - 125	
CHROMIUM	0.268		0.0170	F	.25	101.0	75 - 125	
COBALT	0.103		0	U	.1	102.6	75 - 125	
COPPER	0.265		0.0103	F	.25	102.4	75 - 125	
IRON	13.2		12.5		2	100.0	75 - 125	
LEAD	0.268		0	U	.25	107.1	75 - 125	
MAGNESIUM	5.46		0.358	F	5	102.8	75 - 125	
MANGANESE	0.300		0.0385		.25	106.0	75 - 125	
NICKEL	0.260		0	U	.25	103.9	75 - 125	
POTASSIUM	25.9		0	U	25	103.8	75 - 125	
SILVER	0.207		0	U	.2	103.6	75 - 125	
SODIUM	26.7		0.908		25	103.6	75 - 125	
VANADIUM	0.523		0.0206		.5	100.9	75 - 125	
ZINC	0.510		0.0117	F	.5	99.9	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1926695
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11020492 **Worknum:** WG357117
Instrument ID: PE-ICP2 **Method:** 6010B
Post Spike ID: WG357117-03 **File ID:** P2.022311.205634 **Dil:** 1 **Units:** mg/L
Sample ID: L11020492-02 **File ID:** P2.022311.204950 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	5.06		0.110		5	99.2	75 - 125	
ARSENIC	0.188		0.00838	F	.2	90.4	75 - 125	
BARIUM	0.499		0.00864	F	.5	98.2	75 - 125	
BERYLLIUM	0.0239		0	U	.025	95.5	75 - 125	
CADMIUM	0.0255		0	U	.025	102.1	75 - 125	
CALCIUM	14.7		10.6		5	103.8	75 - 125	
CHROMIUM	0.249		0	U	.25	99.6	75 - 125	
COBALT	0.0966		0	U	.1	96.6	75 - 125	
COPPER	0.279		0.0505		.25	93.4	75 - 125	
IRON	2.74		0.902		2	96.3	75 - 125	
LEAD	0.251		0.00639		.25	98.3	75 - 125	
MAGNESIUM	9.29		4.88		5	98.1	75 - 125	
MANGANESE	0.463		0.241		.25	98.3	75 - 125	
NICKEL	0.248		0	U	.25	99.1	75 - 125	
POTASSIUM	28.0		4.42		25	95.9	75 - 125	
SILVER	0.190		0	U	.2	95.2	75 - 125	
SODIUM	28.0		4.62		25	95.5	75 - 125	
VANADIUM	0.493		0	U	.5	98.6	75 - 125	
ZINC	0.896		0.449		.5	98.4	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1926695
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11020492 **Worknum:** WG357223
Instrument ID: PE-ICP2 **Method:** 6010B
Post Spike ID: WG357223-01 **File ID:** P2.022211.155942 **Dil:** 1 **Units:** mg/L
Sample ID: L11020491-01 **File ID:** P2.022211.155255 **Dil:** 1 **Matrix:** Leachate

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	0.600		0	U	.6	100.0	75 - 125	
ARSENIC	0.197		0	U	.2	98.6	75 - 125	
BARIUM	0.518		0.0348		.5	97.4	75 - 125	
BERYLLIUM	0.0248		0	U	.025	99.3	75 - 125	
CADMIUM	0.0258		0	U	.025	103.1	75 - 125	
CHROMIUM	0.246		0	U	.25	98.5	75 - 125	
LEAD	0.245		0	U	.25	98.1	75 - 125	
NICKEL	1.79		1.68		.25	109.7	75 - 125	
SELENIUM	0.192		0	U	.2	95.9	75 - 125	
SILVER	0.202		0	U	.2	101.1	75 - 125	
THALLIUM	0.268	U	0	U	.25	107.1	75 - 125	
VANADIUM	0.496		0	U	.5	99.2	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1926695
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11020492 **Worknum:** WG357223
Instrument ID: PE-ICP2 **Method:** 6010B
Post Spike ID: WG357223-03 **File ID:** P2.022311.192202 **Dil:** 1 **Units:** mg/L
Sample ID: L11020492-01 **File ID:** P2.022311.191522 **Dil:** 1 **Matrix:** Leachate

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	0.569		0	U	.6	94.8	75 - 125	
ARSENIC	0.183		0	U	.2	91.5	75 - 125	
BARIUM	0.480		0	U	.5	95.9	75 - 125	
BERYLLIUM	0.0233		0	U	.025	93.3	75 - 125	
CADMIUM	0.0235		0	U	.025	94.0	75 - 125	
CHROMIUM	0.239		0	U	.25	95.5	75 - 125	
LEAD	0.237		0	U	.25	94.8	75 - 125	
NICKEL	0.239		0	U	.25	95.5	75 - 125	
SELENIUM	0.183		0	U	.2	91.4	75 - 125	
SILVER	0.192		0	U	.2	96.1	75 - 125	
THALLIUM	0.236	U	0	U	.25	94.4	75 - 125	
VANADIUM	0.480		0	U	.5	95.9	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1926695
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L11020492**	Workgroup (AAB#):	**WG357117**
Analytical Method:	**6010B**	Instrument ID:	**PE-ICP2**
ICAL Worknum:	**WG357338**	Initial Calibration Date:	**22-FEB-2011 10:33**

	WG357338-01		WG357338-02		WG357338-03		WG357338-04		WG357338-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	-138	.1	494	.2	1070	10	52100	20	101000	.999296	
ANTIMONY	0	16.2	.012	21.4	.024	40.5	1.2	1910	2.4	3820	.999999	
ARSENIC	0	2.38	NA	NA	.008	9.48	.4	440	.8	879	1	
BARIUM	0	-45.0	.01	612	.02	1230	1	59600	2	117000	.99989	
BERYLLIUM	0	-581	.0005	282	.001	603	.05	29000	.1	57500	.999504	
CADMIUM	0	22.8	.0005	10.0	.001	18.5	.05	890	.1	1790	.999907	
CALCIUM	0	-43.9	NA	NA	.2	21.4	10	1060	20	2140	.999989	
CHROMIUM	0	-41.1	.005	619	.01	1230	.5	57800	1	114000	.999813	
COBALT	0	-27.1	.002	41.4	.004	79.9	.1	3930	.4	7780	.999976	
COPPER	0	-1210	.005	755	.01	1560	.5	73500	1	145000	.999579	
IRON	0	1.83	.04	18.0	.08	35.8	4	1840	8	3710	.999943	
LEAD	0	51.4	.005	42.6	.01	64.8	.5	2970	1	5900	.997326	
MAGNESIUM	0	3.90	.1	85.3	.2	170	10	8340	20	16800	.999991	
MANGANESE	0	257	.005	2450	.01	4680	.5	228000	1	448000	.999962	
NICKEL	0	-2.05	.005	179	.01	360	.5	17400	1	34000	.999839	
POTASSIUM	0	153	.5	1340	1	2720	50	134000	100	265000	1	
SELENIUM	0	5.46	NA	NA	.008	12.5	.4	578	.8	1150	.999997	
SILVER	0	-1520	.004	958	.008	1690	.4	81500	.8	161000	.999547	
SODIUM	0	325	.5	7350	1	14600	50	697000	100	1350000	1	
THALLIUM	0	-32.2	NA	NA	.01	16.6	.5	858	1	1690	.99998	
VANADIUM	0	4380	.01	1480	.02	2970	1	152000	2	302000	.999984	
ZINC	0	1930	.01	554	.02	979	1	33000	2	65200	.996387	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

INT_CAL_ICP - Modified 03/06/2008
PDF File ID 1926703
Report generated: 24-FEB-2011 09:42

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L11020492**	Workgroup (AAB#):	**WG357117**
Analytical Method:	**6010B**	Instrument ID:	**PE-ICP2**
ICAL Worknum:	**WG357414**	Initial Calibration Date:	**23-FEB-2011 09:44**

	WG357414-01		WG357414-02		WG357414-03		WG357414-04		WG357414-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	-201	.1	526	.2	990	10	47600	20	92900	.999923	
ANTIMONY	0	17.1	.012	19.4	.024	39.1	1.2	1920	2.4	3870	.999968	
ARSENIC	0	2.84	NA	NA	.008	8.36	.4	434	.8	883	.999963	
BARIUM	0	-40.5	.01	623	.02	1210	1	58900	2	119000	.999982	
BERYLLIUM	0	-580	.0005	287	.001	576	.05	28800	.1	58100	.999988	
CADMIUM	0	24.3	.0005	7.86	.001	16.1	.05	888	.1	1790	.999773	
CALCIUM	0	-44.3	NA	NA	.2	24.6	10	1050	20	2150	.999904	
CHROMIUM	0	-34.9	.005	602	.01	1200	.5	57500	1	116000	.999935	
COBALT	0	-20.3	.002	29.8	.004	76.9	.1	3870	.4	7850	.998293	
COPPER	0	-1270	.005	710	.01	1500	.5	71800	1	147000	.9996	
IRON	0	1.34	.04	17.7	.08	34.9	4	1680	8	3410	.999961	
LEAD	0	37.4	.005	33.8	.01	65.9	.5	2990	1	6050	.999794	
MAGNESIUM	0	2.42	.1	84.0	.2	159	10	7770	20	15800	.999902	
MANGANESE	0	216	.005	2410	.01	4590	.5	225000	1	452000	.999953	
NICKEL	0	-0.328	.005	178	.01	352	.5	17300	1	34700	.999996	
POTASSIUM	0	225	.5	1190	1	2420	50	124000	100	246000	1	
SELENIUM	0	9.52	NA	NA	.008	5.44	.4	567	.8	1140	1	
SILVER	0	-1460	.004	954	.008	1640	.4	79800	.8	162000	.999059	
SODIUM	0	887	.5	6710	1	13100	50	646000	100	1260000	1	
THALLIUM	0	-34.0	NA	NA	.01	22.3	.5	861	1	1730	.999995	
VANADIUM	0	4150	.01	1720	.02	3090	1	149000	2	306000	.999583	
ZINC	0	330	.01	355	.02	650	1	33700	2	67500	.999322	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

INT_CAL_ICP - Modified 03/06/2008
PDF File ID 1926703
Report generated: 24-FEB-2011 09:42

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L11020492**	Workgroup (AAB#):	**WG357223**
Analytical Method:	**6010B**	Instrument ID:	**PE-ICP2**
ICAL Worknum:	**WG357338**	Initial Calibration Date:	**22-FEB-2011 10:33**

	WG357338-01		WG357338-02		WG357338-03		WG357338-04		WG357338-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	-138	.1	494	.2	1070	10	52100	20	101000	.999296	
ANTIMONY	0	16.2	.012	21.4	.024	40.5	1.2	1910	2.4	3820	.999999	
ARSENIC	0	2.38	NA	NA	.008	9.48	.4	440	.8	879	1	
BARIUM	0	-45.0	.01	612	.02	1230	1	59600	2	117000	.99989	
BERYLLIUM	0	-581	.0005	282	.001	603	.05	29000	.1	57500	.999504	
CADMIUM	0	22.8	.0005	10.0	.001	18.5	.05	890	.1	1790	.999907	
CALCIUM	0	-43.9	NA	NA	.2	21.4	10	1060	20	2140	.999989	
CHROMIUM	0	-41.1	.005	619	.01	1230	.5	57800	1	114000	.999813	
COBALT	0	-27.1	.002	41.4	.004	79.9	.1	3930	.4	7780	.999976	
COPPER	0	-1210	.005	755	.01	1560	.5	73500	1	145000	.999579	
IRON	0	1.83	.04	18.0	.08	35.8	4	1840	8	3710	.999943	
LEAD	0	51.4	.005	42.6	.01	64.8	.5	2970	1	5900	.997326	
MAGNESIUM	0	3.90	.1	85.3	.2	170	10	8340	20	16800	.999991	
MANGANESE	0	257	.005	2450	.01	4680	.5	228000	1	448000	.999962	
NICKEL	0	-2.05	.005	179	.01	360	.5	17400	1	34000	.999839	
POTASSIUM	0	153	.5	1340	1	2720	50	134000	100	265000	1	
SELENIUM	0	5.46	NA	NA	.008	12.5	.4	578	.8	1150	.999997	
SILVER	0	-1520	.004	958	.008	1690	.4	81500	.8	161000	.999547	
SODIUM	0	325	.5	7350	1	14600	50	697000	100	1350000	1	
THALLIUM	0	-32.2	NA	NA	.01	16.6	.5	858	1	1690	.99998	
VANADIUM	0	4380	.01	1480	.02	2970	1	152000	2	302000	.999984	
ZINC	0	1930	.01	554	.02	979	1	33000	2	65200	.996387	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

INT_CAL_ICP - Modified 03/06/2008
PDF File ID 1926703
Report generated: 24-FEB-2011 09:42

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L11020492**	Workgroup (AAB#):	**WG357223**
Analytical Method:	**6010B**	Instrument ID:	**PE-ICP2**
ICAL Worknum:	**WG357414**	Initial Calibration Date:	**23-FEB-2011 09:44**

	WG357414-01		WG357414-02		WG357414-03		WG357414-04		WG357414-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	-201	.1	526	.2	990	10	47600	20	92900	.999923	
ANTIMONY	0	17.1	.012	19.4	.024	39.1	1.2	1920	2.4	3870	.999968	
ARSENIC	0	2.84	NA	NA	.008	8.36	.4	434	.8	883	.999963	
BARIUM	0	-40.5	.01	623	.02	1210	1	58900	2	119000	.999982	
BERYLLIUM	0	-580	.0005	287	.001	576	.05	28800	.1	58100	.999988	
CADMIUM	0	24.3	.0005	7.86	.001	16.1	.05	888	.1	1790	.999773	
CALCIUM	0	-44.3	NA	NA	.2	24.6	10	1050	20	2150	.999904	
CHROMIUM	0	-34.9	.005	602	.01	1200	.5	57500	1	116000	.999935	
COBALT	0	-20.3	.002	29.8	.004	76.9	.1	3870	.4	7850	.998293	
COPPER	0	-1270	.005	710	.01	1500	.5	71800	1	147000	.9996	
IRON	0	1.34	.04	17.7	.08	34.9	4	1680	8	3410	.999961	
LEAD	0	37.4	.005	33.8	.01	65.9	.5	2990	1	6050	.999794	
MAGNESIUM	0	2.42	.1	84.0	.2	159	10	7770	20	15800	.999902	
MANGANESE	0	216	.005	2410	.01	4590	.5	225000	1	452000	.999953	
NICKEL	0	-0.328	.005	178	.01	352	.5	17300	1	34700	.999996	
POTASSIUM	0	225	.5	1190	1	2420	50	124000	100	246000	1	
SELENIUM	0	9.52	NA	NA	.008	5.44	.4	567	.8	1140	1	
SILVER	0	-1460	.004	954	.008	1640	.4	79800	.8	162000	.999059	
SODIUM	0	887	.5	6710	1	13100	50	646000	100	1260000	1	
THALLIUM	0	-34.0	NA	NA	.01	22.3	.5	861	1	1730	.999995	
VANADIUM	0	4150	.01	1720	.02	3090	1	149000	2	306000	.999583	
ZINC	0	330	.01	355	.02	650	1	33700	2	67500	.999322	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

INT_CAL_ICP - Modified 03/06/2008
PDF File ID 1926703
Report generated: 24-FEB-2011 09:42

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-07
Instrument ID: PE-ICP2 Run Time: 10:47 Method: 6010B
File ID: P2.022211.104728 Analyst: PDM Units: mg/L
Workgroup (AAB#): WG357117 Cal ID: PE-ICP2 - 22-FEB-11
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ALUMINUM	.05	.1	.05	U
ARSENIC	.005	.01	.005	U
BARIUM	.005	.01	.005	U
BERYLLIUM	.005	.01	.005	U
CADMIUM	.005	.01	.005	U
CALCIUM	.1	.2	.1	U
CHROMIUM	.01	.02	.01	U
COBALT	.01	.02	.01	U
COPPER	.01	.02	.01	U
IRON	.05	.1	.05	U
LEAD	.0025	.005	.0025	U
MAGNESIUM	.25	.5	.25	U
MANGANESE	.005	.01	.005	U
NICKEL	.02	.04	.02	U
POTASSIUM	.5	1	.5	U
SILVER	.005	.01	.005	U
SODIUM	.25	.5	.25	U
VANADIUM	.005	.01	.005	U
ZINC	.01	.02	.01	U

U = Result is less than 2 x MDL

F = Result is between MDL and 2 x MDL

* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1926705
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-07
Instrument ID: PE-ICP2 Run Time: 09:57 Method: 6010B
File ID: P2.022311.095752 Analyst: PDM Units: mg/L
Workgroup (AAB#): WG357117 Cal ID: PE-ICP2 - 23-FEB-11
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ALUMINUM	.05	.1	.05	U
ARSENIC	.005	.01	.005	U
BARIUM	.005	.01	.005	U
BERYLLIUM	.005	.01	.005	U
CADMIUM	.005	.01	.005	U
CALCIUM	.1	.2	.1	U
CHROMIUM	.01	.02	.01	U
COBALT	.01	.02	.01	U
COPPER	.01	.02	.01	U
IRON	.05	.1	.05	U
LEAD	.0025	.005	.0025	U
MAGNESIUM	.25	.5	.25	U
MANGANESE	.005	.01	.005	U
NICKEL	.02	.04	.02	U
POTASSIUM	.5	1	.5	U
SILVER	.005	.01	.005	U
SODIUM	.25	.5	.25	U
VANADIUM	.005	.01	.005	U
ZINC	.01	.02	.01	U

U = Result is less than 2 x MDL

F = Result is between MDL and 2 x MDL

* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1926705
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-07
Instrument ID: PE-ICP2 Run Time: 10:47 Method: 6010B
File ID: P2.022211.104728 Analyst: PDM Units: mg/L
Workgroup (AAB#): WG357223 Cal ID: PE-ICP2 - 22-FEB-11
Matrix: LEACHATE

Analytes	MDL	RDL	Concentration	Qualifier
ANTIMONY	.05	.1	.05	U
ARSENIC	.005	.01	.005	U
BARIUM	.005	.01	.005	U
BERYLLIUM	.001	.002	.001	U
CADMIUM	.005	.01	.005	U
CHROMIUM	.01	.02	.01	U
LEAD	.0025	.005	.0025	U
NICKEL	.02	.04	.02	U
SELENIUM	.005	.01	.005	U
SILVER	.005	.01	.005	U
THALLIUM	.5	1	.5	U
VANADIUM	.005	.01	.005	U

U = Result is less than 2 x MDL
F = Result is between MDL and 2 x MDL
* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1926705
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-07
Instrument ID: PE-ICP2 Run Time: 09:57 Method: 6010B
File ID: P2.022311.095752 Analyst: PDM Units: mg/L
Workgroup (AAB#): WG357223 Cal ID: PE-ICP2 - 23-FEB-11
Matrix: LEACHATE

Analytes	MDL	RDL	Concentration	Qualifier
ANTIMONY	.05	.1	.05	U
ARSENIC	.005	.01	.005	U
BARIUM	.005	.01	.005	U
BERYLLIUM	.001	.002	.001	U
CADMIUM	.005	.01	.005	U
CHROMIUM	.01	.02	.01	U
LEAD	.0025	.005	.0025	U
NICKEL	.02	.04	.02	U
SELENIUM	.005	.01	.005	U
SILVER	.005	.01	.005	U
THALLIUM	.5	1	.5	U
VANADIUM	.005	.01	.005	U

U = Result is less than 2 x MDL

F = Result is between MDL and 2 x MDL

* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1926705
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-12

Instrument ID: PE-ICP2 Run Time: 11:18 Method: 6010B

File ID: P2.022211.111857 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 22-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	-0.00310	F
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	-0.0137	F

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1926708
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-14

Instrument ID: PE-ICP2 Run Time: 12:38 Method: 6010B

File ID: P2.022211.123805 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 22-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	-0.00371	F
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	-0.0209	*

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1926708
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-17

Instrument ID: PE-ICP2 Run Time: 14:04 Method: 6010B

File ID: P2.022211.140443 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 22-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	-0.00338	F
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	-0.0336	*

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1926708
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-19

Instrument ID: PE-ICP2 Run Time: 15:06 Method: 6010B

File ID: P2.022211.150611 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 22-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	-0.00384	F
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	-0.0391	*

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
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Report generated 02/24/2011 09:42

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CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-11

Instrument ID: PE-ICP2 Run Time: 10:22 Method: 6010B

File ID: P2.022311.102234 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

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CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-27

Instrument ID: PE-ICP2 Run Time: 20:02 Method: 6010B

File ID: P2.022311.200213 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

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CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-29

Instrument ID: PE-ICP2 Run Time: 21:16 Method: 6010B

File ID: P2.022311.211634 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

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CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-12

Instrument ID: PE-ICP2 Run Time: 11:18 Method: 6010B

File ID: P2.022211.111857 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 22-FEB-11

Matrix: LEACHATE QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00100	0.00200	0.00100	U
Cadmium	0.00500	0.0100	0.00500	U
Chromium	0.0100	0.0200	0.0100	U
Lead	0.00250	0.00500	-0.00310	F
Nickel	0.0200	0.0400	0.0200	U
Selenium	0.00500	0.0100	0.00500	U
Silver	0.00500	0.0100	0.00500	U
Thallium	0.500	1.00	0.500	U
Vanadium	0.00500	0.0100	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

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CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-19

Instrument ID: PE-ICP2 Run Time: 15:06 Method: 6010B

File ID: P2.022211.150611 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 22-FEB-11

Matrix: LEACHATE QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00100	0.00200	0.00100	U
Cadmium	0.00500	0.0100	0.00500	U
Chromium	0.0100	0.0200	0.0100	U
Lead	0.00250	0.00500	-0.00384	F
Nickel	0.0200	0.0400	0.0200	U
Selenium	0.00500	0.0100	0.00500	U
Silver	0.00500	0.0100	0.00500	U
Thallium	0.500	1.00	0.500	U
Vanadium	0.00500	0.0100	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

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Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-21

Instrument ID: PE-ICP2 Run Time: 16:13 Method: 6010B

File ID: P2.022211.161310 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 22-FEB-11

Matrix: LEACHATE QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00100	0.00200	0.00100	U
Cadmium	0.00500	0.0100	0.00500	U
Chromium	0.0100	0.0200	0.0100	U
Lead	0.00250	0.00500	-0.00429	F
Nickel	0.0200	0.0400	0.0200	U
Selenium	0.00500	0.0100	0.00500	U
Silver	0.00500	0.0100	0.00500	U
Thallium	0.500	1.00	0.500	U
Vanadium	0.00500	0.0100	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

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Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-23

Instrument ID: PE-ICP2 Run Time: 17:20 Method: 6010B

File ID: P2.022211.172007 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 22-FEB-11

Matrix: LEACHATE QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00100	0.00200	0.00100	U
Cadmium	0.00500	0.0100	0.00500	U
Chromium	0.0100	0.0200	0.0100	U
Lead	0.00250	0.00500	-0.00376	F
Nickel	0.0200	0.0400	0.0200	U
Selenium	0.00500	0.0100	0.00500	U
Silver	0.00500	0.0100	0.00500	U
Thallium	0.500	1.00	0.500	U
Vanadium	0.00500	0.0100	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

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CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-11

Instrument ID: PE-ICP2 Run Time: 10:22 Method: 6010B

File ID: P2.022311.102234 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 23-FEB-11

Matrix: LEACHATE QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00100	0.00200	0.00100	U
Cadmium	0.00500	0.0100	0.00500	U
Chromium	0.0100	0.0200	0.0100	U
Lead	0.00250	0.00500	0.00250	U
Nickel	0.0200	0.0400	0.0200	U
Selenium	0.00500	0.0100	0.00500	U
Silver	0.00500	0.0100	0.00500	U
Thallium	0.500	1.00	0.500	U
Vanadium	0.00500	0.0100	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

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CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-25

Instrument ID: PE-ICP2 Run Time: 18:41 Method: 6010B

File ID: P2.022311.184151 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 23-FEB-11

Matrix: LEACHATE QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00100	0.00200	0.00100	U
Cadmium	0.00500	0.0100	0.00500	U
Chromium	0.0100	0.0200	0.0100	U
Lead	0.00250	0.00500	0.00250	U
Nickel	0.0200	0.0400	0.0200	U
Selenium	0.00500	0.0100	0.00500	U
Silver	0.00500	0.0100	0.00500	U
Thallium	0.500	1.00	0.500	U
Vanadium	0.00500	0.0100	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
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Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-27

Instrument ID: PE-ICP2 Run Time: 20:02 Method: 6010B

File ID: P2.022311.200213 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 23-FEB-11

Matrix: LEACHATE QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00100	0.00200	0.00100	U
Cadmium	0.00500	0.0100	0.00500	U
Chromium	0.0100	0.0200	0.0100	U
Lead	0.00250	0.00500	0.00250	U
Nickel	0.0200	0.0400	0.0200	U
Selenium	0.00500	0.0100	0.00500	U
Silver	0.00500	0.0100	0.00500	U
Thallium	0.500	1.00	0.500	U
Vanadium	0.00500	0.0100	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1926708
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-06

Instrument ID: PE-ICP2 Run Time: 10:40 Method: 6010B

File ID: P2.022211.104040 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 22-FEB-11

QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Aluminum		10	10.2	102	90 - 110	
Arsenic		.4	0.393	98.1	90 - 110	
Barium		1	1.02	102	90 - 110	
Beryllium		.05	0.0498	99.7	90 - 110	
Cadmium		.05	0.0498	99.5	90 - 110	
Calcium		10	10.5	105	90 - 110	
Chromium		.5	0.507	101	90 - 110	
Cobalt		.2	0.199	99.7	90 - 110	
Copper		.5	0.508	102	90 - 110	
Iron		4	4.00	100	90 - 110	
Lead		.5	0.527	105	90 - 110	
Magnesium		10	9.99	99.9	90 - 110	
Manganese		.5	0.523	105	90 - 110	
Nickel		.5	0.511	102	90 - 110	
Potassium		50	50.2	100	90 - 110	
Silver		.4	0.407	102	90 - 110	
Sodium		50	49.0	97.9	90 - 110	
Vanadium		1	0.998	99.8	90 - 110	
Zinc		1	0.989	98.9	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008

PDF File ID: 1926704

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-06

Instrument ID: PE-ICP2 Run Time: 09:51 Method: 6010B

File ID: P2.022311.095111 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 23-FEB-11

QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Aluminum		10	10.1	101	90 - 110	
Arsenic		.4	0.389	97.2	90 - 110	
Barium		1	1.01	101	90 - 110	
Beryllium		.05	0.0495	99.1	90 - 110	
Cadmium		.05	0.0492	98.5	90 - 110	
Calcium		10	10.3	103	90 - 110	
Chromium		.5	0.498	99.6	90 - 110	
Cobalt		.2	0.192	96.1	90 - 110	
Copper		.5	0.496	99.2	90 - 110	
Iron		4	3.93	98.2	90 - 110	
Lead		.5	0.501	100	90 - 110	
Magnesium		10	9.87	98.7	90 - 110	
Manganese		.5	0.516	103	90 - 110	
Nickel		.5	0.504	101	90 - 110	
Potassium		50	49.4	98.7	90 - 110	
Silver		.4	0.403	101	90 - 110	
Sodium		50	48.2	96.3	90 - 110	
Vanadium		1	0.984	98.4	90 - 110	
Zinc		1	1.00	100	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008

PDF File ID: 1926704

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-06

Instrument ID: PE-ICP2 Run Time: 10:40 Method: 6010B

File ID: P2.022211.104040 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 22-FEB-11

QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		1.2	1.25	104	90 - 110	
Arsenic		.4	0.393	98.1	90 - 110	
Barium		1	1.02	102	90 - 110	
Beryllium		.05	0.0498	99.7	90 - 110	
Cadmium		.05	0.0498	99.5	90 - 110	
Chromium		.5	0.507	101	90 - 110	
Lead		.5	0.527	105	90 - 110	
Nickel		.5	0.511	102	90 - 110	
Selenium		.4	0.394	98.4	90 - 110	
Silver		.4	0.407	102	90 - 110	
Thallium		.5	0.523	105	90 - 110	
Vanadium		1	0.998	99.8	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008

PDF File ID: 1926704

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-06

Instrument ID: PE-ICP2 Run Time: 09:51 Method: 6010B

File ID: P2.022311.095111 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 23-FEB-11

QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		1.2	1.21	101	90 - 110	
Arsenic		.4	0.389	97.2	90 - 110	
Barium		1	1.01	101	90 - 110	
Beryllium		.05	0.0495	99.1	90 - 110	
Cadmium		.05	0.0492	98.5	90 - 110	
Chromium		.5	0.498	99.6	90 - 110	
Lead		.5	0.501	100	90 - 110	
Nickel		.5	0.504	101	90 - 110	
Selenium		.4	0.393	98.3	90 - 110	
Silver		.4	0.403	101	90 - 110	
Thallium		.5	0.510	102	90 - 110	
Vanadium		1	0.984	98.4	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008

PDF File ID: 1926704

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-11

Instrument ID: PE-ICP2 Run Time: 11:12 Method: 6010B

File ID: P2.022211.111218 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 22-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.93	mg/L	99.3	90 - 110		
Arsenic		0.400	0.379	mg/L	94.7	90 - 110		
Barium		1.00	0.993	mg/L	99.3	90 - 110		
Beryllium		0.0500	0.0498	mg/L	99.7	90 - 110		
Cadmium		0.0500	0.0486	mg/L	97.3	90 - 110		
Calcium		10.0	9.99	mg/L	99.9	90 - 110		
Chromium		0.500	0.491	mg/L	98.3	90 - 110		
Cobalt		0.200	0.193	mg/L	96.5	90 - 110		
Copper		0.500	0.488	mg/L	97.7	90 - 110		
Iron		4.00	3.88	mg/L	97.1	90 - 110		
Lead		0.500	0.507	mg/L	101	90 - 110		
Magnesium		10.0	9.73	mg/L	97.3	90 - 110		
Manganese		0.500	0.499	mg/L	99.8	90 - 110		
Nickel		0.500	0.493	mg/L	98.7	90 - 110		
Potassium		50.0	49.4	mg/L	98.8	90 - 110		
Silver		0.400	0.398	mg/L	99.5	90 - 110		
Sodium		50.0	49.2	mg/L	98.5	90 - 110		
Vanadium		1.00	0.981	mg/L	98.1	90 - 110		
Zinc		1.00	0.976	mg/L	97.6	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-13

Instrument ID: PE-ICP2 Run Time: 12:31 Method: 6010B

File ID: P2.022211.123127 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 22-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.0	mg/L	100	90 - 110		
Arsenic		0.400	0.387	mg/L	96.8	90 - 110		
Barium		1.00	0.998	mg/L	99.8	90 - 110		
Beryllium		0.0500	0.0503	mg/L	101	90 - 110		
Cadmium		0.0500	0.0490	mg/L	98.1	90 - 110		
Calcium		10.0	10.1	mg/L	101	90 - 110		
Chromium		0.500	0.495	mg/L	99.0	90 - 110		
Cobalt		0.200	0.194	mg/L	97.1	90 - 110		
Copper		0.500	0.492	mg/L	98.3	90 - 110		
Iron		4.00	3.90	mg/L	97.5	90 - 110		
Lead		0.500	0.510	mg/L	102	90 - 110		
Magnesium		10.0	9.82	mg/L	98.2	90 - 110		
Manganese		0.500	0.501	mg/L	100	90 - 110		
Nickel		0.500	0.494	mg/L	98.8	90 - 110		
Potassium		50.0	49.7	mg/L	99.5	90 - 110		
Silver		0.400	0.401	mg/L	100	90 - 110		
Sodium		50.0	49.7	mg/L	99.4	90 - 110		
Vanadium		1.00	0.984	mg/L	98.4	90 - 110		
Zinc		1.00	0.967	mg/L	96.7	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-16

Instrument ID: PE-ICP2 Run Time: 13:57 Method: 6010B

File ID: P2.022211.135757 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 22-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.94	mg/L	99.4	90 - 110		
Arsenic		0.400	0.386	mg/L	96.5	90 - 110		
Barium		1.00	0.989	mg/L	98.9	90 - 110		
Beryllium		0.0500	0.0501	mg/L	100	90 - 110		
Cadmium		0.0500	0.0486	mg/L	97.2	90 - 110		
Calcium		10.0	10.1	mg/L	101	90 - 110		
Chromium		0.500	0.490	mg/L	98.1	90 - 110		
Cobalt		0.200	0.193	mg/L	96.4	90 - 110		
Copper		0.500	0.493	mg/L	98.5	90 - 110		
Iron		4.00	3.90	mg/L	97.6	90 - 110		
Lead		0.500	0.508	mg/L	102	90 - 110		
Magnesium		10.0	9.78	mg/L	97.8	90 - 110		
Manganese		0.500	0.497	mg/L	99.4	90 - 110		
Nickel		0.500	0.490	mg/L	98.0	90 - 110		
Potassium		50.0	49.4	mg/L	98.9	90 - 110		
Silver		0.400	0.399	mg/L	99.7	90 - 110		
Sodium		50.0	49.4	mg/L	98.7	90 - 110		
Vanadium		1.00	0.978	mg/L	97.8	90 - 110		
Zinc		1.00	0.945	mg/L	94.5	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-18

Instrument ID: PE-ICP2 Run Time: 14:59 Method: 6010B

File ID: P2.022211.145933 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 22-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.96	mg/L	99.6	90 - 110		
Arsenic		0.400	0.381	mg/L	95.4	90 - 110		
Barium		1.00	0.977	mg/L	97.7	90 - 110		
Beryllium		0.0500	0.0500	mg/L	99.9	90 - 110		
Cadmium		0.0500	0.0478	mg/L	95.7	90 - 110		
Calcium		10.0	9.96	mg/L	99.6	90 - 110		
Chromium		0.500	0.484	mg/L	96.8	90 - 110		
Cobalt		0.200	0.189	mg/L	94.4	90 - 110		
Copper		0.500	0.490	mg/L	97.9	90 - 110		
Iron		4.00	3.89	mg/L	97.2	90 - 110		
Lead		0.500	0.495	mg/L	98.9	90 - 110		
Magnesium		10.0	9.73	mg/L	97.3	90 - 110		
Manganese		0.500	0.492	mg/L	98.3	90 - 110		
Nickel		0.500	0.484	mg/L	96.8	90 - 110		
Potassium		50.0	49.1	mg/L	98.2	90 - 110		
Silver		0.400	0.398	mg/L	99.4	90 - 110		
Sodium		50.0	49.3	mg/L	98.5	90 - 110		
Vanadium		1.00	0.965	mg/L	96.5	90 - 110		
Zinc		1.00	0.920	mg/L	92.0	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-10

Instrument ID: PE-ICP2 Run Time: 10:15 Method: 6010B

File ID: P2.022311.101555 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.0	mg/L	100	90 - 110		
Arsenic		0.400	0.383	mg/L	95.8	90 - 110		
Barium		1.00	0.988	mg/L	98.8	90 - 110		
Beryllium		0.0500	0.0493	mg/L	98.7	90 - 110		
Cadmium		0.0500	0.0482	mg/L	96.4	90 - 110		
Calcium		10.0	9.93	mg/L	99.3	90 - 110		
Chromium		0.500	0.488	mg/L	97.6	90 - 110		
Cobalt		0.200	0.190	mg/L	95.2	90 - 110		
Copper		0.500	0.480	mg/L	96.1	90 - 110		
Iron		4.00	3.97	mg/L	99.3	90 - 110		
Lead		0.500	0.492	mg/L	98.3	90 - 110		
Magnesium		10.0	10.0	mg/L	100	90 - 110		
Manganese		0.500	0.498	mg/L	99.6	90 - 110		
Nickel		0.500	0.490	mg/L	98.0	90 - 110		
Potassium		50.0	49.3	mg/L	98.6	90 - 110		
Silver		0.400	0.393	mg/L	98.4	90 - 110		
Sodium		50.0	49.2	mg/L	98.3	90 - 110		
Vanadium		1.00	0.982	mg/L	98.2	90 - 110		
Zinc		1.00	0.992	mg/L	99.2	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-26

Instrument ID: PE-ICP2 Run Time: 19:55 Method: 6010B

File ID: P2.022311.195529 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.90	mg/L	99.0	90 - 110		
Arsenic		0.400	0.383	mg/L	95.8	90 - 110		
Barium		1.00	0.983	mg/L	98.3	90 - 110		
Beryllium		0.0500	0.0489	mg/L	97.8	90 - 110		
Cadmium		0.0500	0.0488	mg/L	97.6	90 - 110		
Calcium		10.0	10.0	mg/L	100	90 - 110		
Chromium		0.500	0.487	mg/L	97.4	90 - 110		
Cobalt		0.200	0.190	mg/L	95.1	90 - 110		
Copper		0.500	0.479	mg/L	95.8	90 - 110		
Iron		4.00	3.81	mg/L	95.2	90 - 110		
Lead		0.500	0.491	mg/L	98.2	90 - 110		
Magnesium		10.0	9.62	mg/L	96.2	90 - 110		
Manganese		0.500	0.495	mg/L	99.0	90 - 110		
Nickel		0.500	0.491	mg/L	98.1	90 - 110		
Potassium		50.0	48.7	mg/L	97.5	90 - 110		
Silver		0.400	0.392	mg/L	98.0	90 - 110		
Sodium		50.0	48.7	mg/L	97.4	90 - 110		
Vanadium		1.00	0.977	mg/L	97.7	90 - 110		
Zinc		1.00	0.984	mg/L	98.4	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-28

Instrument ID: PE-ICP2 Run Time: 21:09 Method: 6010B

File ID: P2.022311.210956 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357117 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.1	mg/L	101	90 - 110		
Arsenic		0.400	0.395	mg/L	98.8	90 - 110		
Barium		1.00	1.01	mg/L	101	90 - 110		
Beryllium		0.0500	0.0503	mg/L	101	90 - 110		
Cadmium		0.0500	0.0502	mg/L	100	90 - 110		
Calcium		10.0	10.2	mg/L	102	90 - 110		
Chromium		0.500	0.498	mg/L	99.5	90 - 110		
Cobalt		0.200	0.195	mg/L	97.3	90 - 110		
Copper		0.500	0.494	mg/L	98.9	90 - 110		
Iron		4.00	3.90	mg/L	97.5	90 - 110		
Lead		0.500	0.501	mg/L	100	90 - 110		
Magnesium		10.0	9.85	mg/L	98.5	90 - 110		
Manganese		0.500	0.507	mg/L	101	90 - 110		
Nickel		0.500	0.500	mg/L	100	90 - 110		
Potassium		50.0	50.0	mg/L	100	90 - 110		
Silver		0.400	0.405	mg/L	101	90 - 110		
Sodium		50.0	49.8	mg/L	99.6	90 - 110		
Vanadium		1.00	1.00	mg/L	100	90 - 110		
Zinc		1.00	1.00	mg/L	100	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-11

Instrument ID: PE-ICP2 Run Time: 11:12 Method: 6010B

File ID: P2.022211.111218 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 22-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		1.20	1.18	mg/L	98.1	90 - 110		
Arsenic		0.400	0.379	mg/L	94.7	90 - 110		
Barium		1.00	0.993	mg/L	99.3	90 - 110		
Beryllium		0.0500	0.0498	mg/L	99.7	90 - 110		
Cadmium		0.0500	0.0486	mg/L	97.3	90 - 110		
Chromium		0.500	0.491	mg/L	98.3	90 - 110		
Lead		0.500	0.507	mg/L	101	90 - 110		
Nickel		0.500	0.493	mg/L	98.7	90 - 110		
Selenium		0.400	0.386	mg/L	96.6	90 - 110		
Silver		0.400	0.398	mg/L	99.5	90 - 110		
Thallium		0.500	0.503	mg/L	101	90 - 110		
Vanadium		1.00	0.981	mg/L	98.1	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-18

Instrument ID: PE-ICP2 Run Time: 14:59 Method: 6010B

File ID: P2.022211.145933 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 22-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		1.20	1.18	mg/L	98.0	90 - 110		
Arsenic		0.400	0.381	mg/L	95.4	90 - 110		
Barium		1.00	0.977	mg/L	97.7	90 - 110		
Beryllium		0.0500	0.0500	mg/L	99.9	90 - 110		
Cadmium		0.0500	0.0478	mg/L	95.7	90 - 110		
Chromium		0.500	0.484	mg/L	96.8	90 - 110		
Lead		0.500	0.495	mg/L	98.9	90 - 110		
Nickel		0.500	0.484	mg/L	96.8	90 - 110		
Selenium		0.400	0.384	mg/L	95.9	90 - 110		
Silver		0.400	0.398	mg/L	99.4	90 - 110		
Thallium		0.500	0.498	mg/L	99.7	90 - 110		
Vanadium		1.00	0.965	mg/L	96.5	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-20

Instrument ID: PE-ICP2 Run Time: 16:06 Method: 6010B

File ID: P2.022211.160628 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 22-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		1.20	1.19	mg/L	98.8	90 - 110		
Arsenic		0.400	0.384	mg/L	96.1	90 - 110		
Barium		1.00	0.973	mg/L	97.3	90 - 110		
Beryllium		0.0500	0.0497	mg/L	99.3	90 - 110		
Cadmium		0.0500	0.0482	mg/L	96.4	90 - 110		
Chromium		0.500	0.481	mg/L	96.1	90 - 110		
Lead		0.500	0.502	mg/L	100	90 - 110		
Nickel		0.500	0.483	mg/L	96.5	90 - 110		
Selenium		0.400	0.390	mg/L	97.4	90 - 110		
Silver		0.400	0.393	mg/L	98.3	90 - 110		
Thallium		0.500	0.498	mg/L	99.6	90 - 110		
Vanadium		1.00	0.960	mg/L	96.0	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357338-22

Instrument ID: PE-ICP2 Run Time: 17:13 Method: 6010B

File ID: P2.022211.171325 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 22-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		1.20	1.19	mg/L	99.3	90 - 110		
Arsenic		0.400	0.387	mg/L	96.7	90 - 110		
Barium		1.00	0.995	mg/L	99.5	90 - 110		
Beryllium		0.0500	0.0511	mg/L	102	90 - 110		
Cadmium		0.0500	0.0487	mg/L	97.4	90 - 110		
Chromium		0.500	0.492	mg/L	98.5	90 - 110		
Lead		0.500	0.506	mg/L	101	90 - 110		
Nickel		0.500	0.495	mg/L	99.0	90 - 110		
Selenium		0.400	0.385	mg/L	96.3	90 - 110		
Silver		0.400	0.406	mg/L	101	90 - 110		
Thallium		0.500	0.499	mg/L	99.9	90 - 110		
Vanadium		1.00	0.985	mg/L	98.5	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-10

Instrument ID: PE-ICP2 Run Time: 10:15 Method: 6010B

File ID: P2.022311.101555 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 23-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		1.20	1.16	mg/L	96.7	90 - 110		
Arsenic		0.400	0.383	mg/L	95.8	90 - 110		
Barium		1.00	0.988	mg/L	98.8	90 - 110		
Beryllium		0.0500	0.0493	mg/L	98.7	90 - 110		
Cadmium		0.0500	0.0482	mg/L	96.4	90 - 110		
Chromium		0.500	0.488	mg/L	97.6	90 - 110		
Lead		0.500	0.492	mg/L	98.3	90 - 110		
Nickel		0.500	0.490	mg/L	98.0	90 - 110		
Selenium		0.400	0.387	mg/L	96.8	90 - 110		
Silver		0.400	0.393	mg/L	98.4	90 - 110		
Thallium		0.500	0.504	mg/L	101	90 - 110		
Vanadium		1.00	0.982	mg/L	98.2	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-24

Instrument ID: PE-ICP2 Run Time: 18:35 Method: 6010B

File ID: P2.022311.183512 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 23-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		1.20	1.15	mg/L	96.2	90 - 110		
Arsenic		0.400	0.385	mg/L	96.2	90 - 110		
Barium		1.00	0.990	mg/L	99.0	90 - 110		
Beryllium		0.0500	0.0499	mg/L	99.7	90 - 110		
Cadmium		0.0500	0.0487	mg/L	97.3	90 - 110		
Chromium		0.500	0.488	mg/L	97.5	90 - 110		
Lead		0.500	0.488	mg/L	97.6	90 - 110		
Nickel		0.500	0.492	mg/L	98.3	90 - 110		
Selenium		0.400	0.389	mg/L	97.3	90 - 110		
Silver		0.400	0.396	mg/L	99.1	90 - 110		
Thallium		0.500	0.494	mg/L	98.7	90 - 110		
Vanadium		1.00	0.982	mg/L	98.2	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357414-26

Instrument ID: PE-ICP2 Run Time: 19:55 Method: 6010B

File ID: P2.022311.195529 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357223 Cal ID: PE-ICP - 23-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		1.20	1.15	mg/L	96.2	90 - 110		
Arsenic		0.400	0.383	mg/L	95.8	90 - 110		
Barium		1.00	0.983	mg/L	98.3	90 - 110		
Beryllium		0.0500	0.0489	mg/L	97.8	90 - 110		
Cadmium		0.0500	0.0488	mg/L	97.6	90 - 110		
Chromium		0.500	0.487	mg/L	97.4	90 - 110		
Lead		0.500	0.491	mg/L	98.2	90 - 110		
Nickel		0.500	0.491	mg/L	98.1	90 - 110		
Selenium		0.400	0.390	mg/L	97.4	90 - 110		
Silver		0.400	0.392	mg/L	98.0	90 - 110		
Thallium		0.500	0.496	mg/L	99.3	90 - 110		
Vanadium		1.00	0.977	mg/L	97.7	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1926707

Report generated 02/24/2011 09:42

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11020492 **Workgroup (AAB#):** WG357117
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG357338-09 **File ID:** P2.022211.110052 **Units:** mg/L
Sol. AB : WG357338-10 **File ID:** P2.022211.110633 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	249	99.6	250	244	97.6	
Arsenic	NS	-0.00231	NS	0.250	0.250	100	
Barium	NS	-0.000740	NS	0.250	0.253	101	
Beryllium	NS	0.000230	NS	0.250	0.261	104	
Cadmium	NS	-0.0000900	NS	0.500	0.472	94.4	
Calcium	250	282	113	250	281	112	
Chromium	NS	-0.000610	NS	0.250	0.250	100	
Cobalt	NS	-0.00115	NS	0.250	0.235	94.0	
Copper	NS	0.00140	NS	0.250	0.259	104	
Iron	100	98.8	98.8	100	96.9	96.9	
Lead	NS	-0.00175	NS	0.500	0.508	102	
Magnesium	250	252	101	250	247	98.8	
Manganese	NS	-0.0000600	NS	0.250	0.251	100	
Nickel	NS	-0.00222	NS	0.500	0.474	94.8	
Potassium	NS	0.000370	NS	5.00	5.16	103	
Silver	NS	-0.00111	NS	0.500	0.528	106	
Sodium	NS	0.0192	NS	5.00	4.97	99.4	
Vanadium	NS	0.00136	NS	0.250	0.252	101	
Zinc	NS	-0.00525	NS	0.500	0.460	92.0	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 1926706
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11020492 **Workgroup (AAB#):** WG357117
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG357414-08 **File ID:** P2.022311.100429 **Units:** mg/L
Sol. AB : WG357414-09 **File ID:** P2.022311.101011 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	235	94.0	250	248	99.2	
Arsenic	NS	0.00421	NS	0.250	0.251	100	
Barium	NS	-0.000700	NS	0.250	0.254	102	
Beryllium	NS	0	NS	0.250	0.257	103	
Cadmium	NS	-0.000170	NS	0.500	0.470	94.0	
Calcium	250	277	111	250	277	111	
Chromium	NS	-0.000720	NS	0.250	0.250	100	
Cobalt	NS	-0.000910	NS	0.250	0.233	93.2	
Copper	NS	0.000790	NS	0.250	0.252	101	
Iron	100	93.8	93.8	100	97.7	97.7	
Lead	NS	0.00117	NS	0.500	0.494	98.8	
Magnesium	250	240	96.0	250	251	100	
Manganese	NS	-0.0000400	NS	0.250	0.254	102	
Nickel	NS	-0.00212	NS	0.500	0.478	95.6	
Potassium	NS	0.0518	NS	5.00	5.21	104	
Silver	NS	-0.00133	NS	0.500	0.520	104	
Sodium	NS	0.0441	NS	5.00	5.03	101	
Vanadium	NS	0.00194	NS	0.250	0.253	101	
Zinc	NS	0.00110	NS	0.500	0.477	95.4	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 1926706
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11020492 **Workgroup (AAB#):** WG357223
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG357338-09 **File ID:** P2.022211.110052 **Units:** mg/L
Sol. AB : WG357338-10 **File ID:** P2.022211.110633 **Matrix:** Leachate

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0154	NS	0.500	0.533	107	
Arsenic	NS	-0.00231	NS	0.250	0.250	100	
Barium	NS	-0.000740	NS	0.250	0.253	101	
Beryllium	NS	0.000230	NS	0.250	0.261	104	
Cadmium	NS	-0.0000900	NS	0.500	0.472	94.4	
Chromium	NS	-0.000610	NS	0.250	0.250	100	
Lead	NS	-0.00175	NS	0.500	0.508	102	
Nickel	NS	-0.00222	NS	0.500	0.474	94.8	
Selenium	NS	0.00188	NS	0.250	0.250	100	
Silver	NS	-0.00111	NS	0.500	0.528	106	
Thallium	NS	0.0639	NS	0.500	0.565	113	
Vanadium	NS	0.00136	NS	0.250	0.252	101	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 1926706
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11020492 **Workgroup (AAB#):** WG357223
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG357414-08 **File ID:** P2.022311.100429 **Units:** mg/L
Sol. AB : WG357414-09 **File ID:** P2.022311.101011 **Matrix:** Leachate

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0155	NS	0.500	0.523	105	
Arsenic	NS	0.00421	NS	0.250	0.251	100	
Barium	NS	-0.000700	NS	0.250	0.254	102	
Beryllium	NS	0	NS	0.250	0.257	103	
Cadmium	NS	-0.000170	NS	0.500	0.470	94.0	
Chromium	NS	-0.000720	NS	0.250	0.250	100	
Lead	NS	0.00117	NS	0.500	0.494	98.8	
Nickel	NS	-0.00212	NS	0.500	0.478	95.6	
Selenium	NS	0.00434	NS	0.250	0.250	100	
Silver	NS	-0.00133	NS	0.500	0.520	104	
Thallium	NS	0.0581	NS	0.500	0.564	113	
Vanadium	NS	0.00194	NS	0.250	0.253	101	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 1926706
Report generated 02/24/2011 09:42

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020492 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	AG	AL	AS	B	BA
ALUMINUM	396.15	0	0	0.206	0	0
ANTIMONY	206.84	0	0	-0.740	0	0
ARSENIC	188.98	0	0.0893	0	0	0
BARIUM	233.53	0	0.00932	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	1.12	0	0	0
CADMIUM	228.80	0	0	6.68	0	0
CALCIUM	227.55	0	0.195	10.0	0	0
CHROMIUM	267.72	0	0.0250	0	0	0
COBALT	228.62	0	0	0	0	0.337
COPPER	327.39	0	0	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	0	-0.0210	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-0.185	0	-0.231	-0.0949	-0.230
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0.111	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0.200	0	0.0400
ZINC	206.20	0	0	0	0	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1926702
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020492 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	BE	CA	CD	CO	CR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	0	6.33
ARSENIC	188.98	0	0.0200	-0.0875	0	-5.90
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	-0.0733
BORON	249.68	0	0	24.1	5.90	1.50
CADMIUM	228.80	0	0	0	-10.7	0
CALCIUM	227.55	0	0	0	300	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	-0.244
COPPER	327.39	0	0	0	0.380	-0.0400
IRON	239.56	0	0	0	1.91	0
LEAD	220.35	0	-0.0480	0	0.116	-0.0700
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-1.04	0	-0.755	-0.0418	-0.110
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	-0.566	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.250	0	-1.52	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0.0900	0	3.48	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	-0.0100	0	0	0.297
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	0	0	0	0	-3.64

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1926702
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020492 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	CU	FE	K	LI	MG
ALUMINUM	396.15	0	-0.0800	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	-0.139	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0.195	0	0	0
BORON	249.68	0	-4.66	0	0	0
CADMIUM	228.80	0	0.00130	0	0	0
CALCIUM	227.55	-2.00	-5.00	0	0	0.104
CHROMIUM	267.72	0	-0.000800	0	0	0
COBALT	228.62	0	0.0262	0	0	0
COPPER	327.39	0	-0.115	0	0.154	0
IRON	239.56	0	0	0	0	0.0276
LEAD	220.35	0.740	0.0440	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0.540	0	0	0
MANGANESE	257.61	-0.0457	-0.0453	-0.0181	-0.794	0.0147
MOLYBDENUM	202.03	0	-0.0494	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.369	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0.0717	0.0498	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0.120	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.134	0	0	0
ZINC	206.20	-0.200	0.0230	0	0	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1926702
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020492 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	MN	MO	NA	NI	PB
ALUMINUM	396.15	0	13.5	0	0	0
ANTIMONY	206.84	0	-7.69	0	0	0
ARSENIC	188.98	0	6.00	0	0	0
BARIUM	233.53	0	-0.548	0	0	0
BERYLLIUM	234.86	-0.131	-1.50	0	-0.00974	0
BORON	249.68	0	-2.20	0	0	0
CADMIUM	228.80	0	-0.00900	0	-0.398	0
CALCIUM	227.55	0	-8.00	0	-900	0
CHROMIUM	267.72	0.434	-0.00100	0	0	0
COBALT	228.62	0	-0.125	0	0.129	0
COPPER	327.39	0	-0.0774	0	0.150	0.257
IRON	239.56	0.480	0	0	0	0.407
LEAD	220.35	0.100	-5.00	0	0.100	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-5.00	0	0	0.0252
MANGANESE	257.61	0	-0.0482	-0.00916	-0.0340	-0.0413
MOLYBDENUM	202.03	-0.209	0	0	0.120	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	1.00	0	0
SELENIUM	196.03	0.451	0.300	0	0.0940	0
SILICON	251.61	0	15.0	0	0	0
SILVER	328.07	0.130	0.100	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	-1.50	1.20	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.578	0	0	0
ZINC	206.20	0	0.180	0	-0.200	-0.100

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1926702
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020492 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	SB	SE	SI	SN	SR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	0	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	0	0	0	0
CADMIUM	228.80	0	0	0	0	0
CALCIUM	227.55	0	0	2.79	0	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	0
COPPER	327.39	0	0.148	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	-0.0100	0	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-0.0924	0	0	0
MANGANESE	257.61	-0.0505	-0.0281	-0.185	-0.0445	-0.625
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	-0.0500	-0.0100	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0.200
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	-0.300	0	0	0	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1926702
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020492 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	TI	TL	V	ZN
ALUMINUM	396.15	0	0	0	0
ANTIMONY	206.84	0	0	0.000100	0
ARSENIC	188.98	0	0	0.0930	0
BARIUM	233.53	0	0	-2.29	0
BERYLLIUM	234.86	0	0	0	0
BORON	249.68	0	0	0	0
CADMIUM	228.80	0	0	0.0800	0
CALCIUM	227.55	0	0	60.0	0
CHROMIUM	267.72	0	0	-0.567	-0.0400
COBALT	228.62	2.21	0	0	0
COPPER	327.39	-1.05	0	-0.700	-0.0613
IRON	239.56	0	0	0	0
LEAD	220.35	0	0	0.0560	0
LITHIUM	670.78	0	0	0	0
MAGNESIUM	279.08	0	0	0	0
MANGANESE	257.61	-0.00931	-0.0414	-0.0601	-0.0552
MOLYBDENUM	202.03	0	0	-0.288	0
NICKEL	231.60	0	0.617	0	0
POTASSIUM	766.49	0	0	0	0
SELENIUM	196.03	-0.220	0	-0.126	0
SILICON	251.61	0	0	0	0
SILVER	328.07	0	0	-1.67	0
SODIUM	589.59	0	0	0	0
STRONTIUM	407.77	0	0	0	0
THALLIUM	190.80	-12.0	0.617	-1.41	0
TIN	189.93	0	0	0	0
TITANIUM	334.94	0	0	0	0
VANADIUM	290.88	0	0	0	0
ZINC	206.20	0	0	-0.100	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1926702
Report generated: 02/24/2011 09:42

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L11020492 **Date:** 01/12/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Integration Time (Sec.)	Concentration (mg/L)
Aluminum	10.00	450.0
Antimony	10.00	45.0
Arsenic	10.00	9.0
Barium	10.00	9.0
Beryllium	10.00	4.5
Boron	10.00	45.0
Cadmium	10.00	9.0
Calcium	10.00	450.0
Chromium	10.00	45.0
Cobalt	10.00	45.0
Copper	10.00	45.0
Iron	10.00	450.0
Lead	10.00	90.0
Lithium	10.00	0.9
Magnesium	10.00	450.0
Manganese	10.00	27.0
Molybdenum	10.00	45.0
Nickel	10.00	45.0
Potassium	10.00	72.0
Selenium	10.00	45.0
Silicon	10.00	36.0
Silver	10.00	9.0
Sodium	10.00	180.0
Strontium	10.00	4.5
Thallium	10.00	45.0
Tin	10.00	45.0
Titanium	10.00	45.0
Vanadium	10.00	45.0
Zinc	10.00	45.0

Comments:
All analytes passed acceptance criteria at the specified concentration.

LINEAR_RANGE - Modified 03/06/2008
PDF File ID: 1926701
Report generated: 02/24/2011 09:42

2.2.1.3 Raw Data

==========

Analysis Begun

Start Time: 2/22/2011 10:07:20 AM **Plasma On Time: 2/22/2011 7:21:53 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\TUESDAY1.sif
Batch ID:
Results Data Set: 022211H3
Results Library: C:\pe\peicp2\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: S0 **Date Collected: 2/22/2011 10:07:22 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S0

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	5013410.0	104555.24	2.09%		
YRADIAL	312575.5	3389.16	1.08%		
Ga 417.206	1181255.5	28725.11	2.43%		
GaRADIAL	60272.9	514.41	0.85%		
Ag 328.068†	-1520.1	246.54	16.22%	[0.00]	mg/L
Al 396.153†	-137.8	83.46	60.58%	[0.00]	mg/L
As 188.979†	2.4	1.93	80.83%	[0.00]	mg/L
Ba 233.527†	-45.0	3.48	7.73%	[0.00]	mg/L
Be 234.861†	-581.0	12.60	2.17%	[0.00]	mg/L
B 249.677†	505.9	0.43	0.08%	[0.00]	mg/L
Ca 227.546†	-43.9	3.67	8.36%	[0.00]	mg/L
Cd 228.802†	22.8	2.54	11.13%	[0.00]	mg/L
Co 228.616†	-27.1	1.29	4.74%	[0.00]	mg/L
Cr 267.716†	-41.1	9.26	22.51%	[0.00]	mg/L
Cu 327.393†	-1206.4	195.76	16.23%	[0.00]	mg/L
Fe 239.562†	1.8	1.00	54.79%	[0.00]	mg/L
Mg 279.077†	3.9	0.08	2.04%	[0.00]	mg/L
Mn 257.610†	256.9	6.10	2.37%	[0.00]	mg/L
Mo 202.031†	-31.3	3.25	10.40%	[0.00]	mg/L
Ni 231.604†	-2.0	5.29	258.50%	[0.00]	mg/L
Pb 220.353†	51.4	2.71	5.27%	[0.00]	mg/L
Sb 206.836†	16.2	1.40	8.63%	[0.00]	mg/L
Se 196.026†	5.5	4.74	86.74%	[0.00]	mg/L
Si 251.611†	287.0	9.60	3.34%	[0.00]	mg/L
Sn 189.927†	39.3	3.34	8.51%	[0.00]	mg/L
Ti 334.940†	-664.5	49.92	7.51%	[0.00]	mg/L
Tl 190.801†	-32.2	4.83	15.01%	[0.00]	mg/L
V 290.880†	4382.8	110.15	2.51%	[0.00]	mg/L
Zn 206.200†	1929.9	60.08	3.11%	[0.00]	mg/L
K 766.490†	153.4	40.94	26.70%	[0.00]	mg/L
Na 589.592†	325.1	283.04	87.05%	[0.00]	mg/L
Sr 407.771†	-546.1	288.61	52.85%	[0.00]	mg/L
Li 670.784†	111.8	14.00	12.53%	[0.00]	mg/L

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Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S1 **Date Collected: 2/22/2011 10:14:00 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S1

Analyte	Back Pressure	Flow

Approved: February 23, 2011

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All	169.0 kPa	0.50 L/min

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4999589.0	78665.76	1.57%		
YRADIAL	307888.3	3354.82	1.09%		
Ga 417.206	1180425.8	10958.69	0.93%		
GaRADIAL	59111.8	1626.80	2.75%		
Ag 328.068†	958.1	159.20	16.62%	[0.0040]	mg/L
Al 396.153†	494.2	43.07	8.71%	[0.10]	mg/L
Ba 233.527†	611.9	2.25	0.37%	[0.010]	mg/L
Be 234.861†	282.5	4.08	1.44%	[0.0005]	mg/L
Cd 228.802†	10.0	0.41	4.06%	[0.00050]	mg/L
Co 228.616†	41.4	1.55	3.75%	[0.0020]	mg/L
Cr 267.716†	619.3	26.30	4.25%	[0.0050]	mg/L
Cu 327.393†	754.7	70.66	9.36%	[0.0050]	mg/L
Fe 239.562†	18.0	1.83	10.16%	[0.040]	mg/L
Mg 279.077†	85.3	5.21	6.11%	[0.10]	mg/L
Mn 257.610†	2452.8	41.18	1.68%	[0.0050]	mg/L
Mo 202.031†	140.4	5.98	4.26%	[0.010]	mg/L
Ni 231.604†	179.1	1.05	0.59%	[0.0050]	mg/L
Pb 220.353†	42.6	7.55	17.71%	[0.0050]	mg/L
Sb 206.836†	21.4	2.54	11.90%	[0.012]	mg/L
Si 251.611†	2215.0	25.62	1.16%	[0.050]	mg/L
Sn 189.927†	70.9	1.36	1.92%	[0.010]	mg/L
Ti 334.940†	7482.3	176.46	2.36%	[0.010]	mg/L
V 290.880†	1477.9	49.05	3.32%	[0.010]	mg/L
Zn 206.200†	553.9	18.79	3.39%	[0.010]	mg/L
K 766.490†	1337.3	58.97	4.41%	[0.50]	mg/L
Na 589.592†	7347.3	62.35	0.85%	[0.50]	mg/L
Sr 407.771†	10775.2	1049.84	9.74%	[0.010]	mg/L
Li 670.784†	975.4	32.56	3.34%	[0.010]	mg/L

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S2 **Date Collected: 2/22/2011 10:20:37 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S2

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4998068.9	12989.90	0.26%		
YRADIAL	307667.9	10550.94	3.43%		
Ga 417.206	1185162.1	5729.66	0.48%		
GaRADIAL	59181.6	629.66	1.06%		
Ag 328.068†	1685.9	76.70	4.55%	[0.0080]	mg/L
Al 396.153†	1069.0	56.60	5.29%	[0.20]	mg/L
As 188.979†	9.5	1.55	16.39%	[0.0080]	mg/L
Ba 233.527†	1225.3	4.36	0.36%	[0.020]	mg/L
Be 234.861†	602.7	7.09	1.18%	[0.0010]	mg/L
B 249.677†	507.2	12.40	2.44%	[0.010]	mg/L
Ca 227.546†	21.4	6.94	32.50%	[0.20]	mg/L
Cd 228.802†	18.5	2.52	13.57%	[0.0010]	mg/L
Co 228.616†	79.9	3.94	4.93%	[0.0040]	mg/L
Cr 267.716†	1229.7	2.02	0.16%	[0.010]	mg/L
Cu 327.393†	1558.2	33.06	2.12%	[0.010]	mg/L
Fe 239.562†	35.8	1.14	3.17%	[0.080]	mg/L
Mg 279.077†	169.8	5.37	3.16%	[0.20]	mg/L
Mn 257.610†	4685.0	9.34	0.20%	[0.010]	mg/L
Mo 202.031†	277.7	2.26	0.81%	[0.020]	mg/L
Ni 231.604†	359.7	12.33	3.43%	[0.010]	mg/L
Pb 220.353†	64.8	2.57	3.97%	[0.010]	mg/L
Sb 206.836†	40.5	2.32	5.73%	[0.024]	mg/L

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Se 196.026†	12.5	3.43	27.42%	[0.0080]	mg/L
Si 251.611†	3884.7	75.55	1.94%	[0.10]	mg/L
Sn 189.927†	127.5	3.07	2.41%	[0.020]	mg/L
Ti 334.940†	14915.5	58.93	0.40%	[0.020]	mg/L
Tl 190.801†	16.6	1.04	6.25%	[0.010]	mg/L
V 290.880†	2967.5	82.88	2.79%	[0.020]	mg/L
Zn 206.200†	978.9	16.91	1.73%	[0.020]	mg/L
K 766.490†	2717.8	75.46	2.78%	[1.00]	mg/L
Na 589.592†	14582.3	134.85	0.92%	[1.00]	mg/L
Sr 407.771†	21442.3	2161.86	10.08%	[0.020]	mg/L
Li 670.784†	1919.1	91.31	4.76%	[0.020]	mg/L

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S3 **Date Collected: 2/22/2011 10:27:16 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S3

Analyte	Back Pressure	Flow
All	171.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4803000.8	33415.41	0.70%		
YRADIAL	297576.9	6075.85	2.04%		
Ga 417.206	1151217.0	12119.17	1.05%		
GaRADIAL	57223.4	162.68	0.28%		
Ag 328.068†	81523.7	672.54	0.82%	[0.40]	mg/L
Al 396.153†	52077.7	96.52	0.19%	[10.00]	mg/L
As 188.979†	440.2	6.72	1.53%	[0.40]	mg/L
Ba 233.527†	59571.2	198.03	0.33%	[1.00]	mg/L
Be 234.861†	28987.9	248.35	0.86%	[0.05]	mg/L
B 249.677†	26504.4	313.45	1.18%	[0.50]	mg/L
Ca 227.546†	1062.1	14.39	1.35%	[10.00]	mg/L
Cd 228.802†	890.0	11.06	1.24%	[0.05]	mg/L
Co 228.616†	3932.3	12.84	0.33%	[0.20]	mg/L
Cr 267.716†	57817.7	158.69	0.27%	[0.50]	mg/L
Cu 327.393†	73480.9	438.69	0.60%	[0.50]	mg/L
Fe 239.562†	1840.8	10.89	0.59%	[4.00]	mg/L
Mg 279.077†	8344.0	95.75	1.15%	[10.00]	mg/L
Mn 257.610†	228044.8	1365.72	0.60%	[0.50]	mg/L
Mo 202.031†	13535.0	65.97	0.49%	[1.00]	mg/L
Ni 231.604†	17376.5	129.33	0.74%	[0.50]	mg/L
Pb 220.353†	2972.6	23.32	0.78%	[0.50]	mg/L
Sb 206.836†	1908.3	18.51	0.97%	[1.20]	mg/L
Se 196.026†	577.7	2.63	0.45%	[0.40]	mg/L
Si 251.611†	172568.3	1065.31	0.62%	[5.00]	mg/L
Sn 189.927†	5908.5	37.42	0.63%	[1.00]	mg/L
Ti 334.940†	728536.0	3496.30	0.48%	[1.00]	mg/L
Tl 190.801†	857.6	6.21	0.72%	[0.50]	mg/L
V 290.880†	151918.0	1000.40	0.66%	[1.00]	mg/L
Zn 206.200†	33037.8	165.71	0.50%	[1.00]	mg/L
K 766.490†	134024.7	827.61	0.62%	[50.00]	mg/L
Na 589.592†	696546.8	8055.55	1.16%	[50.00]	mg/L
Sr 407.771†	1049829.8	100133.97	9.54%	[1.00]	mg/L
Li 670.784†	83914.6	477.78	0.57%	[1.00]	mg/L

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S4 **Date Collected: 2/22/2011 10:33:56 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S4

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Approved: February 23, 2011

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Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	4688820.0	50405.24	1.08%		
YRADIAL	287747.6	11677.37	4.06%		
Ga 417.206	1121729.8	9750.29	0.87%		
GaRADIAL	57546.5	942.27	1.64%		
Ag 328.068†	161498.0	2256.90	1.40%	[0.80]	mg/L
Al 396.153†	101004.4	851.11	0.84%	[20.00]	mg/L
As 188.979†	878.6	9.90	1.13%	[0.80]	mg/L
Ba 233.527†	116825.0	1343.93	1.15%	[2.00]	mg/L
Be 234.861†	57498.7	785.23	1.37%	[0.10]	mg/L
B 249.677†	53281.7	832.88	1.56%	[1.00]	mg/L
Ca 227.546†	2144.4	20.78	0.97%	[20.00]	mg/L
Cd 228.802†	1789.2	10.12	0.57%	[0.10]	mg/L
Co 228.616†	7780.2	86.49	1.11%	[0.40]	mg/L
Cr 267.716†	114097.9	1582.08	1.39%	[1.00]	mg/L
Cu 327.393†	145418.0	2465.41	1.70%	[1.00]	mg/L
Fe 239.562†	3706.0	97.54	2.63%	[8.00]	mg/L
Mg 279.077†	16789.9	529.32	3.15%	[20.00]	mg/L
Mn 257.610†	448426.7	1006.91	0.22%	[1.00]	mg/L
Mo 202.031†	26802.8	302.88	1.13%	[2.00]	mg/L
Ni 231.604†	33999.4	409.86	1.21%	[1.00]	mg/L
Pb 220.353†	5896.3	65.95	1.12%	[1.00]	mg/L
Sb 206.836†	3822.9	29.93	0.78%	[2.40]	mg/L
Se 196.026†	1148.9	3.84	0.33%	[0.80]	mg/L
Si 251.611†	343986.6	5134.65	1.49%	[10.00]	mg/L
Sn 189.927†	11769.8	108.13	0.92%	[2.00]	mg/L
Ti 334.940†	1465042.2	1689.67	0.12%	[2.00]	mg/L
Tl 190.801†	1694.6	25.78	1.52%	[1.00]	mg/L
V 290.880†	302085.9	4350.43	1.44%	[2.00]	mg/L
Zn 206.200†	65222.8	692.36	1.06%	[2.00]	mg/L
K 766.490†	265390.1	2282.04	0.86%	[100.00]	mg/L
Na 589.592†	1346455.6	34211.51	2.54%	[100.00]	mg/L
Sr 407.771†	2066487.4	247952.32	12.00%	[2.00]	mg/L
Li 670.784†	163062.5	1683.31	1.03%	[2.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Wt. Lin	140.5	200700	0.00000	0.999547	
Al 396.153	4	Wt. Lin	-13.3	5186	0.00000	0.999296	
As 188.979	3	Wt. Lin	0.7	1098	0.00000	1.000000	
Ba 233.527	4	Wt. Lin	24.3	59190	0.00000	0.999890	
Be 234.861	4	Wt. Lin	-3.4	583200	0.00000	0.999504	
B 249.677	3	Wt. Lin	-24.6	53180	0.00000	0.999997	
Ca 227.546	3	Wt. Lin	0.0	106.7	0.00000	0.999989	
Cd 228.802	4	Wt. Lin	1.1	17750	0.00000	0.999907	
Co 228.616	4	Wt. Lin	2.3	19520	0.00000	0.999976	
Cr 267.716	4	Wt. Lin	48.6	115500	0.00000	0.999813	
Cu 327.393	4	Wt. Lin	30.5	147500	0.00000	0.999579	
Fe 239.562	4	Wt. Lin	-0.6	460.3	0.00000	0.999943	
Mg 279.077	4	Wt. Lin	1.7	837.6	0.00000	0.999991	
Mn 257.610	4	Wt. Lin	190.6	451500	0.00000	0.999962	
Mo 202.031	4	Wt. Lin	6.0	13490	0.00000	0.999972	
Ni 231.604	4	Wt. Lin	8.1	34520	0.00000	0.999839	
Pb 220.353	4	Wt. Lin	12.5	5768	0.00000	0.997326	
Sb 206.836	4	Wt. Lin	2.3	1590	0.00000	0.999999	
Se 196.026	3	Wt. Lin	1.0	1438	0.00000	0.999997	
Si 251.611	4	Wt. Lin	491.5	34290	0.00000	0.999965	
Sn 189.927	4	Wt. Lin	11.8	5867	0.00000	0.999934	
Ti 334.940	4	Wt. Lin	189.8	731600	0.00000	0.999983	
Tl 190.801	3	Wt. Lin	-0.5	1706	0.00000	0.999980	
V 290.880	4	Wt. Lin	-39.4	151300	0.00000	0.999984	
Zn 206.200	4	Wt. Lin	236.2	33550	0.00000	0.996387	
K 766.490	4	Non Lin, Calc Int	-1.7	2707	-0.53231	1.000000	
Na 589.592	4	Non Lin, Calc Int	115.7	14390	-9.30623	1.000000	
Sr 407.771	4	Wt. Lin	386.0	1044000	0.00000	0.999946	
Li 670.784	4	Wt. Lin	159.9	83680	0.00000	0.999084	

Approved: February 23, 2011

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Sequence No.: 6 **Autosampler Location: 9**
Sample ID: ICV 2nd Vendor **Date Collected: 2/22/2011 10:40:40 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICV 2nd Vendor

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: ICV 2nd Vendor

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4727969.8						66753.29	1.41%
YRADIAL	293836.8						3597.82	1.22%
Ga 417.206	1131167.0						11452.10	1.01%
GaRADIAL	56964.9						1058.53	1.86%
Ag 328.068†	81553.2	0.407	mg/L	0.0049	0.407	mg/L	0.0049	1.21%
QC value within limits for Ag 328.068 Recovery = 101.69%								
Al 396.153†	53056.6	10.2	mg/L	0.05	10.2	mg/L	0.05	0.47%
QC value within limits for Al 396.153 Recovery = 102.19%								
As 188.979†	435.5	0.393	mg/L	0.0046	0.393	mg/L	0.0046	1.17%
QC value within limits for As 188.979 Recovery = 98.13%								
Ba 233.527†	60511.2	1.02	mg/L	0.012	1.02	mg/L	0.012	1.20%
QC value within limits for Ba 233.527 Recovery = 102.47%								
Be 234.861†	28597.2	0.0498	mg/L	0.00052	0.0498	mg/L	0.00052	1.03%
QC value within limits for Be 234.861 Recovery = 99.67%								
B 249.677†	27083.4	0.516	mg/L	0.0077	0.516	mg/L	0.0077	1.50%
QC value within limits for B 249.677 Recovery = 103.19%								
Ca 227.546†	1081.1	10.5	mg/L	0.13	10.5	mg/L	0.13	1.20%
QC value within limits for Ca 227.546 Recovery = 104.74%								
Cd 228.802†	891.0	0.0498	mg/L	0.00065	0.0498	mg/L	0.00065	1.31%
QC value within limits for Cd 228.802 Recovery = 99.54%								
Co 228.616†	3942.3	0.199	mg/L	0.0036	0.199	mg/L	0.0036	1.82%
QC value within limits for Co 228.616 Recovery = 99.66%								
Cr 267.716†	58598.9	0.507	mg/L	0.0065	0.507	mg/L	0.0065	1.29%
QC value within limits for Cr 267.716 Recovery = 101.45%								
Cu 327.393†	74614.8	0.508	mg/L	0.0079	0.508	mg/L	0.0079	1.56%
QC value within limits for Cu 327.393 Recovery = 101.53%								
Fe 239.562†	1842.1	4.00	mg/L	0.039	4.00	mg/L	0.039	0.98%
QC value within limits for Fe 239.562 Recovery = 100.04%								
Mg 279.077†	8370.4	9.99	mg/L	0.059	9.99	mg/L	0.059	0.59%
QC value within limits for Mg 279.077 Recovery = 99.94%								
Mn 257.610†	234166.9	0.523	mg/L	0.0049	0.523	mg/L	0.0049	0.93%
QC value within limits for Mn 257.610 Recovery = 104.61%								
Mo 202.031†	13416.7	0.995	mg/L	0.0105	0.995	mg/L	0.0105	1.06%
QC value within limits for Mo 202.031 Recovery = 99.48%								
Ni 231.604†	17637.7	0.511	mg/L	0.0056	0.511	mg/L	0.0056	1.09%
QC value within limits for Ni 231.604 Recovery = 102.11%								
Pb 220.353†	3022.1	0.527	mg/L	0.0071	0.527	mg/L	0.0071	1.34%
QC value greater than the upper limit for Pb 220.353 Recovery = 105.37%								
Sb 206.836†	1984.4	1.25	mg/L	0.011	1.25	mg/L	0.011	0.87%
QC value within limits for Sb 206.836 Recovery = 104.27%								
Se 196.026†	562.9	0.394	mg/L	0.0093	0.394	mg/L	0.0093	2.38%
QC value within limits for Se 196.026 Recovery = 98.41%								
Si 251.611†	179688.0	5.21	mg/L	0.074	5.21	mg/L	0.074	1.42%
QC value within limits for Si 251.611 Recovery = 104.21%								
Sn 189.927†	6100.9	1.04	mg/L	0.017	1.04	mg/L	0.017	1.63%
QC value within limits for Sn 189.927 Recovery = 103.79%								
Ti 334.940†	751421.3	1.03	mg/L	0.008	1.03	mg/L	0.008	0.77%
QC value within limits for Ti 334.940 Recovery = 102.68%								
Tl 190.801†	871.1	0.523	mg/L	0.0068	0.523	mg/L	0.0068	1.30%
QC value within limits for Tl 190.801 Recovery = 104.54%								
V 290.880†	150945.6	0.998	mg/L	0.0105	0.998	mg/L	0.0105	1.05%
QC value within limits for V 290.880 Recovery = 99.77%								
Zn 206.200†	33354.3	0.989	mg/L	0.0138	0.989	mg/L	0.0138	1.40%
QC value within limits for Zn 206.200 Recovery = 98.94%								
K 766.490†	134655.6	50.2	mg/L	0.47	50.2	mg/L	0.47	0.93%
QC value within limits for K 766.490 Recovery = 100.38%								
Na 589.592†	682552.8	49.0	mg/L	0.49	49.0	mg/L	0.49	1.01%

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QC value within limits for Na 589.592 Recovery = 97.92%
Sr 407.771† 1052804.9 1.01 mg/L 0.081 1.01 mg/L 0.081 8.02%
QC value within limits for Sr 407.771 Recovery = 100.80%
Li 670.784† 85037.5 1.01 mg/L 0.007 1.01 mg/L 0.007 0.72%
QC value within limits for Li 670.784 Recovery = 101.43%
QC Failed. Continue with analysis.

Sequence No.: 7 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 2/22/2011 10:47:28 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5060447.2						93394.86	1.85%
YRADIAL	301290.1						1162.26	0.39%
Ga 417.206	1188369.2						32961.97	2.77%
GaRADIAL	58050.3						1113.13	1.92%
Ag 328.068†	49.3	-0.00046	mg/L	0.000692	-0.00046	mg/L	0.000692	151.73%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-31.0	-0.00343	mg/L	0.010340	-0.00343	mg/L	0.010340	301.26%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.4	-0.00030	mg/L	0.001275	-0.00030	mg/L	0.001275	429.99%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	4.4	-0.00034	mg/L	0.000112	-0.00034	mg/L	0.000112	33.27%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-5.2	0.00000	mg/L	0.000037	0.00000	mg/L	0.000037	992.68%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	645.0	0.0126	mg/L	0.00069	0.0126	mg/L	0.00069	5.49%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	3.7	0.0347	mg/L	0.04876	0.0347	mg/L	0.04876	140.36%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	0.1	-0.00005	mg/L	0.000176	-0.00005	mg/L	0.000176	337.98%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	5.1	0.00015	mg/L	0.000142	0.00015	mg/L	0.000142	96.90%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	0.8	-0.00041	mg/L	0.000079	-0.00041	mg/L	0.000079	19.17%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	48.8	0.00012	mg/L	0.000899	0.00012	mg/L	0.000899	724.59%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	1.4	0.00417	mg/L	0.004883	0.00417	mg/L	0.004883	117.05%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	0.1	-0.00194	mg/L	0.006567	-0.00194	mg/L	0.006567	339.04%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	50.3	-0.00031	mg/L	0.000011	-0.00031	mg/L	0.000011	3.56%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.8	0.00021	mg/L	0.000438	0.00021	mg/L	0.000438	206.13%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	4.4	-0.00011	mg/L	0.000093	-0.00011	mg/L	0.000093	87.43%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	3.2	-0.00160	mg/L	0.000845	-0.00160	mg/L	0.000845	52.72%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.1	-0.00012	mg/L	0.000588	-0.00012	mg/L	0.000588	485.06%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.4	0.00028	mg/L	0.004626	0.00028	mg/L	0.004626	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	124.3	-0.0107	mg/L	0.00081	-0.0107	mg/L	0.00081	7.60%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	5.2	-0.00113	mg/L	0.000575	-0.00113	mg/L	0.000575	50.90%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	125.3	-0.00009	mg/L	0.000126	-0.00009	mg/L	0.000126	144.16%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-2.9	-0.00142	mg/L	0.003317	-0.00142	mg/L	0.003317	233.10%
QC value within limits for Tl 190.801 Recovery = Not calculated								

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V 290.880† -156.7 -0.00077 mg/L 0.000362 -0.00077 mg/L 0.000362 46.68%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† 74.9 -0.00481 mg/L 0.000424 -0.00481 mg/L 0.000424 8.81%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 148.3 0.0554 mg/L 0.02225 0.0554 mg/L 0.02225 40.16%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 375.9 0.0181 mg/L 0.02476 0.0181 mg/L 0.02476 136.97%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† 166.7 -0.00021 mg/L 0.000503 -0.00021 mg/L 0.000503 238.60%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 172.0 0.00014 mg/L 0.001008 0.00014 mg/L 0.001008 702.72%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 10**
Sample ID: LLCCV **Date Collected: 2/22/2011 10:54:08 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLCCV

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5102887.6						70775.75	1.39%
YRADIAL	309003.8						3017.73	0.98%
Ga 417.206	1187836.3						25418.81	2.14%
GaRADIAL	59121.9						1300.27	2.20%
Ag 328.068†	976.0	0.00417	mg/L	0.000375	0.00417	mg/L	0.000375	9.00%
QC value within limits for Ag 328.068 Recovery = 104.31%								
Al 396.153†	492.1	0.0973	mg/L	0.00986	0.0973	mg/L	0.00986	10.13%
QC value within limits for Al 396.153 Recovery = 97.30%								
As 188.979†	6.6	0.00536	mg/L	0.001320	0.00536	mg/L	0.001320	24.63%
QC value greater than the upper limit for As 188.979 Recovery = 134.01%								
Ba 233.527†	615.2	0.0100	mg/L	0.00017	0.0100	mg/L	0.00017	1.68%
QC value within limits for Ba 233.527 Recovery = 100.08%								
Be 234.861†	296.8	0.00052	mg/L	0.000025	0.00052	mg/L	0.000025	4.78%
QC value less than the lower limit for Be 234.861 Recovery = 26.09%								
B 249.677†	755.1	0.0147	mg/L	0.00062	0.0147	mg/L	0.00062	4.18%
QC value less than the lower limit for B 249.677 Recovery = 14.74%								
Ca 227.546†	19.0	0.181	mg/L	0.0335	0.181	mg/L	0.0335	18.47%
QC value within limits for Ca 227.546 Recovery = 90.67%								
Cd 228.802†	10.9	0.00054	mg/L	0.000107	0.00054	mg/L	0.000107	19.72%
QC value within limits for Cd 228.802 Recovery = 108.61%								
Co 228.616†	44.7	0.00215	mg/L	0.000377	0.00215	mg/L	0.000377	17.54%
QC value within limits for Co 228.616 Recovery = 107.47%								
Cr 267.716†	614.9	0.00491	mg/L	0.000137	0.00491	mg/L	0.000137	2.80%
QC value within limits for Cr 267.716 Recovery = 98.11%								
Cu 327.393†	727.1	0.00474	mg/L	0.000679	0.00474	mg/L	0.000679	14.32%
QC value within limits for Cu 327.393 Recovery = 94.81%								
Fe 239.562†	19.3	0.0430	mg/L	0.00473	0.0430	mg/L	0.00473	10.99%
QC value less than the lower limit for Fe 239.562 Recovery = 43.04%								
Mg 279.077†	87.5	0.102	mg/L	0.0101	0.102	mg/L	0.0101	9.84%
QC value less than the lower limit for Mg 279.077 Recovery = 20.50%								
Mn 257.610†	2559.2	0.00529	mg/L	0.000084	0.00529	mg/L	0.000084	1.58%
QC value within limits for Mn 257.610 Recovery = 105.90%								
Mo 202.031†	137.3	0.00974	mg/L	0.000277	0.00974	mg/L	0.000277	2.84%
QC value within limits for Mo 202.031 Recovery = 97.45%								
Ni 231.604†	177.7	0.00491	mg/L	0.000096	0.00491	mg/L	0.000096	1.95%
QC value within limits for Ni 231.604 Recovery = 98.18%								
Pb 220.353†	24.3	0.00211	mg/L	0.000965	0.00211	mg/L	0.000965	45.72%
QC value less than the lower limit for Pb 220.353 Recovery = 42.22%								
Sb 206.836†	19.1	0.0106	mg/L	0.00076	0.0106	mg/L	0.00076	7.20%
QC value within limits for Sb 206.836 Recovery = 88.44%								
Se 196.026†	11.5	0.00731	mg/L	0.003761	0.00731	mg/L	0.003761	51.46%
QC value greater than the upper limit for Se 196.026 Recovery = 182.73%								
Si 251.611†	1915.5	0.0414	mg/L	0.00139	0.0414	mg/L	0.00139	3.36%

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QC value within limits for Si 251.611 Recovery = 82.76%
Sn 189.927† 60.7 0.00833 mg/L 0.001168 0.00833 mg/L 0.001168 14.02%
QC value within limits for Sn 189.927 Recovery = 83.30%
Ti 334.940† 7477.3 0.00996 mg/L 0.000379 0.00996 mg/L 0.000379 3.80%
QC value within limits for Ti 334.940 Recovery = 99.62%
Tl 190.801† 11.5 0.00710 mg/L 0.004559 0.00710 mg/L 0.004559 64.24%
QC value greater than the upper limit for Tl 190.801 Recovery = 141.96%
V 290.880† 1359.3 0.00924 mg/L 0.001327 0.00924 mg/L 0.001327 14.36%
QC value within limits for V 290.880 Recovery = 92.42%
Zn 206.200† 77.5 -0.00471 mg/L 0.000888 -0.00471 mg/L 0.000888 18.84%
QC value less than the lower limit for Zn 206.200 Recovery = -23.55%
K 766.490† 1469.7 0.543 mg/L 0.0217 0.543 mg/L 0.0217 4.00%
QC value less than the lower limit for K 766.490 Recovery = 54.31%
Na 589.592† 7810.1 0.535 mg/L 0.0115 0.535 mg/L 0.0115 2.14%
QC value within limits for Na 589.592 Recovery = 106.95%
Sr 407.771† 10773.1 0.00995 mg/L 0.000807 0.00995 mg/L 0.000807 8.12%
QC value within limits for Sr 407.771 Recovery = 99.48%
Li 670.784† 1130.9 0.0116 mg/L 0.00127 0.0116 mg/L 0.00127 10.91%
QC value within limits for Li 670.784 Recovery = 116.03%
QC Failed. Continue with analysis.

Sequence No.: 9 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 2/22/2011 11:00:52 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4457948.9						46742.84	1.05%
YRADIAL	285357.3						8584.55	3.01%
Ga 417.206	1082623.0						20103.86	1.86%
GaRADIAL	56573.9						1577.20	2.79%
Ag 328.068†	907.6	-0.00111	mg/L	0.001930	-0.00111	mg/L	0.001930	173.57%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1291527.5	249	mg/L	1.7	249	mg/L	1.7	0.69%
QC value within limits for Al 396.153 Recovery = 99.61%								
As 188.979†	8.3	-0.00231	mg/L	0.004410	-0.00231	mg/L	0.004410	190.56%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	118.7	-0.00074	mg/L	0.000131	-0.00074	mg/L	0.000131	17.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	11750.2	0.00023	mg/L	0.000591	0.00023	mg/L	0.000591	262.19%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	-9965.8	-0.00541	mg/L	0.007629	-0.00541	mg/L	0.007629	141.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	30005.5	282	mg/L	1.9	282	mg/L	1.9	0.68%
QC value within limits for Ca 227.546 Recovery = 112.63%								
Cd 228.802†	2.3	-0.00009	mg/L	0.000046	-0.00009	mg/L	0.000046	52.10%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	30.1	-0.00115	mg/L	0.000429	-0.00115	mg/L	0.000429	37.21%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	688.6	-0.00061	mg/L	0.000227	-0.00061	mg/L	0.000227	37.47%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1438.4	0.00140	mg/L	0.000791	0.00140	mg/L	0.000791	56.66%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	45485.4	98.8	mg/L	0.85	98.8	mg/L	0.85	0.86%
QC value within limits for Fe 239.562 Recovery = 98.80%								
Mg 279.077†	211268.9	252	mg/L	2.2	252	mg/L	2.2	0.88%
QC value within limits for Mg 279.077 Recovery = 100.87%								
Mn 257.610†	-193.0	-0.00006	mg/L	0.000258	-0.00006	mg/L	0.000258	410.98%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-15.1	0.00331	mg/L	0.000456	0.00331	mg/L	0.000456	13.75%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-66.7	-0.00222	mg/L	0.000374	-0.00222	mg/L	0.000374	16.85%
QC value within limits for Ni 231.604 Recovery = Not calculated								

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Pb 220.353†	-98.0	-0.00175 mg/L	0.000930	-0.00175 mg/L	0.000930	53.14%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	26.8	0.0154 mg/L	0.00345	0.0154 mg/L	0.00345	22.47%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-110.1	0.00188 mg/L	0.003633	0.00188 mg/L	0.003633	193.44%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	717.9	0.00663 mg/L	0.001396	0.00663 mg/L	0.001396	21.08%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-36.3	-0.00820 mg/L	0.001646	-0.00820 mg/L	0.001646	20.08%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-2064.1	-0.00027 mg/L	0.000059	-0.00027 mg/L	0.000059	21.65%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	151.8	0.0639 mg/L	0.00933	0.0639 mg/L	0.00933	14.60%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	-981.3	0.00136 mg/L	0.001381	0.00136 mg/L	0.001381	101.43%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	135.7	-0.00525 mg/L	0.000924	-0.00525 mg/L	0.000924	17.60%	
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	-0.7	0.00037 mg/L	0.021407	0.00037 mg/L	0.021407	>999.9%	
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	391.5	0.0192 mg/L	0.01206	0.0192 mg/L	0.01206	62.95%	
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	13888.2	0.00108 mg/L	0.000368	0.00108 mg/L	0.000368	34.06%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	259.1	0.00119 mg/L	0.000851	0.00119 mg/L	0.000851	71.78%	
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 2/22/2011 11:06:33 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4432624.9						51290.14	1.16%
YRADIAL	286234.6						3169.87	1.11%
Ga 417.206	1065764.1						15380.32	1.44%
GaRADIAL	56465.8						706.11	1.25%
Ag 328.068†	106980.1	0.528	mg/L	0.0056	0.528	mg/L	0.0056	1.06%
QC value within limits for Ag 328.068 Recovery = 105.58%								
Al 396.153†	1263712.5	244	mg/L	4.7	244	mg/L	4.7	1.92%
QC value within limits for Al 396.153 Recovery = 97.47%								
As 188.979†	283.4	0.250	mg/L	0.0085	0.250	mg/L	0.0085	3.39%
QC value within limits for As 188.979 Recovery = 99.93%								
Ba 233.527†	15078.6	0.253	mg/L	0.0031	0.253	mg/L	0.0031	1.21%
QC value within limits for Ba 233.527 Recovery = 101.05%								
Be 234.861†	163387.8	0.261	mg/L	0.0032	0.261	mg/L	0.0032	1.21%
QC value within limits for Be 234.861 Recovery = 104.27%								
B 249.677†	-9776.1	-0.0178	mg/L	0.00881	-0.0178	mg/L	0.00881	49.38%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	29942.6	281	mg/L	3.6	281	mg/L	3.6	1.29%
QC value within limits for Ca 227.546 Recovery = 112.53%								
Cd 228.802†	8369.9	0.472	mg/L	0.0117	0.472	mg/L	0.0117	2.47%
QC value within limits for Cd 228.802 Recovery = 94.45%								
Co 228.616†	4636.3	0.235	mg/L	0.0029	0.235	mg/L	0.0029	1.23%
QC value within limits for Co 228.616 Recovery = 93.92%								
Cr 267.716†	29558.0	0.250	mg/L	0.0031	0.250	mg/L	0.0031	1.25%
QC value within limits for Cr 267.716 Recovery = 99.85%								
Cu 327.393†	36612.0	0.259	mg/L	0.0025	0.259	mg/L	0.0025	0.95%
QC value within limits for Cu 327.393 Recovery = 103.63%								
Fe 239.562†	44609.0	96.9	mg/L	0.34	96.9	mg/L	0.34	0.36%
QC value within limits for Fe 239.562 Recovery = 96.90%								
Mg 279.077†	206805.9	247	mg/L	1.3	247	mg/L	1.3	0.54%

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QC value within limits for Mg 279.077 Recovery = 98.74%
Mn 257.610† 112845.0 0.251 mg/L 0.0036 0.251 mg/L 0.0036 1.43%
QC value within limits for Mn 257.610 Recovery = 100.59%
Mo 202.031† -16.7 0.00317 mg/L 0.000924 0.00317 mg/L 0.000924 29.11%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† 16361.5 0.474 mg/L 0.0061 0.474 mg/L 0.0061 1.29%
QC value within limits for Ni 231.604 Recovery = 94.70%
Pb 220.353† 2845.3 0.508 mg/L 0.0077 0.508 mg/L 0.0077 1.51%
QC value within limits for Pb 220.353 Recovery = 101.61%
Sb 206.836† 852.5 0.533 mg/L 0.0067 0.533 mg/L 0.0067 1.25%
QC value within limits for Sb 206.836 Recovery = 106.66%
Se 196.026† 246.4 0.250 mg/L 0.0093 0.250 mg/L 0.0093 3.72%
QC value within limits for Se 196.026 Recovery = 99.88%
Si 251.611† 327.0 -0.00477 mg/L 0.001242 -0.00477 mg/L 0.001242 26.02%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -34.8 -0.00794 mg/L 0.002983 -0.00794 mg/L 0.002983 37.57%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -2007.4 -0.00027 mg/L 0.000072 -0.00027 mg/L 0.000072 26.41%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 1005.7 0.565 mg/L 0.0050 0.565 mg/L 0.0050 0.89%
QC value within limits for Tl 190.801 Recovery = 112.91%
V 290.880† 36993.4 0.252 mg/L 0.0056 0.252 mg/L 0.0056 2.22%
QC value within limits for V 290.880 Recovery = 100.87%
Zn 206.200† 15686.2 0.460 mg/L 0.0062 0.460 mg/L 0.0062 1.35%
QC value within limits for Zn 206.200 Recovery = 91.92%
K 766.490† 13972.6 5.16 mg/L 0.051 5.16 mg/L 0.051 0.99%
QC value within limits for K 766.490 Recovery = 103.25%
Na 589.592† 71370.4 4.97 mg/L 0.022 4.97 mg/L 0.022 0.43%
QC value within limits for Na 589.592 Recovery = 99.32%
Sr 407.771† 13463.1 0.00090 mg/L 0.000329 0.00090 mg/L 0.000329 36.41%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 201.1 0.00049 mg/L 0.000431 0.00049 mg/L 0.000431 87.60%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/22/2011 11:12:18 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4873856.5						52250.19	1.07%
YRADIAL	296341.5						5251.09	1.77%
Ga 417.206	1162550.9						22176.53	1.91%
GaRADIAL	57137.9						611.77	1.07%
Ag 328.068†	79795.6	0.398	mg/L	0.0124	0.398	mg/L	0.0124	3.12%
QC value within limits for Ag 328.068 Recovery = 99.49%								
Al 396.153†	51549.1	9.93	mg/L	0.038	9.93	mg/L	0.038	0.38%
QC value within limits for Al 396.153 Recovery = 99.29%								
As 188.979†	420.4	0.379	mg/L	0.0090	0.379	mg/L	0.0090	2.36%
QC value within limits for As 188.979 Recovery = 94.70%								
Ba 233.527†	58619.7	0.993	mg/L	0.0237	0.993	mg/L	0.0237	2.39%
QC value within limits for Ba 233.527 Recovery = 99.27%								
Be 234.861†	28599.7	0.0498	mg/L	0.00140	0.0498	mg/L	0.00140	2.81%
QC value within limits for Be 234.861 Recovery = 99.69%								
B 249.677†	26191.7	0.499	mg/L	0.0179	0.499	mg/L	0.0179	3.59%
QC value within limits for B 249.677 Recovery = 99.80%								
Ca 227.546†	1030.8	9.99	mg/L	0.254	9.99	mg/L	0.254	2.55%
QC value within limits for Ca 227.546 Recovery = 99.91%								
Cd 228.802†	870.5	0.0486	mg/L	0.00110	0.0486	mg/L	0.00110	2.27%
QC value within limits for Cd 228.802 Recovery = 97.27%								
Co 228.616†	3816.0	0.193	mg/L	0.0028	0.193	mg/L	0.0028	1.46%
QC value within limits for Co 228.616 Recovery = 96.48%								

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Cr 267.716†            56760.0       0.491 mg/L        0.0128       0.491 mg/L        0.0128   2.61%
   QC value within limits for Cr 267.716  Recovery = 98.26%
Cu 327.393†            71787.1       0.488 mg/L        0.0184       0.488 mg/L        0.0184   3.76%
   QC value within limits for Cu 327.393  Recovery = 97.68%
Fe 239.562†             1788.3        3.88 mg/L         0.017        3.88 mg/L         0.017   0.44%
   QC value within limits for Fe 239.562  Recovery = 97.12%
Mg 279.077†             8150.1        9.73 mg/L         0.091        9.73 mg/L         0.091   0.93%
   QC value within limits for Mg 279.077  Recovery = 97.31%
Mn 257.610†           223311.6       0.499 mg/L        0.0133       0.499 mg/L        0.0133   2.67%
   QC value within limits for Mn 257.610  Recovery = 99.77%
Mo 202.031†            13297.7       0.986 mg/L        0.0258       0.986 mg/L        0.0258   2.61%
   QC value within limits for Mo 202.031  Recovery = 98.60%
Ni 231.604†            17046.2       0.493 mg/L        0.0109       0.493 mg/L        0.0109   2.21%
   QC value within limits for Ni 231.604  Recovery = 98.68%
Pb 220.353†             2909.4       0.507 mg/L        0.0059       0.507 mg/L        0.0059   1.16%
   QC value within limits for Pb 220.353  Recovery = 101.45%
Sb 206.836†             1865.8        1.18 mg/L         0.028        1.18 mg/L         0.028   2.34%
   QC value within limits for Sb 206.836  Recovery = 98.06%
Se 196.026†              552.5       0.386 mg/L        0.0120       0.386 mg/L        0.0120   3.11%
   QC value within limits for Se 196.026  Recovery = 96.57%
Si 251.611†           169504.1        4.91 mg/L         0.173        4.91 mg/L         0.173   3.51%
   QC value within limits for Si 251.611  Recovery = 98.28%
Sn 189.927†             5736.6       0.976 mg/L        0.0144       0.976 mg/L        0.0144   1.47%
   QC value within limits for Sn 189.927  Recovery = 97.58%
Ti 334.940†           720905.6       0.985 mg/L        0.0055       0.985 mg/L        0.0055   0.56%
   QC value within limits for Ti 334.940  Recovery = 98.51%
Tl 190.801†              838.3       0.503 mg/L        0.0078       0.503 mg/L        0.0078   1.54%
   QC value within limits for Tl 190.801  Recovery = 100.59%
V 290.880†            148492.4       0.981 mg/L        0.0289       0.981 mg/L        0.0289   2.94%
   QC value within limits for V 290.880  Recovery = 98.15%
Zn 206.200†            32892.0       0.976 mg/L        0.0135       0.976 mg/L        0.0135   1.38%
   QC value within limits for Zn 206.200  Recovery = 97.56%
K 766.490†            132553.1        49.4 mg/L          0.52        49.4 mg/L          0.52   1.06%
   QC value within limits for K 766.490  Recovery = 98.79%
Na 589.592†           686270.9        49.2 mg/L          0.49        49.2 mg/L          0.49   0.99%
   QC value within limits for Na 589.592  Recovery = 98.47%
Sr 407.771†          1004255.2       0.962 mg/L        0.0787       0.962 mg/L        0.0787   8.19%
   QC value within limits for Sr 407.771  Recovery = 96.15%
Li 670.784†            82654.7       0.986 mg/L        0.0050       0.986 mg/L        0.0050   0.51%
   QC value within limits for Li 670.784  Recovery = 98.59%
All analyte(s) passed QC.
```

Sequence No.: 12 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/22/2011 11:18:57 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5128306.1						50290.45	0.98%
YRADIAL	307510.8						5981.64	1.95%
Ga 417.206	1203225.0						24521.84	2.04%
GaRADIAL	58863.4						1043.57	1.77%
Ag 328.068†	179.8	0.00019	mg/L	0.000369	0.00019	mg/L	0.000369	189.24%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-42.2	-0.00559	mg/L	0.004231	-0.00559	mg/L	0.004231	75.72%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.1	-0.00058	mg/L	0.000900	-0.00058	mg/L	0.000900	155.67%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-1.8	-0.00044	mg/L	0.000039	-0.00044	mg/L	0.000039	8.82%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	8.6	0.00002	mg/L	0.000035	0.00002	mg/L	0.000035	175.39%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	340.9	0.00689	mg/L	0.000366	0.00689	mg/L	0.000366	5.31%

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   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†              5.8      0.0546 mg/L       0.02090      0.0546 mg/L       0.02090  38.28%
   QC value within limits for Ca 227.546  Recovery = Not calculated
Cd 228.802†              2.3     0.00007 mg/L      0.000091     0.00007 mg/L      0.000091 129.22%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†              1.7    -0.00003 mg/L      0.000095    -0.00003 mg/L      0.000095 342.01%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             -0.7    -0.00043 mg/L      0.000227    -0.00043 mg/L      0.000227  52.93%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†             60.8     0.00020 mg/L      0.000432     0.00020 mg/L      0.000432 210.94%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†              1.0     0.00335 mg/L      0.007356     0.00335 mg/L      0.007356 219.69%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†              3.3     0.00187 mg/L      0.007068     0.00187 mg/L      0.007068 377.11%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†             -1.8    -0.00043 mg/L      0.000009    -0.00043 mg/L      0.000009   2.17%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              6.2     0.00002 mg/L      0.000413     0.00002 mg/L      0.000413 >999.9%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†              3.0    -0.00015 mg/L      0.000081    -0.00015 mg/L      0.000081  54.69%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†             -5.4    -0.00310 mg/L      0.000358    -0.00310 mg/L      0.000358  11.56%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†             -2.1    -0.00278 mg/L      0.001628    -0.00278 mg/L      0.001628  58.54%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              3.1     0.00146 mg/L      0.002796     0.00146 mg/L      0.002796 191.32%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             19.5     -0.0138 mg/L       0.00007     -0.0138 mg/L       0.00007   0.50%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              1.6    -0.00174 mg/L      0.000106    -0.00174 mg/L      0.000106   6.11%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†             83.8    -0.00014 mg/L      0.000073    -0.00014 mg/L      0.000073  50.70%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -2.3    -0.00111 mg/L      0.004345    -0.00111 mg/L      0.004345 390.04%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†            -138.8    -0.00066 mg/L      0.001274    -0.00066 mg/L      0.001274 193.99%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†           -224.3     -0.0137 mg/L       0.00074     -0.0137 mg/L       0.00074   5.38%
   QC value less than the lower limit for Zn 206.200  Recovery = Not calculated
K 766.490†              79.8      0.0301 mg/L       0.01456      0.0301 mg/L       0.01456  48.34%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             94.6    -0.00147 mg/L      0.017222    -0.00147 mg/L      0.017222 >999.9%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†            -52.0    -0.00042 mg/L      0.000104    -0.00042 mg/L      0.000104  24.66%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†            139.1    -0.00025 mg/L      0.000918    -0.00025 mg/L      0.000918 368.55%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Sequence No.: 13 **Autosampler Location: 38**
Sample ID: PBW 82 WG357047-02 **Date Collected: 2/22/2011 11:25:36 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 82 WG357047-02

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: PBW 82 WG357047-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5189489.4						26341.31	0.51%
YRADIAL	318111.1						9133.83	2.87%
Ga 417.206	1238274.0						34689.65	2.80%
GaRADIAL	60725.3						1302.95	2.15%
Ag 328.068†	186.4	0.00023	mg/L	0.000407	0.00023	mg/L	0.000407	179.09%
Al 396.153†	5.7	0.00367	mg/L	0.010140	0.00367	mg/L	0.010140	276.61%
As 188.979†	0.3	-0.00037	mg/L	0.001861	-0.00037	mg/L	0.001861	499.44%
Ba 233.527†	23.7	-0.00001	mg/L	0.000060	-0.00001	mg/L	0.000060	557.13%

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Be 234.861†	9.4	0.00002 mg/L	0.000049	0.00002 mg/L	0.000049	251.58%
B 249.677†	232.8	0.00488 mg/L	0.000404	0.00488 mg/L	0.000404	8.27%
Ca 227.546†	7.7	0.0723 mg/L	0.00751	0.0723 mg/L	0.00751	10.39%
Cd 228.802†	-0.2	-0.00007 mg/L	0.000047	-0.00007 mg/L	0.000047	69.31%
Co 228.616†	4.7	0.00013 mg/L	0.000111	0.00013 mg/L	0.000111	87.47%
Cr 267.716†	6.0	-0.00037 mg/L	0.000099	-0.00037 mg/L	0.000099	26.89%
Cu 327.393†	108.0	0.00053 mg/L	0.000776	0.00053 mg/L	0.000776	147.67%
Fe 239.562†	3.8	0.00940 mg/L	0.004701	0.00940 mg/L	0.004701	50.03%
Mg 279.077†	3.5	0.00209 mg/L	0.006813	0.00209 mg/L	0.006813	325.82%
Mn 257.610†	79.5	-0.00025 mg/L	0.000014	-0.00025 mg/L	0.000014	5.69%
Mo 202.031†	2.2	-0.00028 mg/L	0.000557	-0.00028 mg/L	0.000557	197.30%
Ni 231.604†	7.0	-0.00003 mg/L	0.000197	-0.00003 mg/L	0.000197	573.66%
Pb 220.353†	1.8	-0.00185 mg/L	0.000631	-0.00185 mg/L	0.000631	34.11%
Sb 206.836†	1.3	-0.00061 mg/L	0.001232	-0.00061 mg/L	0.001232	201.88%
Se 196.026†	6.7	0.00396 mg/L	0.001009	0.00396 mg/L	0.001009	25.46%
Si 251.611†	338.1	-0.00447 mg/L	0.000249	-0.00447 mg/L	0.000249	5.56%
Sn 189.927†	-4.5	-0.00278 mg/L	0.000397	-0.00278 mg/L	0.000397	14.27%
Ti 334.940†	279.7	0.00012 mg/L	0.000186	0.00012 mg/L	0.000186	149.97%
Tl 190.801†	3.0	0.00205 mg/L	0.002249	0.00205 mg/L	0.002249	109.52%
V 290.880†	-90.1	-0.00033 mg/L	0.000566	-0.00033 mg/L	0.000566	169.54%
Zn 206.200†	-203.0	-0.0131 mg/L	0.00057	-0.0131 mg/L	0.00057	4.36%
K 766.490†	20.5	0.00819 mg/L	0.006213	0.00819 mg/L	0.006213	75.82%
Na 589.592†	100.1	-0.00109 mg/L	0.016925	-0.00109 mg/L	0.016925	>999.9%
Sr 407.771†	127.2	-0.00025 mg/L	0.000273	-0.00025 mg/L	0.000273	109.71%
Li 670.784†	168.4	0.00010 mg/L	0.001152	0.00010 mg/L	0.001152	>999.9%

Sequence No.: 14 **Autosampler Location: 39**
Sample ID: LCSW 82 WG357047-03 **Date Collected: 2/22/2011 11:32:15 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 82 WG357047-03

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: LCSW 82 WG357047-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5006716.2						39118.90	0.78%
YRADIAL	307568.6						5022.70	1.63%
Ga 417.206	1204393.1						7891.22	0.66%
GaRADIAL	59173.8						279.83	0.47%
Ag 328.068†	39703.3	0.198	mg/L	0.0012	0.198	mg/L	0.0012	0.63%
Al 396.153†	25954.4	5.00	mg/L	0.023	5.00	mg/L	0.023	0.46%
As 188.979†	206.3	0.186	mg/L	0.0008	0.186	mg/L	0.0008	0.45%
Ba 233.527†	29185.3	0.494	mg/L	0.0025	0.494	mg/L	0.0025	0.50%
Be 234.861†	14083.5	0.0246	mg/L	0.00016	0.0246	mg/L	0.00016	0.66%
B 249.677†	53423.7	1.01	mg/L	0.005	1.01	mg/L	0.005	0.49%
Ca 227.546†	504.2	4.89	mg/L	0.008	4.89	mg/L	0.008	0.17%
Cd 228.802†	430.8	0.0241	mg/L	0.00025	0.0241	mg/L	0.00025	1.05%
Co 228.616†	1904.3	0.0962	mg/L	0.00084	0.0962	mg/L	0.00084	0.87%
Cr 267.716†	28016.0	0.242	mg/L	0.0005	0.242	mg/L	0.0005	0.22%
Cu 327.393†	35805.3	0.243	mg/L	0.0027	0.243	mg/L	0.0027	1.09%
Fe 239.562†	883.3	1.92	mg/L	0.011	1.92	mg/L	0.011	0.56%
Mg 279.077†	4086.0	4.88	mg/L	0.032	4.88	mg/L	0.032	0.66%
Mn 257.610†	111469.7	0.249	mg/L	0.0006	0.249	mg/L	0.0006	0.23%
Mo 202.031†	6601.0	0.489	mg/L	0.0021	0.489	mg/L	0.0021	0.42%
Ni 231.604†	8499.3	0.246	mg/L	0.0015	0.246	mg/L	0.0015	0.62%
Pb 220.353†	1438.2	0.250	mg/L	0.0011	0.250	mg/L	0.0011	0.44%
Sb 206.836†	923.6	0.582	mg/L	0.0077	0.582	mg/L	0.0077	1.32%
Se 196.026†	268.1	0.187	mg/L	0.0067	0.187	mg/L	0.0067	3.58%
Si 251.611†	86209.6	2.49	mg/L	0.013	2.49	mg/L	0.013	0.52%
Sn 189.927†	3024.0	0.513	mg/L	0.0044	0.513	mg/L	0.0044	0.86%
Ti 334.940†	362781.7	0.496	mg/L	0.0022	0.496	mg/L	0.0022	0.44%
Tl 190.801†	423.9	0.254	mg/L	0.0025	0.254	mg/L	0.0025	0.98%
V 290.880†	73589.5	0.487	mg/L	0.0019	0.487	mg/L	0.0019	0.38%
Zn 206.200†	15831.8	0.466	mg/L	0.0060	0.466	mg/L	0.0060	1.29%
K 766.490†	65459.4	24.3	mg/L	0.15	24.3	mg/L	0.15	0.63%
Na 589.592†	342919.3	24.2	mg/L	0.19	24.2	mg/L	0.19	0.78%

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Sr 407.771†	510720.4	0.489	mg/L	0.0361	0.489	mg/L	0.0361 7.39%
Li 670.784†	41559.9	0.495	mg/L	0.0011	0.495	mg/L	0.0011 0.22%

Sequence No.: 15 **Autosampler Location: 47**
Sample ID: L1102048607 WG357047-01 **Date Collected: 2/22/2011 11:38:56 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048607 WG357047-01

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102048607 WG357047-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5110175.4						63506.00	1.24%
YRADIAL	309571.9						6251.48	2.02%
Ga 417.206	1244564.2						3611.44	0.29%
GaRADIAL	60293.6						1635.36	2.71%
Ag 328.068†	319.8	0.00086	mg/L	0.000671	0.00086	mg/L	0.000671	78.14%
Al 396.153†	3121.8	0.605	mg/L	0.0241	0.605	mg/L	0.0241	3.98%
As 188.979†	1.0	0.00031	mg/L	0.000759	0.00031	mg/L	0.000759	247.95%
Ba 233.527†	1344.9	0.0223	mg/L	0.00031	0.0223	mg/L	0.00031	1.41%
Be 234.861†	82.7	0.00003	mg/L	0.000104	0.00003	mg/L	0.000104	407.54%
B 249.677†	572.6	0.0134	mg/L	0.00049	0.0134	mg/L	0.00049	3.61%
Ca 227.546†	89.6	0.826	mg/L	0.0569	0.826	mg/L	0.0569	6.89%
Cd 228.802†	-0.1	-0.00006	mg/L	0.000056	-0.00006	mg/L	0.000056	87.41%
Co 228.616†	8.3	0.00027	mg/L	0.000202	0.00027	mg/L	0.000202	74.01%
Cr 267.716†	342.6	0.00252	mg/L	0.000054	0.00252	mg/L	0.000054	2.12%
Cu 327.393†	271.7	0.00171	mg/L	0.000297	0.00171	mg/L	0.000297	17.34%
Fe 239.562†	284.4	0.619	mg/L	0.0232	0.619	mg/L	0.0232	3.75%
Mg 279.077†	562.1	0.669	mg/L	0.0126	0.669	mg/L	0.0126	1.88%
Mn 257.610†	9978.4	0.0230	mg/L	0.00025	0.0230	mg/L	0.00025	1.08%
Mo 202.031†	3.7	-0.00013	mg/L	0.000139	-0.00013	mg/L	0.000139	105.28%
Ni 231.604†	91.2	0.00241	mg/L	0.000234	0.00241	mg/L	0.000234	9.72%
Pb 220.353†	-7.1	-0.00337	mg/L	0.000280	-0.00337	mg/L	0.000280	8.32%
Sb 206.836†	-0.6	-0.00186	mg/L	0.000945	-0.00186	mg/L	0.000945	50.83%
Se 196.026†	3.2	0.00191	mg/L	0.003076	0.00191	mg/L	0.003076	160.95%
Si 251.611†	228006.4	6.63	mg/L	0.090	6.63	mg/L	0.090	1.35%
Sn 189.927†	-5.2	-0.00289	mg/L	0.000836	-0.00289	mg/L	0.000836	28.87%
Ti 334.940†	4837.2	0.00636	mg/L	0.000906	0.00636	mg/L	0.000906	14.25%
Tl 190.801†	0.8	0.00079	mg/L	0.001963	0.00079	mg/L	0.001963	248.57%
V 290.880†	-38.3	0.00005	mg/L	0.000384	0.00005	mg/L	0.000384	713.84%
Zn 206.200†	226.1	-0.00031	mg/L	0.000427	-0.00031	mg/L	0.000427	139.06%
K 766.490†	2023.3	0.746	mg/L	0.0503	0.746	mg/L	0.0503	6.74%
Na 589.592†	25288.2	1.75	mg/L	0.012	1.75	mg/L	0.012	0.69%
Sr 407.771†	7483.1	0.00673	mg/L	0.000593	0.00673	mg/L	0.000593	8.81%
Li 670.784†	217.3	0.00069	mg/L	0.000743	0.00069	mg/L	0.000743	108.35%

Sequence No.: 16 **Autosampler Location: 48**
Sample ID: L1102048608S WG357047-04 **Date Collected: 2/22/2011 11:45:35 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048608S WG357047-04

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102048608S WG357047-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5003618.3						32909.27	0.66%
YRADIAL	314584.9						5648.43	1.80%
Ga 417.206	1208224.6						12781.33	1.06%
GaRADIAL	59918.4						121.33	0.20%

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Ag 328.068†	40485.2	0.202 mg/L	0.0018	0.202 mg/L	0.0018	0.90%
Al 396.153†	30053.4	5.79 mg/L	0.025	5.79 mg/L	0.025	0.43%
As 188.979†	212.8	0.191 mg/L	0.0009	0.191 mg/L	0.0009	0.47%
Ba 233.527†	31062.4	0.526 mg/L	0.0007	0.526 mg/L	0.0007	0.12%
Be 234.861†	14469.3	0.0250 mg/L	0.00030	0.0250 mg/L	0.00030	1.20%
B 249.677†	53308.6	1.01 mg/L	0.013	1.01 mg/L	0.013	1.27%
Ca 227.546†	624.6	6.01 mg/L	0.018	6.01 mg/L	0.018	0.29%
Cd 228.802†	438.6	0.0245 mg/L	0.00027	0.0245 mg/L	0.00027	1.11%
Co 228.616†	1972.0	0.0996 mg/L	0.00061	0.0996 mg/L	0.00061	0.61%
Cr 267.716†	29272.6	0.253 mg/L	0.0004	0.253 mg/L	0.0004	0.17%
Cu 327.393†	36746.2	0.250 mg/L	0.0018	0.250 mg/L	0.0018	0.73%
Fe 239.562†	1323.4	2.88 mg/L	0.013	2.88 mg/L	0.013	0.44%
Mg 279.077†	4761.0	5.68 mg/L	0.040	5.68 mg/L	0.040	0.70%
Mn 257.610†	130711.3	0.293 mg/L	0.0007	0.293 mg/L	0.0007	0.23%
Mo 202.031†	6787.1	0.503 mg/L	0.0031	0.503 mg/L	0.0031	0.63%
Ni 231.604†	8831.8	0.256 mg/L	0.0013	0.256 mg/L	0.0013	0.51%
Pb 220.353†	1477.2	0.257 mg/L	0.0027	0.257 mg/L	0.0027	1.03%
Sb 206.836†	947.6	0.597 mg/L	0.0067	0.597 mg/L	0.0067	1.12%
Se 196.026†	277.3	0.194 mg/L	0.0011	0.194 mg/L	0.0011	0.58%
Si 251.611†	330843.7	9.63 mg/L	0.099	9.63 mg/L	0.099	1.03%
Sn 189.927†	3094.3	0.525 mg/L	0.0039	0.525 mg/L	0.0039	0.74%
Ti 334.940†	372093.0	0.508 mg/L	0.0013	0.508 mg/L	0.0013	0.26%
Tl 190.801†	438.2	0.263 mg/L	0.0006	0.263 mg/L	0.0006	0.22%
V 290.880†	75642.7	0.500 mg/L	0.0015	0.500 mg/L	0.0015	0.29%
Zn 206.200†	16187.7	0.477 mg/L	0.0018	0.477 mg/L	0.0018	0.37%
K 766.490†	68887.4	25.5 mg/L	0.06	25.5 mg/L	0.06	0.25%
Na 589.592†	379444.4	26.8 mg/L	0.35	26.8 mg/L	0.35	1.32%
Sr 407.771†	524548.2	0.502 mg/L	0.0340	0.502 mg/L	0.0340	6.77%
Li 670.784†	43416.7	0.517 mg/L	0.0044	0.517 mg/L	0.0044	0.85%

Sequence No.: 17 **Autosampler Location: 49**
Sample ID: L1102048609SD WG357047-05 **Date Collected: 2/22/2011 11:52:15 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048609SD WG357047-05

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102048609SD WG357047-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4936388.0						32095.94	0.65%
YRADIAL	308618.4						2488.37	0.81%
Ga 417.206	1191969.0						21899.50	1.84%
GaRADIAL	59176.4						1200.64	2.03%
Ag 328.068†	40521.9	0.202	mg/L	0.0026	0.202	mg/L	0.0026	1.31%
Al 396.153†	30183.0	5.82	mg/L	0.088	5.82	mg/L	0.088	1.51%
As 188.979†	214.1	0.193	mg/L	0.0050	0.193	mg/L	0.0050	2.60%
Ba 233.527†	31305.8	0.530	mg/L	0.0006	0.530	mg/L	0.0006	0.12%
Be 234.861†	14618.2	0.0253	mg/L	0.00037	0.0253	mg/L	0.00037	1.47%
B 249.677†	53339.8	1.01	mg/L	0.014	1.01	mg/L	0.014	1.34%
Ca 227.546†	625.1	6.01	mg/L	0.149	6.01	mg/L	0.149	2.48%
Cd 228.802†	440.5	0.0246	mg/L	0.00045	0.0246	mg/L	0.00045	1.83%
Co 228.616†	1984.7	0.100	mg/L	0.0009	0.100	mg/L	0.0009	0.86%
Cr 267.716†	29419.8	0.254	mg/L	0.0007	0.254	mg/L	0.0007	0.26%
Cu 327.393†	36652.0	0.249	mg/L	0.0026	0.249	mg/L	0.0026	1.05%
Fe 239.562†	1342.6	2.92	mg/L	0.059	2.92	mg/L	0.059	2.01%
Mg 279.077†	4854.1	5.79	mg/L	0.069	5.79	mg/L	0.069	1.20%
Mn 257.610†	131213.6	0.294	mg/L	0.0008	0.294	mg/L	0.0008	0.26%
Mo 202.031†	6806.0	0.504	mg/L	0.0047	0.504	mg/L	0.0047	0.94%
Ni 231.604†	8863.4	0.256	mg/L	0.0009	0.256	mg/L	0.0009	0.33%
Pb 220.353†	1496.4	0.260	mg/L	0.0013	0.260	mg/L	0.0013	0.49%
Sb 206.836†	953.1	0.600	mg/L	0.0131	0.600	mg/L	0.0131	2.18%
Se 196.026†	279.6	0.196	mg/L	0.0026	0.196	mg/L	0.0026	1.35%
Si 251.611†	339670.6	9.88	mg/L	0.133	9.88	mg/L	0.133	1.35%
Sn 189.927†	3124.5	0.531	mg/L	0.0021	0.531	mg/L	0.0021	0.39%
Ti 334.940†	375642.2	0.513	mg/L	0.0022	0.513	mg/L	0.0022	0.42%
Tl 190.801†	446.2	0.268	mg/L	0.0029	0.268	mg/L	0.0029	1.10%

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V 290.880†	75860.9	0.502	mg/L	0.0013	0.502	mg/L	0.0013	0.25%
Zn 206.200†	16299.1	0.480	mg/L	0.0056	0.480	mg/L	0.0056	1.17%
K 766.490†	68812.8	25.5	mg/L	0.37	25.5	mg/L	0.37	1.45%
Na 589.592†	379032.3	26.8	mg/L	0.46	26.8	mg/L	0.46	1.71%
Sr 407.771†	529143.5	0.506	mg/L	0.0455	0.506	mg/L	0.0455	8.98%
Li 670.784†	43402.6	0.517	mg/L	0.0080	0.517	mg/L	0.0080	1.55%

Sequence No.: 18 **Autosampler Location: 56**
Sample ID: L1102048701 **Date Collected: 2/22/2011 11:59:01 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048701

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102048701

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5181027.3						23525.46	0.45%
YRADIAL	319442.4						7975.43	2.50%
Ga 417.206	1261109.5						15148.90	1.20%
GaRADIAL	60559.8						165.15	0.27%
Ag 328.068†	138.0	-0.00061	mg/L	0.000302	-0.00061	mg/L	0.000302	49.43%
Al 396.153†	15866.7	3.06	mg/L	0.011	3.06	mg/L	0.011	0.37%
As 188.979†	4.6	0.00516	mg/L	0.002850	0.00516	mg/L	0.002850	55.22%
Ba 233.527†	4634.2	0.0779	mg/L	0.00040	0.0779	mg/L	0.00040	0.52%
Be 234.861†	1803.2	0.00059	mg/L	0.000174	0.00059	mg/L	0.000174	29.50%
B 249.677†	-50.7	0.0542	mg/L	0.00047	0.0542	mg/L	0.00047	0.86%
Ca 227.546†	69.2	0.693	mg/L	0.1065	0.693	mg/L	0.1065	15.36%
Cd 228.802†	1.3	0.00000	mg/L	0.000052	0.00000	mg/L	0.000052	>999.9%
Co 228.616†	44.1	0.00166	mg/L	0.000090	0.00166	mg/L	0.000090	5.41%
Cr 267.716†	2023.0	0.0170	mg/L	0.00038	0.0170	mg/L	0.00038	2.24%
Cu 327.393†	1324.7	0.0103	mg/L	0.00010	0.0103	mg/L	0.00010	0.98%
Fe 239.562†	5744.2	12.5	mg/L	0.09	12.5	mg/L	0.09	0.76%
Mg 279.077†	307.1	0.358	mg/L	0.0078	0.358	mg/L	0.0078	2.17%
Mn 257.610†	16735.9	0.0385	mg/L	0.00010	0.0385	mg/L	0.00010	0.27%
Mo 202.031†	29.7	0.00239	mg/L	0.000059	0.00239	mg/L	0.000059	2.47%
Ni 231.604†	175.6	0.00485	mg/L	0.000114	0.00485	mg/L	0.000114	2.36%
Pb 220.353†	20.7	0.00101	mg/L	0.000660	0.00101	mg/L	0.000660	65.60%
Sb 206.836†	-0.2	-0.00170	mg/L	0.002189	-0.00170	mg/L	0.002189	129.02%
Se 196.026†	4.2	0.00667	mg/L	0.003313	0.00667	mg/L	0.003313	49.65%
Si 251.611†	230424.4	6.71	mg/L	0.083	6.71	mg/L	0.083	1.23%
Sn 189.927†	-1.5	-0.00228	mg/L	0.000276	-0.00228	mg/L	0.000276	12.12%
Ti 334.940†	44413.8	0.0605	mg/L	0.00055	0.0605	mg/L	0.00055	0.90%
Tl 190.801†	-1.4	0.00019	mg/L	0.002539	0.00019	mg/L	0.002539	>999.9%
V 290.880†	2931.0	0.0206	mg/L	0.00115	0.0206	mg/L	0.00115	5.57%
Zn 206.200†	635.3	0.0117	mg/L	0.00132	0.0117	mg/L	0.00132	11.30%
K 766.490†	1062.1	0.392	mg/L	0.0151	0.392	mg/L	0.0151	3.85%
Na 589.592†	13176.7	0.908	mg/L	0.0106	0.908	mg/L	0.0106	1.17%
Sr 407.771†	16742.6	0.0142	mg/L	0.00136	0.0142	mg/L	0.00136	9.58%
Li 670.784†	138.1	-0.00026	mg/L	0.000490	-0.00026	mg/L	0.000490	187.44%

Sequence No.: 19 **Autosampler Location: 57**
Sample ID: L1102048701PS WG357117-01 **Date Collected: 2/22/2011 12:05:38 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048701PS WG357117-01

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102048701PS WG357117-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

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Y 371.029	4973043.6				67394.52	1.36%
YRADIAL	308609.8				2145.26	0.70%
Ga 417.206	1194121.9				16742.36	1.40%
GaRADIAL	58019.6				150.58	0.26%
Ag 328.068†	41725.6	0.207 mg/L	0.0043	0.207 mg/L	0.0043	2.08%
Al 396.153†	41259.6	7.95 mg/L	0.064	7.95 mg/L	0.064	0.81%
As 188.979†	222.6	0.202 mg/L	0.0023	0.202 mg/L	0.0023	1.15%
Ba 233.527†	34539.9	0.585 mg/L	0.0069	0.585 mg/L	0.0069	1.18%
Be 234.861†	16539.4	0.0265 mg/L	0.00033	0.0265 mg/L	0.00033	1.25%
B 249.677†	53105.2	1.05 mg/L	0.016	1.05 mg/L	0.016	1.55%
Ca 227.546†	590.2	5.74 mg/L	0.042	5.74 mg/L	0.042	0.72%
Cd 228.802†	441.0	0.0246 mg/L	0.00068	0.0246 mg/L	0.00068	2.76%
Co 228.616†	2039.3	0.103 mg/L	0.0021	0.103 mg/L	0.0021	2.02%
Cr 267.716†	30976.5	0.268 mg/L	0.0019	0.268 mg/L	0.0019	0.70%
Cu 327.393†	38795.3	0.265 mg/L	0.0049	0.265 mg/L	0.0049	1.85%
Fe 239.562†	6091.0	13.2 mg/L	0.08	13.2 mg/L	0.08	0.60%
Mg 279.077†	4582.2	5.46 mg/L	0.057	5.46 mg/L	0.057	1.05%
Mn 257.610†	133560.2	0.300 mg/L	0.0036	0.300 mg/L	0.0036	1.19%
Mo 202.031†	6870.3	0.510 mg/L	0.0056	0.510 mg/L	0.0056	1.11%
Ni 231.604†	8976.4	0.260 mg/L	0.0020	0.260 mg/L	0.0020	0.76%
Pb 220.353†	1543.6	0.268 mg/L	0.0027	0.268 mg/L	0.0027	1.00%
Sb 206.836†	973.3	0.613 mg/L	0.0113	0.613 mg/L	0.0113	1.85%
Se 196.026†	276.0	0.197 mg/L	0.0036	0.197 mg/L	0.0036	1.83%
Si 251.611†	323103.2	9.40 mg/L	0.067	9.40 mg/L	0.067	0.71%
Sn 189.927†	-9.2	-0.00358 mg/L	0.000308	-0.00358 mg/L	0.000308	8.60%
Ti 334.940†	426751.5	0.583 mg/L	0.0054	0.583 mg/L	0.0054	0.92%
Tl 190.801†	453.1	0.273 mg/L	0.0042	0.273 mg/L	0.0042	1.52%
V 290.880†	78958.9	0.523 mg/L	0.0076	0.523 mg/L	0.0076	1.46%
Zn 206.200†	17307.2	0.510 mg/L	0.0051	0.510 mg/L	0.0051	1.00%
K 766.490†	69932.5	25.9 mg/L	0.29	25.9 mg/L	0.29	1.11%
Na 589.592†	377858.7	26.7 mg/L	0.17	26.7 mg/L	0.17	0.62%
Sr 407.771†	515931.2	0.492 mg/L	0.0068	0.492 mg/L	0.0068	1.39%
Li 670.784†	44423.8	0.529 mg/L	0.0036	0.529 mg/L	0.0036	0.68%

Sequence No.: 20 **Autosampler Location: 58**
Sample ID: L1102048701DL WG357117-02 **Date Collected: 2/22/2011 12:11:25 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048701DL WG357117-02

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102048701DL WG357117-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5250119.2						82080.14	1.56%
YRADIAL	315659.9						9860.23	3.12%
Ga 417.206	1252610.0						18629.98	1.49%
GaRADIAL	60231.1						1256.63	2.09%
Ag 328.068†	237.5	0.00036	mg/L	0.000959	0.00036	mg/L	0.000959	269.31%
Al 396.153†	3270.5	0.633	mg/L	0.0095	0.633	mg/L	0.0095	1.50%
As 188.979†	-1.6	-0.00180	mg/L	0.000859	-0.00180	mg/L	0.000859	47.75%
Ba 233.527†	966.3	0.0159	mg/L	0.00017	0.0159	mg/L	0.00017	1.09%
Be 234.861†	391.5	0.00015	mg/L	0.000028	0.00015	mg/L	0.000028	18.97%
B 249.677†	705.3	0.0253	mg/L	0.00024	0.0253	mg/L	0.00024	0.95%
Ca 227.546†	16.2	0.161	mg/L	0.0611	0.161	mg/L	0.0611	37.96%
Cd 228.802†	0.1	-0.00004	mg/L	0.000119	-0.00004	mg/L	0.000119	324.79%
Co 228.616†	15.1	0.00056	mg/L	0.000244	0.00056	mg/L	0.000244	43.77%
Cr 267.716†	435.8	0.00334	mg/L	0.000051	0.00334	mg/L	0.000051	1.54%
Cu 327.393†	390.3	0.00276	mg/L	0.000270	0.00276	mg/L	0.000270	9.77%
Fe 239.562†	1217.3	2.65	mg/L	0.050	2.65	mg/L	0.050	1.87%
Mg 279.077†	67.4	0.0770	mg/L	0.00249	0.0770	mg/L	0.00249	3.23%
Mn 257.610†	3820.2	0.00844	mg/L	0.000146	0.00844	mg/L	0.000146	1.73%
Mo 202.031†	9.3	0.00038	mg/L	0.000230	0.00038	mg/L	0.000230	60.53%
Ni 231.604†	26.0	0.00052	mg/L	0.000144	0.00052	mg/L	0.000144	27.75%
Pb 220.353†	1.3	-0.00203	mg/L	0.000705	-0.00203	mg/L	0.000705	34.77%
Sb 206.836†	-2.5	-0.00307	mg/L	0.002460	-0.00307	mg/L	0.002460	80.05%
Se 196.026†	-0.7	-0.00025	mg/L	0.004797	-0.00025	mg/L	0.004797	>999.9%

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Si 251.611†	50463.3	1.46	mg/L	0.024	1.46	mg/L	0.024 1.67%
Sn 189.927†	-2.3	-0.00240	mg/L	0.000292	-0.00240	mg/L	0.000292 12.18%
Ti 334.940†	9462.5	0.0127	mg/L	0.00024	0.0127	mg/L	0.00024 1.89%
Tl 190.801†	-0.2	0.00032	mg/L	0.001699	0.00032	mg/L	0.001699 536.24%
V 290.880†	535.7	0.00400	mg/L	0.000735	0.00400	mg/L	0.000735 18.34%
Zn 206.200†	-45.6	-0.00845	mg/L	0.001006	-0.00845	mg/L	0.001006 11.91%
K 766.490†	330.2	0.122	mg/L	0.0377	0.122	mg/L	0.0377 30.76%
Na 589.592†	2890.2	0.193	mg/L	0.0097	0.193	mg/L	0.0097 5.02%
Sr 407.771†	3501.5	0.00267	mg/L	0.000287	0.00267	mg/L	0.000287 10.76%
Li 670.784†	167.9	0.00009	mg/L	0.000981	0.00009	mg/L	0.000981 >999.9%

Sequence No.: 21 **Autosampler Location: 59**
Sample ID: L1102048702 **Date Collected: 2/22/2011 12:18:07 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048702

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102048702

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5169533.0						15697.92	0.30%
YRADIAL	323985.0						11987.80	3.70%
Ga 417.206	1245671.6						12600.40	1.01%
GaRADIAL	61069.4						1367.12	2.24%
Ag 328.068†	-39.3	-0.00259	mg/L	0.000264	-0.00259	mg/L	0.000264	10.20%
Al 396.153†	33346.7	6.44	mg/L	0.025	6.44	mg/L	0.025	0.39%
As 188.979†	6.5	0.0102	mg/L	0.00074	0.0102	mg/L	0.00074	7.22%
Ba 233.527†	7324.2	0.123	mg/L	0.0027	0.123	mg/L	0.0027	2.18%
Be 234.861†	6522.0	0.00391	mg/L	0.000128	0.00391	mg/L	0.000128	3.29%
B 249.677†	-2669.0	0.111	mg/L	0.0034	0.111	mg/L	0.0034	3.09%
Ca 227.546†	110.5	1.20	mg/L	0.064	1.20	mg/L	0.064	5.29%
Cd 228.802†	4.7	0.00024	mg/L	0.000085	0.00024	mg/L	0.000085	35.59%
Co 228.616†	208.7	0.00926	mg/L	0.000336	0.00926	mg/L	0.000336	3.62%
Cr 267.716†	8759.5	0.0753	mg/L	0.00103	0.0753	mg/L	0.00103	1.37%
Cu 327.393†	1967.9	0.0175	mg/L	0.00048	0.0175	mg/L	0.00048	2.75%
Fe 239.562†	16649.9	36.2	mg/L	0.90	36.2	mg/L	0.90	2.49%
Mg 279.077†	416.0	0.475	mg/L	0.0133	0.475	mg/L	0.0133	2.79%
Mn 257.610†	23260.6	0.0542	mg/L	0.00068	0.0542	mg/L	0.00068	1.25%
Mo 202.031†	12.4	0.00229	mg/L	0.000219	0.00229	mg/L	0.000219	9.53%
Ni 231.604†	647.2	0.0185	mg/L	0.00011	0.0185	mg/L	0.00011	0.62%
Pb 220.353†	61.4	0.00714	mg/L	0.000495	0.00714	mg/L	0.000495	6.92%
Sb 206.836†	5.0	0.00123	mg/L	0.000498	0.00123	mg/L	0.000498	40.47%
Se 196.026†	-16.4	0.00078	mg/L	0.002899	0.00078	mg/L	0.002899	371.01%
Si 251.611†	251027.8	7.31	mg/L	0.045	7.31	mg/L	0.045	0.61%
Sn 189.927†	-18.6	-0.00518	mg/L	0.000735	-0.00518	mg/L	0.000735	14.21%
Ti 334.940†	112203.1	0.153	mg/L	0.0025	0.153	mg/L	0.0025	1.66%
Tl 190.801†	-5.3	-0.00095	mg/L	0.001300	-0.00095	mg/L	0.001300	137.19%
V 290.880†	11064.1	0.0762	mg/L	0.00134	0.0762	mg/L	0.00134	1.76%
Zn 206.200†	1325.8	0.0319	mg/L	0.00082	0.0319	mg/L	0.00082	2.58%
K 766.490†	1938.8	0.714	mg/L	0.0143	0.714	mg/L	0.0143	2.00%
Na 589.592†	36968.1	2.56	mg/L	0.043	2.56	mg/L	0.043	1.67%
Sr 407.771†	21875.7	0.0163	mg/L	0.00191	0.0163	mg/L	0.00191	11.74%
Li 670.784†	206.8	0.00056	mg/L	0.001330	0.00056	mg/L	0.001330	237.53%

Sequence No.: 22 **Autosampler Location: 60**
Sample ID: L1102048703 **Date Collected: 2/22/2011 12:24:46 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048703

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Approved: February 23, 2011

Pierre Morris

Mean Data: L1102048703

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5171784.1						59185.56	1.14%
YRADIAL	321916.8						4882.05	1.52%
Ga 417.206	1274969.0						35464.09	2.78%
GaRADIAL	60592.7						423.53	0.70%
Ag 328.068†	30.4	-0.00232	mg/L	0.000379	-0.00232	mg/L	0.000379	16.34%
Al 396.153†	41377.6	7.98	mg/L	0.031	7.98	mg/L	0.031	0.39%
As 188.979†	9.4	0.0130	mg/L	0.00115	0.0130	mg/L	0.00115	8.82%
Ba 233.527†	2852.5	0.0479	mg/L	0.00043	0.0479	mg/L	0.00043	0.89%
Be 234.861†	5286.3	0.00145	mg/L	0.000050	0.00145	mg/L	0.000050	3.46%
B 249.677†	-2946.3	0.112	mg/L	0.0018	0.112	mg/L	0.0018	1.57%
Ca 227.546†	122.1	1.31	mg/L	0.064	1.31	mg/L	0.064	4.87%
Cd 228.802†	2.6	0.00002	mg/L	0.000216	0.00002	mg/L	0.000216	910.55%
Co 228.616†	76.7	0.00255	mg/L	0.000152	0.00255	mg/L	0.000152	5.97%
Cr 267.716†	7515.5	0.0645	mg/L	0.00131	0.0645	mg/L	0.00131	2.03%
Cu 327.393†	2168.4	0.0190	mg/L	0.00121	0.0190	mg/L	0.00121	6.35%
Fe 239.562†	17429.0	37.9	mg/L	0.07	37.9	mg/L	0.07	0.19%
Mg 279.077†	312.2	0.350	mg/L	0.0018	0.350	mg/L	0.0018	0.52%
Mn 257.610†	10314.5	0.0260	mg/L	0.00036	0.0260	mg/L	0.00036	1.39%
Mo 202.031†	45.8	0.00485	mg/L	0.000444	0.00485	mg/L	0.000444	9.15%
Ni 231.604†	314.7	0.00888	mg/L	0.000338	0.00888	mg/L	0.000338	3.80%
Pb 220.353†	51.2	0.00538	mg/L	0.001418	0.00538	mg/L	0.001418	26.37%
Sb 206.836†	5.2	0.00145	mg/L	0.002667	0.00145	mg/L	0.002667	184.02%
Se 196.026†	-13.2	0.00354	mg/L	0.002972	0.00354	mg/L	0.002972	83.92%
Si 251.611†	331242.9	9.65	mg/L	0.116	9.65	mg/L	0.116	1.20%
Sn 189.927†	-18.7	-0.00520	mg/L	0.000669	-0.00520	mg/L	0.000669	12.88%
Ti 334.940†	90560.9	0.124	mg/L	0.0039	0.124	mg/L	0.0039	3.14%
Tl 190.801†	-1.2	0.00105	mg/L	0.003787	0.00105	mg/L	0.003787	362.10%
V 290.880†	11371.2	0.0783	mg/L	0.00126	0.0783	mg/L	0.00126	1.61%
Zn 206.200†	1038.5	0.0233	mg/L	0.00054	0.0233	mg/L	0.00054	2.32%
K 766.490†	1682.0	0.621	mg/L	0.0241	0.621	mg/L	0.0241	3.88%
Na 589.592†	18168.7	1.26	mg/L	0.007	1.26	mg/L	0.007	0.59%
Sr 407.771†	23430.1	0.0175	mg/L	0.00205	0.0175	mg/L	0.00205	11.66%
Li 670.784†	205.1	0.00054	mg/L	0.000466	0.00054	mg/L	0.000466	86.37%

Sequence No.: 23 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/22/2011 12:31:27 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4875346.4						21902.94	0.45%
YRADIAL	292683.6						3554.28	1.21%
Ga 417.206	1158781.9						6084.59	0.53%
GaRADIAL	56608.2						1008.60	1.78%
Ag 328.068†	80392.9	0.401	mg/L	0.0076	0.401	mg/L	0.0076	1.90%
QC value within limits for Ag 328.068 Recovery = 100.24%								
Al 396.153†	52070.1	10.0	mg/L	0.06	10.0	mg/L	0.06	0.56%
QC value within limits for Al 396.153 Recovery = 100.29%								
As 188.979†	429.6	0.387	mg/L	0.0033	0.387	mg/L	0.0033	0.85%
QC value within limits for As 188.979 Recovery = 96.77%								
Ba 233.527†	58911.3	0.998	mg/L	0.0177	0.998	mg/L	0.0177	1.77%
QC value within limits for Ba 233.527 Recovery = 99.76%								
Be 234.861†	28850.3	0.0503	mg/L	0.00117	0.0503	mg/L	0.00117	2.33%
QC value within limits for Be 234.861 Recovery = 100.57%								
B 249.677†	26687.0	0.508	mg/L	0.0127	0.508	mg/L	0.0127	2.50%
QC value within limits for B 249.677 Recovery = 101.66%								
Ca 227.546†	1045.7	10.1	mg/L	0.15	10.1	mg/L	0.15	1.53%
QC value within limits for Ca 227.546 Recovery = 101.30%								
Cd 228.802†	878.5	0.0490	mg/L	0.00039	0.0490	mg/L	0.00039	0.80%

Approved: February 23, 2011

Pierre Morris

QC value within limits for Cd 228.802 Recovery = 98.09%

Co 228.616†	3839.9	0.194 mg/L	0.0007	0.194 mg/L	0.0007	0.35%
QC value within limits for Co 228.616 Recovery = 97.07%						
Cr 267.716†	57200.4	0.495 mg/L	0.0098	0.495 mg/L	0.0098	1.98%
QC value within limits for Cr 267.716 Recovery = 99.03%						
Cu 327.393†	72274.9	0.492 mg/L	0.0084	0.492 mg/L	0.0084	1.70%
QC value within limits for Cu 327.393 Recovery = 98.35%						
Fe 239.562†	1796.1	3.90 mg/L	0.071	3.90 mg/L	0.071	1.82%
QC value within limits for Fe 239.562 Recovery = 97.54%						
Mg 279.077†	8221.5	9.82 mg/L	0.147	9.82 mg/L	0.147	1.50%
QC value within limits for Mg 279.077 Recovery = 98.16%						
Mn 257.610†	224210.3	0.501 mg/L	0.0084	0.501 mg/L	0.0084	1.69%
QC value within limits for Mn 257.610 Recovery = 100.18%						
Mo 202.031†	13397.0	0.993 mg/L	0.0143	0.993 mg/L	0.0143	1.44%
QC value within limits for Mo 202.031 Recovery = 99.33%						
Ni 231.604†	17064.8	0.494 mg/L	0.0087	0.494 mg/L	0.0087	1.75%
QC value within limits for Ni 231.604 Recovery = 98.79%						
Pb 220.353†	2923.7	0.510 mg/L	0.0014	0.510 mg/L	0.0014	0.27%
QC value within limits for Pb 220.353 Recovery = 101.96%						
Sb 206.836†	1884.0	1.19 mg/L	0.009	1.19 mg/L	0.009	0.77%
QC value within limits for Sb 206.836 Recovery = 99.02%						
Se 196.026†	550.8	0.385 mg/L	0.0075	0.385 mg/L	0.0075	1.94%
QC value within limits for Se 196.026 Recovery = 96.28%						
Si 251.611†	171511.3	4.97 mg/L	0.100	4.97 mg/L	0.100	2.01%
QC value within limits for Si 251.611 Recovery = 99.45%						
Sn 189.927†	5777.1	0.983 mg/L	0.0028	0.983 mg/L	0.0028	0.29%
QC value within limits for Sn 189.927 Recovery = 98.27%						
Ti 334.940†	733813.9	1.00 mg/L	0.005	1.00 mg/L	0.005	0.45%
QC value within limits for Ti 334.940 Recovery = 100.27%						
Tl 190.801†	843.8	0.506 mg/L	0.0036	0.506 mg/L	0.0036	0.71%
QC value within limits for Tl 190.801 Recovery = 101.28%						
V 290.880†	148903.1	0.984 mg/L	0.0176	0.984 mg/L	0.0176	1.79%
QC value within limits for V 290.880 Recovery = 98.42%						
Zn 206.200†	32598.7	0.967 mg/L	0.0202	0.967 mg/L	0.0202	2.09%
QC value within limits for Zn 206.200 Recovery = 96.68%						
K 766.490†	133479.7	49.7 mg/L	0.43	49.7 mg/L	0.43	0.86%
QC value within limits for K 766.490 Recovery = 99.49%						
Na 589.592†	692289.9	49.7 mg/L	0.39	49.7 mg/L	0.39	0.79%
QC value within limits for Na 589.592 Recovery = 99.37%						
Sr 407.771†	1016402.4	0.973 mg/L	0.0786	0.973 mg/L	0.0786	8.08%
QC value within limits for Sr 407.771 Recovery = 97.31%						
Li 670.784†	83289.6	0.993 mg/L	0.0023	0.993 mg/L	0.0023	0.23%
QC value within limits for Li 670.784 Recovery = 99.34%						

All analyte(s) passed QC.

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Sequence No.: 24 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/22/2011 12:38:05 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5182154.1						53652.90	1.04%
YRADIAL	310928.5						4667.77	1.50%
Ga 417.206	1213326.4						17242.52	1.42%
GaRADIAL	59423.3						1259.40	2.12%
Ag 328.068†	227.0	0.00043	mg/L	0.000783	0.00043	mg/L	0.000783	182.29%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-73.9	-0.0117	mg/L	0.01000	-0.0117	mg/L	0.01000	85.57%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.8	0.00012	mg/L	0.003129	0.00012	mg/L	0.003129	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	6.7	-0.00030	mg/L	0.000059	-0.00030	mg/L	0.000059	19.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								

Approved: February 23, 2011

Pierre Morris

Be 234.861†	11.9	0.00003 mg/L	0.000028	0.00003 mg/L	0.000028	111.09%
QC value within limits for Be 234.861 Recovery = Not calculated						
B 249.677†	589.2	0.0116 mg/L	0.00003	0.0116 mg/L	0.00003	0.22%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	1.9	0.0172 mg/L	0.04109	0.0172 mg/L	0.04109	239.43%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Cd 228.802†	1.5	0.00002 mg/L	0.000093	0.00002 mg/L	0.000093	399.71%
QC value within limits for Cd 228.802 Recovery = Not calculated						
Co 228.616†	0.7	-0.00008 mg/L	0.000183	-0.00008 mg/L	0.000183	227.73%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-0.2	-0.00042 mg/L	0.000093	-0.00042 mg/L	0.000093	21.88%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	82.0	0.00035 mg/L	0.000717	0.00035 mg/L	0.000717	205.36%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	2.2	0.00601 mg/L	0.002211	0.00601 mg/L	0.002211	36.81%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	8.5	0.00808 mg/L	0.003112	0.00808 mg/L	0.003112	38.51%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-5.4	-0.00044 mg/L	0.000059	-0.00044 mg/L	0.000059	13.60%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	9.7	0.00028 mg/L	0.000373	0.00028 mg/L	0.000373	134.39%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	1.0	-0.00021 mg/L	0.000264	-0.00021 mg/L	0.000264	126.77%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-8.9	-0.00371 mg/L	0.000749	-0.00371 mg/L	0.000749	20.19%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	-0.6	-0.00182 mg/L	0.001377	-0.00182 mg/L	0.001377	75.49%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.9	0.00130 mg/L	0.004084	0.00130 mg/L	0.004084	314.75%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	192.7	-0.00872 mg/L	0.000536	-0.00872 mg/L	0.000536	6.15%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	0.4	-0.00194 mg/L	0.000638	-0.00194 mg/L	0.000638	32.93%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	140.6	-0.00007 mg/L	0.000107	-0.00007 mg/L	0.000107	159.37%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	4.3	0.00277 mg/L	0.001593	0.00277 mg/L	0.001593	57.51%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	-132.9	-0.00062 mg/L	0.000401	-0.00062 mg/L	0.000401	65.01%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	-463.9	-0.0209 mg/L	0.00056	-0.0209 mg/L	0.00056	2.68%
QC value less than the lower limit for Zn 206.200 Recovery = Not calculated						
K 766.490†	106.2	0.0398 mg/L	0.01687	0.0398 mg/L	0.01687	42.37%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	416.9	0.0209 mg/L	0.00795	0.0209 mg/L	0.00795	38.02%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	411.9	0.00002 mg/L	0.000225	0.00002 mg/L	0.000225	933.09%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	107.0	-0.00063 mg/L	0.000814	-0.00063 mg/L	0.000814	128.72%
QC value within limits for Li 670.784 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 25 **Autosampler Location: 10**
Sample ID: LLCCV **Date Collected: 2/22/2011 12:44:42 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLCCV

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5003654.4						9883.92	0.20%
YRADIAL	308212.2						13351.63	4.33%
Ga 417.206	1179196.6						19338.16	1.64%
GaRADIAL	58591.1						1594.34	2.72%
Ag 328.068†	1087.7	0.00473	mg/L	0.000129	0.00473	mg/L	0.000129	2.73%

Approved: February 23, 2011

Pierre Morris

QC value within limits for Ag 328.068 Recovery = 118.26%

Al 396.153†	410.7	0.0816 mg/L	0.00322	0.0816 mg/L	0.00322	3.94%
QC value within limits for Al 396.153 Recovery = 81.62%						
As 188.979†	4.8	0.00370 mg/L	0.003878	0.00370 mg/L	0.003878	104.77%
QC value within limits for As 188.979 Recovery = 92.54%						
Ba 233.527†	594.0	0.00965 mg/L	0.000080	0.00965 mg/L	0.000080	0.83%
QC value within limits for Ba 233.527 Recovery = 96.51%						
Be 234.861†	264.7	0.00047 mg/L	0.000029	0.00047 mg/L	0.000029	6.31%
QC value less than the lower limit for Be 234.861 Recovery = 23.36%						
B 249.677†	746.6	0.0146 mg/L	0.00044	0.0146 mg/L	0.00044	3.04%
QC value less than the lower limit for B 249.677 Recovery = 14.58%						
Ca 227.546†	15.5	0.148 mg/L	0.0266	0.148 mg/L	0.0266	17.94%
QC value within limits for Ca 227.546 Recovery = 74.22%						
Cd 228.802†	11.0	0.00056 mg/L	0.000070	0.00056 mg/L	0.000070	12.47%
QC value within limits for Cd 228.802 Recovery = 111.80%						
Co 228.616†	45.2	0.00218 mg/L	0.000153	0.00218 mg/L	0.000153	7.04%
QC value within limits for Co 228.616 Recovery = 108.76%						
Cr 267.716†	591.4	0.00470 mg/L	0.000067	0.00470 mg/L	0.000067	1.42%
QC value within limits for Cr 267.716 Recovery = 94.04%						
Cu 327.393†	761.5	0.00497 mg/L	0.000715	0.00497 mg/L	0.000715	14.38%
QC value within limits for Cu 327.393 Recovery = 99.47%						
Fe 239.562†	17.1	0.0383 mg/L	0.00298	0.0383 mg/L	0.00298	7.80%
QC value less than the lower limit for Fe 239.562 Recovery = 38.25%						
Mg 279.077†	87.1	0.102 mg/L	0.0088	0.102 mg/L	0.0088	8.60%
QC value less than the lower limit for Mg 279.077 Recovery = 20.39%						
Mn 257.610†	2450.4	0.00505 mg/L	0.000040	0.00505 mg/L	0.000040	0.80%
QC value within limits for Mn 257.610 Recovery = 100.96%						
Mo 202.031†	134.1	0.00950 mg/L	0.000236	0.00950 mg/L	0.000236	2.49%
QC value within limits for Mo 202.031 Recovery = 95.04%						
Ni 231.604†	185.0	0.00513 mg/L	0.000250	0.00513 mg/L	0.000250	4.88%
QC value within limits for Ni 231.604 Recovery = 102.52%						
Pb 220.353†	29.3	0.00297 mg/L	0.001123	0.00297 mg/L	0.001123	37.84%
QC value less than the lower limit for Pb 220.353 Recovery = 59.33%						
Sb 206.836†	18.7	0.0104 mg/L	0.00071	0.0104 mg/L	0.00071	6.81%
QC value within limits for Sb 206.836 Recovery = 86.42%						
Se 196.026†	6.0	0.00350 mg/L	0.005141	0.00350 mg/L	0.005141	147.06%
QC value within limits for Se 196.026 Recovery = 87.40%						
Si 251.611†	1873.8	0.0402 mg/L	0.00117	0.0402 mg/L	0.00117	2.92%
QC value within limits for Si 251.611 Recovery = 80.33%						
Sn 189.927†	57.9	0.00786 mg/L	0.000704	0.00786 mg/L	0.000704	8.97%
QC value within limits for Sn 189.927 Recovery = 78.56%						
Ti 334.940†	7314.8	0.00974 mg/L	0.000108	0.00974 mg/L	0.000108	1.10%
QC value within limits for Ti 334.940 Recovery = 97.39%						
Tl 190.801†	0.6	0.00074 mg/L	0.002315	0.00074 mg/L	0.002315	311.18%
QC value less than the lower limit for Tl 190.801 Recovery = 14.88%						
V 290.880†	1433.4	0.00973 mg/L	0.000728	0.00973 mg/L	0.000728	7.48%
QC value within limits for V 290.880 Recovery = 97.32%						
Zn 206.200†	-197.6	-0.0129 mg/L	0.00049	-0.0129 mg/L	0.00049	3.81%
QC value less than the lower limit for Zn 206.200 Recovery = -64.55%						
K 766.490†	1325.4	0.490 mg/L	0.0312	0.490 mg/L	0.0312	6.36%
QC value less than the lower limit for K 766.490 Recovery = 48.98%						
Na 589.592†	7143.3	0.488 mg/L	0.0140	0.488 mg/L	0.0140	2.88%
QC value within limits for Na 589.592 Recovery = 97.68%						
Sr 407.771†	9886.3	0.00910 mg/L	0.000805	0.00910 mg/L	0.000805	8.85%
QC value within limits for Sr 407.771 Recovery = 90.99%						
Li 670.784†	917.4	0.00905 mg/L	0.002135	0.00905 mg/L	0.002135	23.59%
QC value within limits for Li 670.784 Recovery = 90.52%						

QC Failed. Continue with analysis.

Sequence No.: 26 **Autosampler Location: 40**
Sample ID: L1102047501 **Date Collected: 2/22/2011 12:51:22 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102047501

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102047501

Approved: February 23, 2011

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Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5153699.2						79831.47	1.55%
YRADIAL	311135.1						6252.06	2.01%
Ga 417.206	1212922.5						24544.09	2.02%
GaRADIAL	59657.3						1126.04	1.89%
Ag 328.068†	227.7	0.00043	mg/L	0.000170	0.00043	mg/L	0.000170	39.09%
Al 396.153†	-2.5	0.00207	mg/L	0.009604	0.00207	mg/L	0.009604	463.30%
As 188.979†	-2.6	-0.00297	mg/L	0.002072	-0.00297	mg/L	0.002072	69.81%
Ba 233.527†	5.1	-0.00032	mg/L	0.000048	-0.00032	mg/L	0.000048	14.84%
Be 234.861†	4.5	0.00001	mg/L	0.000042	0.00001	mg/L	0.000042	319.58%
B 249.677†	2779.5	0.0527	mg/L	0.00097	0.0527	mg/L	0.00097	1.84%
Ca 227.546†	3.6	0.0337	mg/L	0.04529	0.0337	mg/L	0.04529	134.36%
Cd 228.802†	-0.1	-0.00004	mg/L	0.000115	-0.00004	mg/L	0.000115	262.61%
Co 228.616†	6.4	0.00021	mg/L	0.000221	0.00021	mg/L	0.000221	103.45%
Cr 267.716†	24.8	-0.00021	mg/L	0.000062	-0.00021	mg/L	0.000062	30.02%
Cu 327.393†	95.8	0.00044	mg/L	0.000672	0.00044	mg/L	0.000672	151.99%
Fe 239.562†	-0.1	0.00101	mg/L	0.001507	0.00101	mg/L	0.001507	149.04%
Mg 279.077†	2.9	0.00137	mg/L	0.009156	0.00137	mg/L	0.009156	669.20%
Mn 257.610†	-60.3	-0.00054	mg/L	0.000010	-0.00054	mg/L	0.000010	1.76%
Mo 202.031†	4.7	-0.00010	mg/L	0.000338	-0.00010	mg/L	0.000338	355.22%
Ni 231.604†	7.0	-0.00003	mg/L	0.000017	-0.00003	mg/L	0.000017	51.69%
Pb 220.353†	-16.4	-0.00501	mg/L	0.000707	-0.00501	mg/L	0.000707	14.11%
Sb 206.836†	0.2	-0.00134	mg/L	0.000248	-0.00134	mg/L	0.000248	18.45%
Se 196.026†	3.5	0.00172	mg/L	0.007031	0.00172	mg/L	0.007031	409.79%
Si 251.611†	2163.1	0.0487	mg/L	0.00166	0.0487	mg/L	0.00166	3.41%
Sn 189.927†	-7.1	-0.00322	mg/L	0.000076	-0.00322	mg/L	0.000076	2.37%
Ti 334.940†	106.6	-0.00011	mg/L	0.000121	-0.00011	mg/L	0.000121	106.95%
Tl 190.801†	-1.5	-0.00061	mg/L	0.001259	-0.00061	mg/L	0.001259	207.38%
V 290.880†	-86.9	-0.00031	mg/L	0.000385	-0.00031	mg/L	0.000385	122.97%
Zn 206.200†	-487.6	-0.0216	mg/L	0.00078	-0.0216	mg/L	0.00078	3.63%
K 766.490†	68.0	0.0254	mg/L	0.02687	0.0254	mg/L	0.02687	105.65%
Na 589.592†	4517.3	0.306	mg/L	0.0057	0.306	mg/L	0.0057	1.87%
Sr 407.771†	-10.6	-0.00038	mg/L	0.000095	-0.00038	mg/L	0.000095	24.87%
Li 670.784†	88.9	-0.00085	mg/L	0.001048	-0.00085	mg/L	0.001048	123.44%

Sequence No.: 27 **Autosampler Location: 41**
Sample ID: L1102047502 **Date Collected: 2/22/2011 12:58:03 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102047502

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102047502

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5140524.9						59378.30	1.16%
YRADIAL	311208.6						5096.90	1.64%
Ga 417.206	1239214.2						17639.56	1.42%
GaRADIAL	59930.1						721.93	1.20%
Ag 328.068†	237.5	0.00048	mg/L	0.000761	0.00048	mg/L	0.000761	157.74%
Al 396.153†	-66.1	-0.0102	mg/L	0.00785	-0.0102	mg/L	0.00785	77.08%
As 188.979†	-0.1	-0.00076	mg/L	0.001623	-0.00076	mg/L	0.001623	213.55%
Ba 233.527†	3.0	-0.00036	mg/L	0.000031	-0.00036	mg/L	0.000031	8.56%
Be 234.861†	9.8	0.00002	mg/L	0.000013	0.00002	mg/L	0.000013	60.48%
B 249.677†	2621.5	0.0498	mg/L	0.00237	0.0498	mg/L	0.00237	4.76%
Ca 227.546†	6.8	0.0635	mg/L	0.04994	0.0635	mg/L	0.04994	78.65%
Cd 228.802†	1.5	0.00003	mg/L	0.000070	0.00003	mg/L	0.000070	219.18%
Co 228.616†	5.7	0.00018	mg/L	0.000062	0.00018	mg/L	0.000062	34.93%
Cr 267.716†	24.2	-0.00021	mg/L	0.000030	-0.00021	mg/L	0.000030	14.10%
Cu 327.393†	252.2	0.00150	mg/L	0.000933	0.00150	mg/L	0.000933	62.12%
Fe 239.562†	1.0	0.00327	mg/L	0.007282	0.00327	mg/L	0.007282	222.72%
Mg 279.077†	9.2	0.00899	mg/L	0.002237	0.00899	mg/L	0.002237	24.90%
Mn 257.610†	-60.9	-0.00054	mg/L	0.000031	-0.00054	mg/L	0.000031	5.62%
Mo 202.031†	4.8	-0.00009	mg/L	0.000185	-0.00009	mg/L	0.000185	213.72%
Ni 231.604†	6.3	-0.00005	mg/L	0.000178	-0.00005	mg/L	0.000178	334.99%
Pb 220.353†	-4.3	-0.00289	mg/L	0.000537	-0.00289	mg/L	0.000537	18.53%

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Sb 206.836†	-0.1	-0.00152	mg/L	0.002326	-0.00152	mg/L	0.002326 153.12%
Se 196.026†	1.7	0.00050	mg/L	0.002866	0.00050	mg/L	0.002866 569.71%
Si 251.611†	2055.3	0.0456	mg/L	0.00101	0.0456	mg/L	0.00101 2.21%
Sn 189.927†	-6.6	-0.00314	mg/L	0.000661	-0.00314	mg/L	0.000661 21.05%
Ti 334.940†	47.7	-0.00019	mg/L	0.000038	-0.00019	mg/L	0.000038 19.78%
Tl 190.801†	5.4	0.00341	mg/L	0.002160	0.00341	mg/L	0.002160 63.28%
V 290.880†	-121.8	-0.00054	mg/L	0.001135	-0.00054	mg/L	0.001135 208.54%
Zn 206.200†	-385.1	-0.0185	mg/L	0.00099	-0.0185	mg/L	0.00099 5.32%
K 766.490†	104.4	0.0389	mg/L	0.03064	0.0389	mg/L	0.03064 78.79%
Na 589.592†	4477.1	0.303	mg/L	0.0019	0.303	mg/L	0.0019 0.63%
Sr 407.771†	14.3	-0.00036	mg/L	0.000035	-0.00036	mg/L	0.000035 9.77%
Li 670.784†	45.2	-0.00137	mg/L	0.001439	-0.00137	mg/L	0.001439 104.94%

Sequence No.: 28 **Autosampler Location: 42**
Sample ID: L1102047503 **Date Collected: 2/22/2011 1:04:42 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102047503

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102047503

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5218033.4						48342.44	0.93%
YRADIAL	311227.9						6579.13	2.11%
Ga 417.206	1257626.6						4790.85	0.38%
GaRADIAL	59727.9						125.64	0.21%
Ag 328.068†	239.9	0.00049	mg/L	0.000196	0.00049	mg/L	0.000196	39.65%
Al 396.153†	-38.3	-0.00483	mg/L	0.008365	-0.00483	mg/L	0.008365	173.11%
As 188.979†	1.4	0.00061	mg/L	0.001372	0.00061	mg/L	0.001372	224.80%
Ba 233.527†	2.2	-0.00037	mg/L	0.000064	-0.00037	mg/L	0.000064	17.10%
Be 234.861†	9.7	0.00002	mg/L	0.000017	0.00002	mg/L	0.000017	79.94%
B 249.677†	2502.6	0.0476	mg/L	0.00060	0.0476	mg/L	0.00060	1.26%
Ca 227.546†	10.4	0.0971	mg/L	0.02109	0.0971	mg/L	0.02109	21.72%
Cd 228.802†	-1.0	-0.00012	mg/L	0.000166	-0.00012	mg/L	0.000166	140.56%
Co 228.616†	8.7	0.00033	mg/L	0.000196	0.00033	mg/L	0.000196	58.95%
Cr 267.716†	24.6	-0.00021	mg/L	0.000064	-0.00021	mg/L	0.000064	30.71%
Cu 327.393†	252.0	0.00150	mg/L	0.000837	0.00150	mg/L	0.000837	55.74%
Fe 239.562†	2.2	0.00600	mg/L	0.004088	0.00600	mg/L	0.004088	68.16%
Mg 279.077†	-1.9	-0.00431	mg/L	0.002663	-0.00431	mg/L	0.002663	61.74%
Mn 257.610†	-68.7	-0.00056	mg/L	0.000007	-0.00056	mg/L	0.000007	1.31%
Mo 202.031†	5.5	-0.00003	mg/L	0.000182	-0.00003	mg/L	0.000182	529.26%
Ni 231.604†	-0.4	-0.00025	mg/L	0.000117	-0.00025	mg/L	0.000117	47.72%
Pb 220.353†	-9.8	-0.00385	mg/L	0.000619	-0.00385	mg/L	0.000619	16.06%
Sb 206.836†	1.5	-0.00050	mg/L	0.001599	-0.00050	mg/L	0.001599	322.50%
Se 196.026†	3.7	0.00192	mg/L	0.003968	0.00192	mg/L	0.003968	206.40%
Si 251.611†	1996.0	0.0439	mg/L	0.00023	0.0439	mg/L	0.00023	0.52%
Sn 189.927†	-4.9	-0.00285	mg/L	0.000481	-0.00285	mg/L	0.000481	16.89%
Ti 334.940†	29.0	-0.00022	mg/L	0.000076	-0.00022	mg/L	0.000076	34.77%
Tl 190.801†	-1.6	-0.00071	mg/L	0.000789	-0.00071	mg/L	0.000789	111.64%
V 290.880†	-110.7	-0.00047	mg/L	0.001017	-0.00047	mg/L	0.001017	215.96%
Zn 206.200†	-441.5	-0.0202	mg/L	0.00054	-0.0202	mg/L	0.00054	2.65%
K 766.490†	-5.7	-0.00179	mg/L	0.014854	-0.00179	mg/L	0.014854	829.90%
Na 589.592†	4378.0	0.296	mg/L	0.0115	0.296	mg/L	0.0115	3.88%
Sr 407.771†	-33.5	-0.00040	mg/L	0.000046	-0.00040	mg/L	0.000046	11.41%
Li 670.784†	45.5	-0.00137	mg/L	0.000718	-0.00137	mg/L	0.000718	52.54%

Sequence No.: 29 **Autosampler Location: 43**
Sample ID: L1102047504 **Date Collected: 2/22/2011 1:11:19 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102047504

Analyte	Back Pressure	Flow

Approved: February 23, 2011

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All 170.0 kPa 0.50 L/min

Mean Data: L1102047504

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5084512.9						93402.87	1.84%
YRADIAL	313167.4						5434.38	1.74%
Ga 417.206	1236456.9						28237.43	2.28%
GaRADIAL	60161.4						880.42	1.46%
Ag 328.068†	167.4	0.00014	mg/L	0.000606	0.00014	mg/L	0.000606	448.18%
Al 396.153†	-9.4	0.00075	mg/L	0.010088	0.00075	mg/L	0.010088	>999.9%
As 188.979†	1.0	0.00023	mg/L	0.001103	0.00023	mg/L	0.001103	470.26%
Ba 233.527†	7.9	-0.00028	mg/L	0.000049	-0.00028	mg/L	0.000049	17.94%
Be 234.861†	5.9	0.00002	mg/L	0.000024	0.00002	mg/L	0.000024	148.47%
B 249.677†	2483.0	0.0471	mg/L	0.00112	0.0471	mg/L	0.00112	2.38%
Ca 227.546†	10.8	0.100	mg/L	0.0615	0.100	mg/L	0.0615	61.25%
Cd 228.802†	-0.6	-0.00010	mg/L	0.000131	-0.00010	mg/L	0.000131	136.07%
Co 228.616†	3.7	0.00008	mg/L	0.000276	0.00008	mg/L	0.000276	367.33%
Cr 267.716†	19.5	-0.00025	mg/L	0.000081	-0.00025	mg/L	0.000081	32.20%
Cu 327.393†	160.0	0.00088	mg/L	0.000394	0.00088	mg/L	0.000394	44.99%
Fe 239.562†	-1.5	-0.00203	mg/L	0.002591	-0.00203	mg/L	0.002591	127.36%
Mg 279.077†	6.5	0.00575	mg/L	0.001012	0.00575	mg/L	0.001012	17.58%
Mn 257.610†	-48.0	-0.00052	mg/L	0.000032	-0.00052	mg/L	0.000032	6.14%
Mo 202.031†	2.9	-0.00023	mg/L	0.000322	-0.00023	mg/L	0.000322	141.16%
Ni 231.604†	0.4	-0.00022	mg/L	0.000278	-0.00022	mg/L	0.000278	125.09%
Pb 220.353†	-9.9	-0.00387	mg/L	0.000278	-0.00387	mg/L	0.000278	7.18%
Sb 206.836†	-0.9	-0.00200	mg/L	0.000893	-0.00200	mg/L	0.000893	44.71%
Se 196.026†	7.3	0.00436	mg/L	0.002577	0.00436	mg/L	0.002577	59.13%
Si 251.611†	2052.8	0.0455	mg/L	0.00189	0.0455	mg/L	0.00189	4.16%
Sn 189.927†	-8.8	-0.00351	mg/L	0.000365	-0.00351	mg/L	0.000365	10.40%
Ti 334.940†	93.5	-0.00013	mg/L	0.000108	-0.00013	mg/L	0.000108	82.96%
Tl 190.801†	1.5	0.00114	mg/L	0.002363	0.00114	mg/L	0.002363	207.96%
V 290.880†	59.4	0.00065	mg/L	0.000647	0.00065	mg/L	0.000647	99.06%
Zn 206.200†	-664.5	-0.0268	mg/L	0.00059	-0.0268	mg/L	0.00059	2.20%
K 766.490†	26.3	0.0100	mg/L	0.01588	0.0100	mg/L	0.01588	158.14%
Na 589.592†	4456.2	0.302	mg/L	0.0040	0.302	mg/L	0.0040	1.32%
Sr 407.771†	12.1	-0.00036	mg/L	0.000074	-0.00036	mg/L	0.000074	20.58%
Li 670.784†	49.0	-0.00133	mg/L	0.001959	-0.00133	mg/L	0.001959	147.69%

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Sequence No.: 30 **Autosampler Location: 44**
Sample ID: L1102047505 **Date Collected: 2/22/2011 1:17:57 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102047505

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102047505

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5144422.6						88746.65	1.73%
YRADIAL	316771.5						2449.40	0.77%
Ga 417.206	1231645.2						20769.26	1.69%
GaRADIAL	60787.5						1307.14	2.15%
Ag 328.068†	157.7	0.00008	mg/L	0.000579	0.00008	mg/L	0.000579	704.25%
Al 396.153†	-46.3	-0.00637	mg/L	0.003544	-0.00637	mg/L	0.003544	55.66%
As 188.979†	-1.3	-0.00181	mg/L	0.002631	-0.00181	mg/L	0.002631	145.53%
Ba 233.527†	2.7	-0.00036	mg/L	0.000053	-0.00036	mg/L	0.000053	14.42%
Be 234.861†	4.4	0.00000	mg/L	0.000047	0.00000	mg/L	0.000047	>999.9%
B 249.677†	2486.9	0.0475	mg/L	0.00086	0.0475	mg/L	0.00086	1.80%
Ca 227.546†	25.3	0.238	mg/L	0.0229	0.238	mg/L	0.0229	9.62%
Cd 228.802†	4.0	0.00018	mg/L	0.000146	0.00018	mg/L	0.000146	81.53%
Co 228.616†	4.1	0.00009	mg/L	0.000238	0.00009	mg/L	0.000238	255.56%
Cr 267.716†	114.1	0.00057	mg/L	0.000076	0.00057	mg/L	0.000076	13.47%
Cu 327.393†	471.1	0.00299	mg/L	0.000495	0.00299	mg/L	0.000495	16.53%
Fe 239.562†	30.7	0.0678	mg/L	0.00197	0.0678	mg/L	0.00197	2.90%
Mg 279.077†	5.7	0.00473	mg/L	0.008966	0.00473	mg/L	0.008966	189.65%

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Mn 257.610†	464.9	0.00063	mg/L	0.000024	0.00063	mg/L	0.000024 3.88%
Mo 202.031†	4.4	-0.00011	mg/L	0.000343	-0.00011	mg/L	0.000343 305.64%
Ni 231.604†	15.8	0.00022	mg/L	0.000133	0.00022	mg/L	0.000133 60.23%
Pb 220.353†	-1.3	-0.00238	mg/L	0.000995	-0.00238	mg/L	0.000995 41.86%
Sb 206.836†	-0.5	-0.00180	mg/L	0.000941	-0.00180	mg/L	0.000941 52.29%
Se 196.026†	-0.4	-0.00091	mg/L	0.004270	-0.00091	mg/L	0.004270 471.57%
Si 251.611†	2439.2	0.0568	mg/L	0.00164	0.0568	mg/L	0.00164 2.89%
Sn 189.927†	-3.8	-0.00266	mg/L	0.000516	-0.00266	mg/L	0.000516 19.42%
Ti 334.940†	162.1	-0.00004	mg/L	0.000109	-0.00004	mg/L	0.000109 305.01%
Tl 190.801†	2.7	0.00183	mg/L	0.001949	0.00183	mg/L	0.001949 106.63%
V 290.880†	-36.7	0.00002	mg/L	0.000248	0.00002	mg/L	0.000248 >999.9%
Zn 206.200†	-612.7	-0.0253	mg/L	0.00040	-0.0253	mg/L	0.00040 1.60%
K 766.490†	233.9	0.0867	mg/L	0.02119	0.0867	mg/L	0.02119 24.46%
Na 589.592†	5632.2	0.383	mg/L	0.0097	0.383	mg/L	0.0097 2.54%
Sr 407.771†	188.1	-0.00020	mg/L	0.000128	-0.00020	mg/L	0.000128 64.96%
Li 670.784†	86.4	-0.00088	mg/L	0.000865	-0.00088	mg/L	0.000865 98.45%

Sequence No.: 31 **Autosampler Location: 45**
Sample ID: L1102047506 **Date Collected: 2/22/2011 1:24:36 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102047506

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102047506

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5145166.3						31796.72	0.62%
YRADIAL	317660.5						4237.19	1.33%
Ga 417.206	1240974.6						20024.89	1.61%
GaRADIAL	60683.7						1068.76	1.76%
Ag 328.068†	259.9	0.00059	mg/L	0.000668	0.00059	mg/L	0.000668	112.38%
Al 396.153†	30.1	0.00837	mg/L	0.006762	0.00837	mg/L	0.006762	80.83%
As 188.979†	-0.8	-0.00138	mg/L	0.000639	-0.00138	mg/L	0.000639	46.41%
Ba 233.527†	7.2	-0.00029	mg/L	0.000120	-0.00029	mg/L	0.000120	41.30%
Be 234.861†	2.7	0.00001	mg/L	0.000037	0.00001	mg/L	0.000037	424.66%
B 249.677†	2019.1	0.0384	mg/L	0.00159	0.0384	mg/L	0.00159	4.14%
Ca 227.546†	15.3	0.143	mg/L	0.0834	0.143	mg/L	0.0834	58.46%
Cd 228.802†	0.8	-0.00001	mg/L	0.000037	-0.00001	mg/L	0.000037	729.51%
Co 228.616†	6.3	0.00021	mg/L	0.000258	0.00021	mg/L	0.000258	124.58%
Cr 267.716†	33.2	-0.00013	mg/L	0.000154	-0.00013	mg/L	0.000154	114.94%
Cu 327.393†	496.7	0.00316	mg/L	0.001121	0.00316	mg/L	0.001121	35.47%
Fe 239.562†	2.3	0.00624	mg/L	0.002050	0.00624	mg/L	0.002050	32.87%
Mg 279.077†	5.0	0.00395	mg/L	0.003226	0.00395	mg/L	0.003226	81.64%
Mn 257.610†	75.3	-0.00025	mg/L	0.000014	-0.00025	mg/L	0.000014	5.83%
Mo 202.031†	2.0	-0.00029	mg/L	0.000185	-0.00029	mg/L	0.000185	63.52%
Ni 231.604†	3.6	-0.00013	mg/L	0.000126	-0.00013	mg/L	0.000126	98.22%
Pb 220.353†	-6.0	-0.00319	mg/L	0.000728	-0.00319	mg/L	0.000728	22.79%
Sb 206.836†	0.8	-0.00095	mg/L	0.002037	-0.00095	mg/L	0.002037	214.17%
Se 196.026†	4.4	0.00239	mg/L	0.002328	0.00239	mg/L	0.002328	97.43%
Si 251.611†	794.3	0.00883	mg/L	0.000318	0.00883	mg/L	0.000318	3.60%
Sn 189.927†	-5.7	-0.00298	mg/L	0.000393	-0.00298	mg/L	0.000393	13.20%
Ti 334.940†	248.6	0.00008	mg/L	0.000067	0.00008	mg/L	0.000067	81.38%
Tl 190.801†	-5.8	-0.00312	mg/L	0.001780	-0.00312	mg/L	0.001780	56.96%
V 290.880†	-83.6	-0.00029	mg/L	0.000827	-0.00029	mg/L	0.000827	284.14%
Zn 206.200†	-504.1	-0.0221	mg/L	0.00092	-0.0221	mg/L	0.00092	4.18%
K 766.490†	69.8	0.0260	mg/L	0.03645	0.0260	mg/L	0.03645	139.94%
Na 589.592†	5437.3	0.370	mg/L	0.0092	0.370	mg/L	0.0092	2.49%
Sr 407.771†	4.2	-0.00037	mg/L	0.000138	-0.00037	mg/L	0.000138	37.65%
Li 670.784†	187.2	0.00033	mg/L	0.000974	0.00033	mg/L	0.000974	299.53%

Sequence No.: 32 **Autosampler Location: 46**
Sample ID: L1102048602 **Date Collected: 2/22/2011 1:31:13 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

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Nebulizer Parameters: L1102048602

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102048602

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5172099.2						30003.52	0.58%
YRADIAL	312613.0						5547.55	1.77%
Ga 417.206	1262679.1						13839.50	1.10%
GaRADIAL	60364.2						1273.07	2.11%
Ag 328.068†	317.1	0.00083	mg/L	0.000328	0.00083	mg/L	0.000328	39.39%
Al 396.153†	3015.0	0.584	mg/L	0.0104	0.584	mg/L	0.0104	1.79%
As 188.979†	-1.8	-0.00222	mg/L	0.000222	-0.00222	mg/L	0.000222	10.01%
Ba 233.527†	1764.9	0.0294	mg/L	0.00020	0.0294	mg/L	0.00020	0.67%
Be 234.861†	140.1	0.00010	mg/L	0.000041	0.00010	mg/L	0.000041	41.57%
B 249.677†	59.2	0.00451	mg/L	0.000271	0.00451	mg/L	0.000271	6.03%
Ca 227.546†	43.2	0.399	mg/L	0.0414	0.399	mg/L	0.0414	10.38%
Cd 228.802†	-1.2	-0.00008	mg/L	0.000055	-0.00008	mg/L	0.000055	66.53%
Co 228.616†	54.1	0.00261	mg/L	0.000255	0.00261	mg/L	0.000255	9.77%
Cr 267.716†	532.1	0.00414	mg/L	0.000087	0.00414	mg/L	0.000087	2.09%
Cu 327.393†	317.1	0.00204	mg/L	0.000451	0.00204	mg/L	0.000451	22.13%
Fe 239.562†	355.2	0.773	mg/L	0.0147	0.773	mg/L	0.0147	1.90%
Mg 279.077†	322.6	0.383	mg/L	0.0067	0.383	mg/L	0.0067	1.75%
Mn 257.610†	29576.5	0.0660	mg/L	0.00022	0.0660	mg/L	0.00022	0.34%
Mo 202.031†	12.1	0.00050	mg/L	0.000389	0.00050	mg/L	0.000389	77.20%
Ni 231.604†	134.3	0.00365	mg/L	0.000286	0.00365	mg/L	0.000286	7.84%
Pb 220.353†	-5.3	-0.00308	mg/L	0.000536	-0.00308	mg/L	0.000536	17.40%
Sb 206.836†	-1.7	-0.00253	mg/L	0.001593	-0.00253	mg/L	0.001593	63.02%
Se 196.026†	0.1	-0.00031	mg/L	0.003876	-0.00031	mg/L	0.003876	>999.9%
Si 251.611†	152798.4	4.44	mg/L	0.011	4.44	mg/L	0.011	0.24%
Sn 189.927†	-2.9	-0.00250	mg/L	0.000366	-0.00250	mg/L	0.000366	14.63%
Ti 334.940†	5330.4	0.00703	mg/L	0.000137	0.00703	mg/L	0.000137	1.94%
Tl 190.801†	5.1	0.00337	mg/L	0.004795	0.00337	mg/L	0.004795	142.24%
V 290.880†	-5.1	0.00029	mg/L	0.000367	0.00029	mg/L	0.000367	128.88%
Zn 206.200†	-460.4	-0.0208	mg/L	0.00034	-0.0208	mg/L	0.00034	1.66%
K 766.490†	1987.0	0.733	mg/L	0.0286	0.733	mg/L	0.0286	3.90%
Na 589.592†	28300.8	1.96	mg/L	0.021	1.96	mg/L	0.021	1.06%
Sr 407.771†	4551.2	0.00390	mg/L	0.000543	0.00390	mg/L	0.000543	13.94%
Li 670.784†	130.4	-0.00035	mg/L	0.001076	-0.00035	mg/L	0.001076	304.73%

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Sequence No.: 33 **Autosampler Location: 50**
Sample ID: L1102048614 **Date Collected: 2/22/2011 1:37:52 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048614

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102048614

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5201199.3						53551.45	1.03%
YRADIAL	324659.7						10649.09	3.28%
Ga 417.206	1280106.7						17314.57	1.35%
GaRADIAL	61774.5						883.38	1.43%
Ag 328.068†	283.7	0.00044	mg/L	0.000467	0.00044	mg/L	0.000467	107.15%
Al 396.153†	8169.0	1.58	mg/L	0.027	1.58	mg/L	0.027	1.68%
As 188.979†	3.1	0.00285	mg/L	0.001160	0.00285	mg/L	0.001160	40.70%
Ba 233.527†	1479.5	0.0246	mg/L	0.00031	0.0246	mg/L	0.00031	1.27%
Be 234.861†	749.7	0.00025	mg/L	0.000013	0.00025	mg/L	0.000013	5.03%
B 249.677†	-501.7	0.0138	mg/L	0.00047	0.0138	mg/L	0.00047	3.40%
Ca 227.546†	81.5	0.779	mg/L	0.0158	0.779	mg/L	0.0158	2.03%
Cd 228.802†	-1.2	-0.00012	mg/L	0.000178	-0.00012	mg/L	0.000178	147.95%
Co 228.616†	55.8	0.00258	mg/L	0.000266	0.00258	mg/L	0.000266	10.28%

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Cr 267.716†	1231.8	0.0102	mg/L	0.00013	0.0102	mg/L	0.00013 1.23%
Cu 327.393†	609.1	0.00454	mg/L	0.000079	0.00454	mg/L	0.000079 1.75%
Fe 239.562†	2423.8	5.27	mg/L	0.101	5.27	mg/L	0.101 1.92%
Mg 279.077†	676.7	0.803	mg/L	0.0240	0.803	mg/L	0.0240 2.99%
Mn 257.610†	65487.5	0.146	mg/L	0.0027	0.146	mg/L	0.0027 1.82%
Mo 202.031†	18.4	0.00121	mg/L	0.000261	0.00121	mg/L	0.000261 21.53%
Ni 231.604†	273.9	0.00770	mg/L	0.000266	0.00770	mg/L	0.000266 3.46%
Pb 220.353†	3.4	-0.00173	mg/L	0.000580	-0.00173	mg/L	0.000580 33.61%
Sb 206.836†	-1.3	-0.00231	mg/L	0.001690	-0.00231	mg/L	0.001690 73.08%
Se 196.026†	0.2	0.00134	mg/L	0.001364	0.00134	mg/L	0.001364 101.70%
Si 251.611†	194571.8	5.66	mg/L	0.125	5.66	mg/L	0.125 2.21%
Sn 189.927†	-10.8	-0.00386	mg/L	0.000966	-0.00386	mg/L	0.000966 25.02%
Ti 334.940†	6419.3	0.00852	mg/L	0.000327	0.00852	mg/L	0.000327 3.84%
Tl 190.801†	-0.1	0.00045	mg/L	0.002712	0.00045	mg/L	0.002712 599.42%
V 290.880†	371.5	0.00312	mg/L	0.000320	0.00312	mg/L	0.000320 10.27%
Zn 206.200†	-182.0	-0.0125	mg/L	0.00059	-0.0125	mg/L	0.00059 4.66%
K 766.490†	1507.0	0.556	mg/L	0.0091	0.556	mg/L	0.0091 1.63%
Na 589.592†	18915.9	1.31	mg/L	0.023	1.31	mg/L	0.023 1.77%
Sr 407.771†	5778.3	0.00454	mg/L	0.000329	0.00454	mg/L	0.000329 7.24%
Li 670.784†	355.6	0.00234	mg/L	0.000448	0.00234	mg/L	0.000448 19.14%

Sequence No.: 34 **Autosampler Location: 51**
Sample ID: L1102048617 **Date Collected: 2/22/2011 1:44:33 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048617

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102048617

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5179374.0						45371.90	0.88%
YRADIAL	315347.5						7312.48	2.32%
Ga 417.206	1257696.0						20642.08	1.64%
GaRADIAL	61070.5						656.61	1.08%
Ag 328.068†	155.4	0.00007	mg/L	0.000456	0.00007	mg/L	0.000456	702.15%
Al 396.153†	659.2	0.130	mg/L	0.0010	0.130	mg/L	0.0010	0.80%
As 188.979†	-0.4	-0.00103	mg/L	0.001820	-0.00103	mg/L	0.001820	175.91%
Ba 233.527†	342.9	0.00538	mg/L	0.000037	0.00538	mg/L	0.000037	0.69%
Be 234.861†	27.0	0.00003	mg/L	0.000017	0.00003	mg/L	0.000017	57.77%
B 249.677†	28.6	0.00139	mg/L	0.000143	0.00139	mg/L	0.000143	10.30%
Ca 227.546†	91.1	0.844	mg/L	0.0246	0.844	mg/L	0.0246	2.92%
Cd 228.802†	-1.2	-0.00011	mg/L	0.000020	-0.00011	mg/L	0.000020	17.74%
Co 228.616†	14.8	0.00063	mg/L	0.000114	0.00063	mg/L	0.000114	17.94%
Cr 267.716†	397.7	0.00302	mg/L	0.000054	0.00302	mg/L	0.000054	1.80%
Cu 327.393†	83.6	0.00037	mg/L	0.000428	0.00037	mg/L	0.000428	115.19%
Fe 239.562†	52.4	0.115	mg/L	0.0046	0.115	mg/L	0.0046	3.99%
Mg 279.077†	673.2	0.802	mg/L	0.0029	0.802	mg/L	0.0029	0.37%
Mn 257.610†	3133.0	0.00729	mg/L	0.000088	0.00729	mg/L	0.000088	1.20%
Mo 202.031†	4.0	-0.00014	mg/L	0.000286	-0.00014	mg/L	0.000286	208.96%
Ni 231.604†	87.1	0.00229	mg/L	0.000241	0.00229	mg/L	0.000241	10.52%
Pb 220.353†	-15.8	-0.00485	mg/L	0.000821	-0.00485	mg/L	0.000821	16.92%
Sb 206.836†	0.5	-0.00114	mg/L	0.000737	-0.00114	mg/L	0.000737	64.57%
Se 196.026†	2.0	0.00093	mg/L	0.001627	0.00093	mg/L	0.001627	175.21%
Si 251.611†	141301.4	4.11	mg/L	0.019	4.11	mg/L	0.019	0.46%
Sn 189.927†	-8.2	-0.00340	mg/L	0.000270	-0.00340	mg/L	0.000270	7.92%
Ti 334.940†	638.0	0.00062	mg/L	0.000088	0.00062	mg/L	0.000088	14.26%
Tl 190.801†	3.7	0.00240	mg/L	0.003378	0.00240	mg/L	0.003378	140.85%
V 290.880†	-157.7	-0.00077	mg/L	0.001345	-0.00077	mg/L	0.001345	173.94%
Zn 206.200†	-641.5	-0.0262	mg/L	0.00087	-0.0262	mg/L	0.00087	3.33%
K 766.490†	614.1	0.226	mg/L	0.0204	0.226	mg/L	0.0204	9.01%
Na 589.592†	21631.0	1.50	mg/L	0.008	1.50	mg/L	0.008	0.51%
Sr 407.771†	6336.0	0.00569	mg/L	0.000534	0.00569	mg/L	0.000534	9.39%
Li 670.784†	313.7	0.00184	mg/L	0.000935	0.00184	mg/L	0.000935	50.85%

Sequence No.: 35 **Autosampler Location: 52**

Approved: February 23, 2011

Pierre Morris

Sample ID: L1102048620 **Date Collected: 2/22/2011 1:51:11 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048620

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102048620

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5143035.2						41223.91	0.80%
YRADIAL	318375.2						2844.54	0.89%
Ga 417.206	1263146.0						33485.24	2.65%
GaRADIAL	60827.8						1052.17	1.73%
Ag 328.068†	255.0	0.00038	mg/L	0.000661	0.00038	mg/L	0.000661	173.04%
Al 396.153†	9020.9	1.74	mg/L	0.023	1.74	mg/L	0.023	1.34%
As 188.979†	1.0	0.00071	mg/L	0.001688	0.00071	mg/L	0.001688	236.52%
Ba 233.527†	1139.0	0.0188	mg/L	0.00013	0.0188	mg/L	0.00013	0.68%
Be 234.861†	490.1	0.00015	mg/L	0.000105	0.00015	mg/L	0.000105	71.69%
B 249.677†	-350.2	0.00844	mg/L	0.000818	0.00844	mg/L	0.000818	9.69%
Ca 227.546†	75.5	0.717	mg/L	0.0453	0.717	mg/L	0.0453	6.32%
Cd 228.802†	1.0	0.00002	mg/L	0.000102	0.00002	mg/L	0.000102	478.84%
Co 228.616†	52.5	0.00247	mg/L	0.000365	0.00247	mg/L	0.000365	14.81%
Cr 267.716†	1724.5	0.0144	mg/L	0.00016	0.0144	mg/L	0.00016	1.11%
Cu 327.393†	584.7	0.00417	mg/L	0.000609	0.00417	mg/L	0.000609	14.61%
Fe 239.562†	1634.2	3.55	mg/L	0.055	3.55	mg/L	0.055	1.54%
Mg 279.077†	775.6	0.922	mg/L	0.0213	0.922	mg/L	0.0213	2.31%
Mn 257.610†	45131.3	0.101	mg/L	0.0002	0.101	mg/L	0.0002	0.17%
Mo 202.031†	23.1	0.00147	mg/L	0.000508	0.00147	mg/L	0.000508	34.57%
Ni 231.604†	389.2	0.0110	mg/L	0.00036	0.0110	mg/L	0.00036	3.29%
Pb 220.353†	-5.1	-0.00311	mg/L	0.001431	-0.00311	mg/L	0.001431	46.06%
Sb 206.836†	0.6	-0.00118	mg/L	0.001311	-0.00118	mg/L	0.001311	111.39%
Se 196.026†	-0.1	0.00049	mg/L	0.002484	0.00049	mg/L	0.002484	506.14%
Si 251.611†	215041.5	6.26	mg/L	0.133	6.26	mg/L	0.133	2.12%
Sn 189.927†	-6.7	-0.00315	mg/L	0.001108	-0.00315	mg/L	0.001108	35.14%
Ti 334.940†	3806.7	0.00495	mg/L	0.000236	0.00495	mg/L	0.000236	4.76%
Tl 190.801†	0.0	0.00042	mg/L	0.001321	0.00042	mg/L	0.001321	311.71%
V 290.880†	201.8	0.00187	mg/L	0.000359	0.00187	mg/L	0.000359	19.23%
Zn 206.200†	-41.8	-0.00831	mg/L	0.000803	-0.00831	mg/L	0.000803	9.66%
K 766.490†	776.8	0.286	mg/L	0.0036	0.286	mg/L	0.0036	1.27%
Na 589.592†	19522.5	1.35	mg/L	0.002	1.35	mg/L	0.002	0.13%
Sr 407.771†	4501.7	0.00352	mg/L	0.000384	0.00352	mg/L	0.000384	10.93%
Li 670.784†	521.8	0.00432	mg/L	0.000225	0.00432	mg/L	0.000225	5.21%

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Sequence No.: 36 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/22/2011 1:57:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4884643.3						89377.39	1.83%
YRADIAL	294524.7						6224.09	2.11%
Ga 417.206	1160495.5						28820.73	2.48%
GaRADIAL	56744.5						962.69	1.70%
Ag 328.068†	80001.6	0.399	mg/L	0.0110	0.399	mg/L	0.0110	2.77%
QC value within limits for Ag 328.068 Recovery = 99.75%								
Al 396.153†	51613.6	9.94	mg/L	0.023	9.94	mg/L	0.023	0.23%
QC value within limits for Al 396.153 Recovery = 99.41%								
As 188.979†	428.5	0.386	mg/L	0.0091	0.386	mg/L	0.0091	2.35%

Approved: February 23, 2011

Pierre Morris

QC value within limits for As 188.979 Recovery = 96.52%

Ba 233.527†	58377.1	0.989 mg/L	0.0272	0.989 mg/L	0.0272	2.75%
QC value within limits for Ba 233.527 Recovery = 98.86%						
Be 234.861†	28754.6	0.0501 mg/L	0.00132	0.0501 mg/L	0.00132	2.63%
QC value within limits for Be 234.861 Recovery = 100.22%						
B 249.677†	25824.3	0.492 mg/L	0.0138	0.492 mg/L	0.0138	2.80%
QC value within limits for B 249.677 Recovery = 98.44%						
Ca 227.546†	1041.0	10.1 mg/L	0.34	10.1 mg/L	0.34	3.40%
QC value within limits for Ca 227.546 Recovery = 100.83%						
Cd 228.802†	871.2	0.0486 mg/L	0.00117	0.0486 mg/L	0.00117	2.40%
QC value within limits for Cd 228.802 Recovery = 97.25%						
Co 228.616†	3814.2	0.193 mg/L	0.0031	0.193 mg/L	0.0031	1.59%
QC value within limits for Co 228.616 Recovery = 96.43%						
Cr 267.716†	56641.9	0.490 mg/L	0.0129	0.490 mg/L	0.0129	2.63%
QC value within limits for Cr 267.716 Recovery = 98.06%						
Cu 327.393†	72407.8	0.493 mg/L	0.0133	0.493 mg/L	0.0133	2.71%
QC value within limits for Cu 327.393 Recovery = 98.52%						
Fe 239.562†	1796.7	3.90 mg/L	0.045	3.90 mg/L	0.045	1.16%
QC value within limits for Fe 239.562 Recovery = 97.57%						
Mg 279.077†	8194.8	9.78 mg/L	0.133	9.78 mg/L	0.133	1.36%
QC value within limits for Mg 279.077 Recovery = 97.85%						
Mn 257.610†	222575.5	0.497 mg/L	0.0134	0.497 mg/L	0.0134	2.70%
QC value within limits for Mn 257.610 Recovery = 99.44%						
Mo 202.031†	13319.5	0.988 mg/L	0.0237	0.988 mg/L	0.0237	2.40%
QC value within limits for Mo 202.031 Recovery = 98.76%						
Ni 231.604†	16930.7	0.490 mg/L	0.0147	0.490 mg/L	0.0147	3.01%
QC value within limits for Ni 231.604 Recovery = 98.01%						
Pb 220.353†	2912.1	0.508 mg/L	0.0077	0.508 mg/L	0.0077	1.52%
QC value within limits for Pb 220.353 Recovery = 101.55%						
Sb 206.836†	1874.5	1.18 mg/L	0.028	1.18 mg/L	0.028	2.39%
QC value within limits for Sb 206.836 Recovery = 98.52%						
Se 196.026†	551.5	0.386 mg/L	0.0115	0.386 mg/L	0.0115	2.99%
QC value within limits for Se 196.026 Recovery = 96.41%						
Si 251.611†	170241.7	4.94 mg/L	0.144	4.94 mg/L	0.144	2.92%
QC value within limits for Si 251.611 Recovery = 98.71%						
Sn 189.927†	5751.8	0.978 mg/L	0.0169	0.978 mg/L	0.0169	1.73%
QC value within limits for Sn 189.927 Recovery = 97.84%						
Ti 334.940†	725710.9	0.992 mg/L	0.0037	0.992 mg/L	0.0037	0.37%
QC value within limits for Ti 334.940 Recovery = 99.17%						
Tl 190.801†	844.1	0.506 mg/L	0.0122	0.506 mg/L	0.0122	2.41%
QC value within limits for Tl 190.801 Recovery = 101.29%						
V 290.880†	147997.1	0.978 mg/L	0.0265	0.978 mg/L	0.0265	2.70%
QC value within limits for V 290.880 Recovery = 97.82%						
Zn 206.200†	31856.6	0.945 mg/L	0.0252	0.945 mg/L	0.0252	2.67%
QC value within limits for Zn 206.200 Recovery = 94.47%						
K 766.490†	132687.2	49.4 mg/L	0.36	49.4 mg/L	0.36	0.74%
QC value within limits for K 766.490 Recovery = 98.89%						
Na 589.592†	688031.9	49.4 mg/L	0.55	49.4 mg/L	0.55	1.12%
QC value within limits for Na 589.592 Recovery = 98.74%						
Sr 407.771†	996520.4	0.954 mg/L	0.0770	0.954 mg/L	0.0770	8.07%
QC value within limits for Sr 407.771 Recovery = 95.41%						
Li 670.784†	82703.7	0.986 mg/L	0.0011	0.986 mg/L	0.0011	0.11%
QC value within limits for Li 670.784 Recovery = 98.64%						

All analyte(s) passed QC.

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Sequence No.: 37 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/22/2011 2:04:43 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	5211439.6				65105.04	1.25%
YRADIAL	309881.7				6812.06	2.20%

Approved: February 23, 2011

Pierre Morris

Ga 417.206	1224795.6				18901.29	1.54%
GaRADIAL	58806.3				1309.05	2.23%
Ag 328.068†	248.8	0.00054 mg/L	0.000531	0.00054 mg/L	0.000531	98.42%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153†	-28.0	-0.00284 mg/L	0.006484	-0.00284 mg/L	0.006484	228.12%
QC value within limits for Al 396.153 Recovery = Not calculated						
As 188.979†	0.7	0.00003 mg/L	0.002076	0.00003 mg/L	0.002076	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated						
Ba 233.527†	1.0	-0.00040 mg/L	0.000007	-0.00040 mg/L	0.000007	1.80%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 234.861†	-0.8	0.00000 mg/L	0.000012	0.00000 mg/L	0.000012	317.30%
QC value within limits for Be 234.861 Recovery = Not calculated						
B 249.677†	117.9	0.00269 mg/L	0.000123	0.00269 mg/L	0.000123	4.57%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	3.7	0.0340 mg/L	0.04346	0.0340 mg/L	0.04346	127.66%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Cd 228.802†	1.8	0.00004 mg/L	0.000028	0.00004 mg/L	0.000028	71.51%
QC value within limits for Cd 228.802 Recovery = Not calculated						
Co 228.616†	4.5	0.00012 mg/L	0.000125	0.00012 mg/L	0.000125	108.34%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-12.8	-0.00053 mg/L	0.000108	-0.00053 mg/L	0.000108	20.22%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	58.2	0.00019 mg/L	0.000686	0.00019 mg/L	0.000686	367.96%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	0.3	0.00187 mg/L	0.004478	0.00187 mg/L	0.004478	239.10%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	-2.2	-0.00468 mg/L	0.004174	-0.00468 mg/L	0.004174	89.13%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-25.8	-0.00048 mg/L	0.000023	-0.00048 mg/L	0.000023	4.66%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	3.9	-0.00015 mg/L	0.000125	-0.00015 mg/L	0.000125	83.23%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	-5.8	-0.00040 mg/L	0.000143	-0.00040 mg/L	0.000143	35.48%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-7.1	-0.00338 mg/L	0.000802	-0.00338 mg/L	0.000802	23.74%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	1.2	-0.00067 mg/L	0.001795	-0.00067 mg/L	0.001795	268.34%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-0.2	-0.00081 mg/L	0.005668	-0.00081 mg/L	0.005668	700.07%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	96.7	-0.0115 mg/L	0.00059	-0.0115 mg/L	0.00059	5.15%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-3.2	-0.00256 mg/L	0.000261	-0.00256 mg/L	0.000261	10.23%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	116.9	-0.00010 mg/L	0.000062	-0.00010 mg/L	0.000062	62.11%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	2.6	0.00180 mg/L	0.000750	0.00180 mg/L	0.000750	41.63%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	-95.4	-0.00037 mg/L	0.000252	-0.00037 mg/L	0.000252	68.18%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	-891.7	-0.0336 mg/L	0.00059	-0.0336 mg/L	0.00059	1.75%
QC value less than the lower limit for Zn 206.200 Recovery = Not calculated						
K 766.490†	52.5	0.0200 mg/L	0.02351	0.0200 mg/L	0.02351	117.32%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	18.6	-0.00675 mg/L	0.010196	-0.00675 mg/L	0.010196	151.12%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	56.6	-0.00032 mg/L	0.000074	-0.00032 mg/L	0.000074	23.49%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	70.2	-0.00107 mg/L	0.000689	-0.00107 mg/L	0.000689	64.25%
QC value within limits for Li 670.784 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 38 **Autosampler Location: 53**
Sample ID: L1102048623 **Date Collected: 2/22/2011 2:11:21 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048623

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Approved: February 23, 2011

Pierre Morris

Mean Data: L1102048623

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5225506.2						68032.97	1.30%
YRADIAL	322434.7						2273.40	0.71%
Ga 417.206	1293663.2						23158.75	1.79%
GaRADIAL	61554.3						1394.41	2.27%
Ag 328.068†	228.2	0.00031	mg/L	0.000219	0.00031	mg/L	0.000219	70.96%
Al 396.153†	6166.0	1.19	mg/L	0.011	1.19	mg/L	0.011	0.90%
As 188.979†	0.7	0.00028	mg/L	0.001668	0.00028	mg/L	0.001668	590.51%
Ba 233.527†	920.7	0.0151	mg/L	0.00019	0.0151	mg/L	0.00019	1.24%
Be 234.861†	410.6	0.00025	mg/L	0.000095	0.00025	mg/L	0.000095	38.69%
B 249.677†	-124.0	0.00775	mg/L	0.000247	0.00775	mg/L	0.000247	3.19%
Ca 227.546†	68.4	0.643	mg/L	0.0054	0.643	mg/L	0.0054	0.83%
Cd 228.802†	-0.4	-0.00006	mg/L	0.000050	-0.00006	mg/L	0.000050	77.77%
Co 228.616†	33.5	0.00153	mg/L	0.000172	0.00153	mg/L	0.000172	11.25%
Cr 267.716†	1130.8	0.00931	mg/L	0.000221	0.00931	mg/L	0.000221	2.37%
Cu 327.393†	511.5	0.00353	mg/L	0.000672	0.00353	mg/L	0.000672	19.01%
Fe 239.562†	1083.5	2.35	mg/L	0.034	2.35	mg/L	0.034	1.43%
Mg 279.077†	678.0	0.806	mg/L	0.0117	0.806	mg/L	0.0117	1.46%
Mn 257.610†	32037.2	0.0717	mg/L	0.00200	0.0717	mg/L	0.00200	2.78%
Mo 202.031†	13.8	0.00071	mg/L	0.000041	0.00071	mg/L	0.000041	5.79%
Ni 231.604†	272.6	0.00766	mg/L	0.000176	0.00766	mg/L	0.000176	2.29%
Pb 220.353†	-7.2	-0.00344	mg/L	0.000973	-0.00344	mg/L	0.000973	28.28%
Sb 206.836†	0.2	-0.00135	mg/L	0.001265	-0.00135	mg/L	0.001265	93.58%
Se 196.026†	5.1	0.00369	mg/L	0.003033	0.00369	mg/L	0.003033	82.13%
Si 251.611†	194912.7	5.67	mg/L	0.052	5.67	mg/L	0.052	0.91%
Sn 189.927†	-8.6	-0.00349	mg/L	0.000236	-0.00349	mg/L	0.000236	6.76%
Ti 334.940†	2864.1	0.00366	mg/L	0.000247	0.00366	mg/L	0.000247	6.74%
Tl 190.801†	4.4	0.00295	mg/L	0.001348	0.00295	mg/L	0.001348	45.71%
V 290.880†	-146.0	-0.00053	mg/L	0.000642	-0.00053	mg/L	0.000642	122.24%
Zn 206.200†	-399.9	-0.0190	mg/L	0.00038	-0.0190	mg/L	0.00038	2.00%
K 766.490†	799.0	0.294	mg/L	0.0569	0.294	mg/L	0.0569	19.33%
Na 589.592†	19327.9	1.34	mg/L	0.014	1.34	mg/L	0.014	1.04%
Sr 407.771†	4245.2	0.00342	mg/L	0.000425	0.00342	mg/L	0.000425	12.45%
Li 670.784†	443.1	0.00338	mg/L	0.000842	0.00338	mg/L	0.000842	24.87%

User canceled analysis.

Approved: February 23, 2011

Pierce Morris

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Analysis Begun

Start Time: 2/22/2011 2:20:17 PM **Plasma On Time: 2/22/2011 7:21:53 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\TUESDAY1.sif
Batch ID:
Results Data Set: 022211H3
Results Library: C:\pe\peicp2\Results\Results.mdb

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Method Loaded
Method Name: 200.7-6010 PE-ICP2.1 **Method Last Saved: 2/18/2011 7:17:22 AM**
IEC File: CA227 LiBeMOD.iec **MSF File:**
Method Description: STANDARD

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Sequence No.: 1 **Autosampler Location: 54**
Sample ID: L1102048626 **Date Collected: 2/22/2011 2:20:19 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048626

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102048626

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5269559.8						56270.79	1.07%
YRADIAL	322170.4						1903.36	0.59%
Ga 417.206	1266295.6						22240.17	1.76%
GaRADIAL	61663.1						1369.70	2.22%
Ag 328.068†	293.7	0.00076	mg/L	0.000853	0.00076	mg/L	0.000853	111.98%
Al 396.153†	-43.8	-0.00589	mg/L	0.016662	-0.00589	mg/L	0.016662	282.81%
As 188.979†	-2.5	-0.00288	mg/L	0.001784	-0.00288	mg/L	0.001784	62.03%
Ba 233.527†	7.6	-0.00028	mg/L	0.000010	-0.00028	mg/L	0.000010	3.41%
Be 234.861†	9.4	0.00002	mg/L	0.000036	0.00002	mg/L	0.000036	168.62%
B 249.677†	22.0	0.00090	mg/L	0.000165	0.00090	mg/L	0.000165	18.36%
Ca 227.546†	2.9	0.0269	mg/L	0.03445	0.0269	mg/L	0.03445	128.12%
Cd 228.802†	0.8	0.00001	mg/L	0.000129	0.00001	mg/L	0.000129	>999.9%
Co 228.616†	5.1	0.00015	mg/L	0.000105	0.00015	mg/L	0.000105	71.17%
Cr 267.716†	34.5	-0.00012	mg/L	0.000111	-0.00012	mg/L	0.000111	90.16%
Cu 327.393†	161.5	0.00089	mg/L	0.000379	0.00089	mg/L	0.000379	42.68%
Fe 239.562†	1.1	0.00353	mg/L	0.005258	0.00353	mg/L	0.005258	149.15%
Mg 279.077†	-2.0	-0.00445	mg/L	0.000922	-0.00445	mg/L	0.000922	20.73%
Mn 257.610†	-60.9	-0.00056	mg/L	0.000004	-0.00056	mg/L	0.000004	0.78%
Mo 202.031†	4.7	-0.00009	mg/L	0.000258	-0.00009	mg/L	0.000258	277.83%
Ni 231.604†	-2.6	-0.00031	mg/L	0.000216	-0.00031	mg/L	0.000216	69.14%
Pb 220.353†	-9.4	-0.00379	mg/L	0.000715	-0.00379	mg/L	0.000715	18.86%
Sb 206.836†	-0.2	-0.00158	mg/L	0.002472	-0.00158	mg/L	0.002472	156.19%
Se 196.026†	0.3	-0.00052	mg/L	0.000168	-0.00052	mg/L	0.000168	32.55%
Si 251.611†	275.6	-0.00630	mg/L	0.000454	-0.00630	mg/L	0.000454	7.21%
Sn 189.927†	-7.0	-0.00321	mg/L	0.000842	-0.00321	mg/L	0.000842	26.23%
Ti 334.940†	102.0	-0.00012	mg/L	0.000082	-0.00012	mg/L	0.000082	68.27%
Tl 190.801†	6.0	0.00378	mg/L	0.000729	0.00378	mg/L	0.000729	19.27%
V 290.880†	-152.2	-0.00074	mg/L	0.000541	-0.00074	mg/L	0.000541	72.58%
Zn 206.200†	-795.9	-0.0308	mg/L	0.00018	-0.0308	mg/L	0.00018	0.57%
K 766.490†	-34.4	-0.0121	mg/L	0.01106	-0.0121	mg/L	0.01106	91.44%
Na 589.592†	122.0	0.00043	mg/L	0.009244	0.00043	mg/L	0.009244	>999.9%
Sr 407.771†	-130.8	-0.00050	mg/L	0.000053	-0.00050	mg/L	0.000053	10.63%
Li 670.784†	25.4	-0.00161	mg/L	0.001653	-0.00161	mg/L	0.001653	102.83%

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Sequence No.: 2 **Autosampler Location: 55**
Sample ID: L1102048629 **Date Collected: 2/22/2011 2:26:58 PM**
Analyst: PDM **Data Type: Original**

Approved: February 23, 2011
Pierre Morris

Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048629

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102048629

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5123472.4						29852.02	0.58%
YRADIAL	309023.4						2438.86	0.79%
Ga 417.206	1227584.4						16662.44	1.36%
GaRADIAL	59200.3						1480.34	2.50%
Ag 328.068†	248.7	0.00054	mg/L	0.000310	0.00054	mg/L	0.000310	57.51%
Al 396.153†	-91.7	-0.0151	mg/L	0.01218	-0.0151	mg/L	0.01218	80.54%
As 188.979†	3.2	0.00227	mg/L	0.000631	0.00227	mg/L	0.000631	27.82%
Ba 233.527†	0.6	-0.00040	mg/L	0.000017	-0.00040	mg/L	0.000017	4.31%
Be 234.861†	-12.6	-0.00002	mg/L	0.000020	-0.00002	mg/L	0.000020	119.32%
B 249.677†	-4.4	0.00041	mg/L	0.000182	0.00041	mg/L	0.000182	44.27%
Ca 227.546†	2.4	0.0221	mg/L	0.09295	0.0221	mg/L	0.09295	421.39%
Cd 228.802†	0.9	-0.00002	mg/L	0.000083	-0.00002	mg/L	0.000083	333.96%
Co 228.616†	5.0	0.00014	mg/L	0.000060	0.00014	mg/L	0.000060	43.22%
Cr 267.716†	64.3	0.00014	mg/L	0.000060	0.00014	mg/L	0.000060	44.43%
Cu 327.393†	135.5	0.00071	mg/L	0.000526	0.00071	mg/L	0.000526	73.87%
Fe 239.562†	0.9	0.00324	mg/L	0.005390	0.00324	mg/L	0.005390	166.24%
Mg 279.077†	-0.1	-0.00217	mg/L	0.003159	-0.00217	mg/L	0.003159	145.28%
Mn 257.610†	-45.7	-0.00053	mg/L	0.000029	-0.00053	mg/L	0.000029	5.41%
Mo 202.031†	2.8	-0.00024	mg/L	0.000300	-0.00024	mg/L	0.000300	126.86%
Ni 231.604†	7.8	-0.00001	mg/L	0.000128	-0.00001	mg/L	0.000128	>999.9%
Pb 220.353†	-12.9	-0.00440	mg/L	0.000479	-0.00440	mg/L	0.000479	10.88%
Sb 206.836†	0.1	-0.00139	mg/L	0.002355	-0.00139	mg/L	0.002355	169.35%
Se 196.026†	1.2	0.00012	mg/L	0.002654	0.00012	mg/L	0.002654	>999.9%
Si 251.611†	227.4	-0.00770	mg/L	0.000208	-0.00770	mg/L	0.000208	2.71%
Sn 189.927†	-8.2	-0.00340	mg/L	0.000678	-0.00340	mg/L	0.000678	19.90%
Ti 334.940†	43.6	-0.00020	mg/L	0.000110	-0.00020	mg/L	0.000110	54.93%
Tl 190.801†	2.6	0.00177	mg/L	0.001362	0.00177	mg/L	0.001362	76.85%
V 290.880†	-42.6	-0.00002	mg/L	0.000362	-0.00002	mg/L	0.000362	>999.9%
Zn 206.200†	-692.4	-0.0277	mg/L	0.00035	-0.0277	mg/L	0.00035	1.26%
K 766.490†	-19.7	-0.00662	mg/L	0.042800	-0.00662	mg/L	0.042800	646.19%
Na 589.592†	-32.5	-0.0103	mg/L	0.00619	-0.0103	mg/L	0.00619	60.12%
Sr 407.771†	-62.8	-0.00043	mg/L	0.000140	-0.00043	mg/L	0.000140	32.53%
Li 670.784†	51.9	-0.00129	mg/L	0.000696	-0.00129	mg/L	0.000696	53.92%

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Sequence No.: 3 **Autosampler Location: 61**
Sample ID: L1102049202 **Date Collected: 2/22/2011 2:33:42 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049202

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102049202

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5073964.8						19563.76	0.39%
YRADIAL	309421.2						3633.14	1.17%
Ga 417.206	1248429.1						13911.03	1.11%
GaRADIAL	59873.9						1567.47	2.62%
Ag 328.068†	393.7	0.00118	mg/L	0.000740	0.00118	mg/L	0.000740	62.94%
Al 396.153†	585.9	0.115	mg/L	0.0091	0.115	mg/L	0.0091	7.89%
As 188.979†	11.4	0.00945	mg/L	0.004799	0.00945	mg/L	0.004799	50.77%
Ba 233.527†	562.9	0.00913	mg/L	0.000023	0.00913	mg/L	0.000023	0.26%
Be 234.861†	62.1	0.00002	mg/L	0.000163	0.00002	mg/L	0.000163	980.54%
B 249.677†	778.4	0.0195	mg/L	0.00090	0.0195	mg/L	0.00090	4.61%
Ca 227.546†	1167.8	10.9	mg/L	0.16	10.9	mg/L	0.16	1.47%

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Pierre Morris

Cd 228.802†	45.4	0.00244 mg/L	0.000060	0.00244 mg/L	0.000060	2.45%
Co 228.616†	20.1	0.00088 mg/L	0.000102	0.00088 mg/L	0.000102	11.55%
Cr 267.716†	892.9	0.00722 mg/L	0.000086	0.00722 mg/L	0.000086	1.19%
Cu 327.393†	8078.7	0.0547 mg/L	0.00068	0.0547 mg/L	0.00068	1.23%
Fe 239.562†	441.8	0.961 mg/L	0.0222	0.961 mg/L	0.0222	2.31%
Mg 279.077†	4285.1	5.11 mg/L	0.082	5.11 mg/L	0.082	1.61%
Mn 257.610†	111365.6	0.247 mg/L	0.0020	0.247 mg/L	0.0020	0.80%
Mo 202.031†	593.2	0.0436 mg/L	0.00026	0.0436 mg/L	0.00026	0.59%
Ni 231.604†	56.1	0.00138 mg/L	0.000053	0.00138 mg/L	0.000053	3.83%
Pb 220.353†	28.3	0.00338 mg/L	0.001337	0.00338 mg/L	0.001337	39.57%
Sb 206.836†	45.1	0.0272 mg/L	0.00180	0.0272 mg/L	0.00180	6.63%
Se 196.026†	-9.8	-0.00458 mg/L	0.003034	-0.00458 mg/L	0.003034	66.25%
Si 251.611†	59021.0	1.71 mg/L	0.009	1.71 mg/L	0.009	0.50%
Sn 189.927†	-9.1	-0.00356 mg/L	0.000336	-0.00356 mg/L	0.000336	9.44%
Ti 334.940†	2749.3	0.00361 mg/L	0.000173	0.00361 mg/L	0.000173	4.80%
Tl 190.801†	29.4	0.0169 mg/L	0.00209	0.0169 mg/L	0.00209	12.37%
V 290.880†	681.2	0.00481 mg/L	0.001120	0.00481 mg/L	0.001120	23.28%
Zn 206.200†	14334.4	0.420 mg/L	0.0038	0.420 mg/L	0.0038	0.89%
K 766.490†	12076.8	4.46 mg/L	0.061	4.46 mg/L	0.061	1.37%
Na 589.592†	67325.1	4.68 mg/L	0.041	4.68 mg/L	0.041	0.88%
Sr 407.771†	32841.1	0.0310 mg/L	0.00241	0.0310 mg/L	0.00241	7.79%
Li 670.784†	182.8	0.00027 mg/L	0.000511	0.00027 mg/L	0.000511	186.69%

Sequence No.: 4 **Autosampler Location: 62**
Sample ID: L1102050701 **Date Collected: 2/22/2011 2:40:25 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102050701

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102050701

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4981016.1						47251.12	0.95%
YRADIAL	316476.3						10088.60	3.19%
Ga 417.206	1254159.5						31043.61	2.48%
GaRADIAL	60793.4						1856.92	3.05%
Ag 328.068†	722.4	0.00170	mg/L	0.000805	0.00170	mg/L	0.000805	47.28%
Al 396.153†	58432.6	11.3	mg/L	0.25	11.3	mg/L	0.25	2.22%
As 188.979†	18.5	0.0177	mg/L	0.00342	0.0177	mg/L	0.00342	19.33%
Ba 233.527†	9941.2	0.167	mg/L	0.0021	0.167	mg/L	0.0021	1.24%
Be 234.861†	2825.4	0.00058	mg/L	0.000035	0.00058	mg/L	0.000035	6.05%
B 249.677†	76.5	0.0908	mg/L	0.00347	0.0908	mg/L	0.00347	3.82%
Ca 227.546†	4548.8	42.7	mg/L	0.73	42.7	mg/L	0.73	1.71%
Cd 228.802†	5.9	0.00024	mg/L	0.000052	0.00024	mg/L	0.000052	21.54%
Co 228.616†	181.3	0.00823	mg/L	0.000380	0.00823	mg/L	0.000380	4.62%
Cr 267.716†	1794.9	0.0145	mg/L	0.00012	0.0145	mg/L	0.00012	0.86%
Cu 327.393†	2228.8	0.0176	mg/L	0.00072	0.0176	mg/L	0.00072	4.11%
Fe 239.562†	10035.8	21.8	mg/L	0.73	21.8	mg/L	0.73	3.35%
Mg 279.077†	10024.3	12.0	mg/L	0.42	12.0	mg/L	0.42	3.55%
Mn 257.610†	412326.4	0.919	mg/L	0.0040	0.919	mg/L	0.0040	0.44%
Mo 202.031†	21.2	0.00240	mg/L	0.000689	0.00240	mg/L	0.000689	28.72%
Ni 231.604†	686.1	0.0196	mg/L	0.00012	0.0196	mg/L	0.00012	0.61%
Pb 220.353†	42.9	0.00665	mg/L	0.000496	0.00665	mg/L	0.000496	7.47%
Sb 206.836†	4.8	0.00149	mg/L	0.000669	0.00149	mg/L	0.000669	44.80%
Se 196.026†	-28.8	-0.00366	mg/L	0.003188	-0.00366	mg/L	0.003188	87.21%
Si 251.611†	906372.2	26.4	mg/L	0.46	26.4	mg/L	0.46	1.75%
Sn 189.927†	-12.5	-0.00415	mg/L	0.000951	-0.00415	mg/L	0.000951	22.94%
Ti 334.940†	107108.5	0.147	mg/L	0.0023	0.147	mg/L	0.0023	1.56%
Tl 190.801†	75.1	0.0436	mg/L	0.00248	0.0436	mg/L	0.00248	5.70%
V 290.880†	3581.6	0.0256	mg/L	0.00101	0.0256	mg/L	0.00101	3.96%
Zn 206.200†	1852.4	0.0477	mg/L	0.00090	0.0477	mg/L	0.00090	1.88%
K 766.490†	7707.4	2.84	mg/L	0.043	2.84	mg/L	0.043	1.53%
Na 589.592†	127001.0	8.87	mg/L	0.198	8.87	mg/L	0.198	2.23%
Sr 407.771†	162861.8	0.153	mg/L	0.0025	0.153	mg/L	0.0025	1.61%
Li 670.784†	1499.7	0.0160	mg/L	0.00043	0.0160	mg/L	0.00043	2.70%

Approved: February 23, 2011

Pierre Morris

Sequence No.: 5 **Autosampler Location: 63**
Sample ID: L1102050702 **Date Collected: 2/22/2011 2:46:07 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102050702

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102050702

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5050714.6						56777.07	1.12%
YRADIAL	308544.3						8317.24	2.70%
Ga 417.206	1274053.6						22051.91	1.73%
GaRADIAL	60856.1						420.78	0.69%
Ag 328.068†	586.1	0.00218	mg/L	0.000481	0.00218	mg/L	0.000481	22.09%
Al 396.153†	92.5	0.0204	mg/L	0.01100	0.0204	mg/L	0.01100	53.93%
As 188.979†	3.8	0.00187	mg/L	0.004092	0.00187	mg/L	0.004092	219.11%
Ba 233.527†	4075.1	0.0684	mg/L	0.00079	0.0684	mg/L	0.00079	1.15%
Be 234.861†	41.4	0.00007	mg/L	0.000025	0.00007	mg/L	0.000025	37.51%
B 249.677†	1950.5	0.0374	mg/L	0.00029	0.0374	mg/L	0.00029	0.78%
Ca 227.546†	4968.4	46.5	mg/L	0.73	46.5	mg/L	0.73	1.56%
Cd 228.802†	1.5	0.00002	mg/L	0.000073	0.00002	mg/L	0.000073	483.18%
Co 228.616†	22.4	0.00101	mg/L	0.000354	0.00101	mg/L	0.000354	35.08%
Cr 267.716†	102.9	0.00046	mg/L	0.000171	0.00046	mg/L	0.000171	36.69%
Cu 327.393†	-6.6	-0.00025	mg/L	0.000457	-0.00025	mg/L	0.000457	185.24%
Fe 239.562†	24.7	0.0546	mg/L	0.00630	0.0546	mg/L	0.00630	11.54%
Mg 279.077†	8798.3	10.5	mg/L	0.24	10.5	mg/L	0.24	2.32%
Mn 257.610†	2854.8	0.00771	mg/L	0.000119	0.00771	mg/L	0.000119	1.55%
Mo 202.031†	5.5	-0.00003	mg/L	0.000802	-0.00003	mg/L	0.000802	>999.9%
Ni 231.604†	40.5	0.00091	mg/L	0.000093	0.00091	mg/L	0.000093	10.23%
Pb 220.353†	-19.6	-0.00333	mg/L	0.001835	-0.00333	mg/L	0.001835	55.14%
Sb 206.836†	8.4	0.00384	mg/L	0.000611	0.00384	mg/L	0.000611	15.90%
Se 196.026†	-22.2	-0.00447	mg/L	0.003367	-0.00447	mg/L	0.003367	75.25%
Si 251.611†	320521.7	9.33	mg/L	0.031	9.33	mg/L	0.031	0.33%
Sn 189.927†	-4.4	-0.00276	mg/L	0.000564	-0.00276	mg/L	0.000564	20.47%
Ti 334.940†	-46.4	0.00014	mg/L	0.000220	0.00014	mg/L	0.000220	154.35%
Tl 190.801†	87.4	0.0473	mg/L	0.00323	0.0473	mg/L	0.00323	6.83%
V 290.880†	-424.7	-0.00255	mg/L	0.001358	-0.00255	mg/L	0.001358	53.34%
Zn 206.200†	-566.1	-0.0239	mg/L	0.00036	-0.0239	mg/L	0.00036	1.49%
K 766.490†	1937.9	0.707	mg/L	0.0304	0.707	mg/L	0.0304	4.30%
Na 589.592†	133221.9	9.30	mg/L	0.087	9.30	mg/L	0.087	0.94%
Sr 407.771†	187306.0	0.179	mg/L	0.0135	0.179	mg/L	0.0135	7.51%
Li 670.784†	654.1	0.00591	mg/L	0.001161	0.00591	mg/L	0.001161	19.66%

Sequence No.: 6 **Autosampler Location: 64**
Sample ID: FLT_BLK **Date Collected: 2/22/2011 2:52:49 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FLT_BLK

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: FLT_BLK

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5145777.5						29991.75	0.58%
YRADIAL	313937.9						6619.12	2.11%
Ga 417.206	1280431.2						11199.79	0.87%
GaRADIAL	60615.1						579.82	0.96%
Ag 328.068†	314.7	0.00087	mg/L	0.000299	0.00087	mg/L	0.000299	34.40%
Al 396.153†	-54.9	-0.00802	mg/L	0.007134	-0.00802	mg/L	0.007134	88.90%
As 188.979†	-0.7	-0.00124	mg/L	0.002132	-0.00124	mg/L	0.002132	171.39%

Approved: February 23, 2011

Pierre Morris

Ba 233.527†	1.0	-0.00039 mg/L	0.000094	-0.00039 mg/L	0.000094	23.87%
Be 234.861†	28.4	0.00005 mg/L	0.000024	0.00005 mg/L	0.000024	43.96%
B 249.677†	-119.4	-0.00176 mg/L	0.000193	-0.00176 mg/L	0.000193	10.98%
Ca 227.546†	4.5	0.0400 mg/L	0.02714	0.0400 mg/L	0.02714	67.90%
Cd 228.802†	-2.4	-0.00019 mg/L	0.000099	-0.00019 mg/L	0.000099	53.12%
Co 228.616†	10.1	0.00040 mg/L	0.000354	0.00040 mg/L	0.000354	88.28%
Cr 267.716†	-24.1	-0.00063 mg/L	0.000111	-0.00063 mg/L	0.000111	17.64%
Cu 327.393†	91.5	0.00041 mg/L	0.000255	0.00041 mg/L	0.000255	61.83%
Fe 239.562†	0.3	0.00188 mg/L	0.001508	0.00188 mg/L	0.001508	80.37%
Mg 279.077†	-0.8	-0.00298 mg/L	0.006639	-0.00298 mg/L	0.006639	222.79%
Mn 257.610†	-84.9	-0.00049 mg/L	0.000004	-0.00049 mg/L	0.000004	0.82%
Mo 202.031†	1.5	-0.00033 mg/L	0.000497	-0.00033 mg/L	0.000497	149.23%
Ni 231.604†	-6.8	-0.00043 mg/L	0.000176	-0.00043 mg/L	0.000176	40.69%
Pb 220.353†	-16.1	-0.00495 mg/L	0.000520	-0.00495 mg/L	0.000520	10.51%
Sb 206.836†	-1.3	-0.00229 mg/L	0.000523	-0.00229 mg/L	0.000523	22.90%
Se 196.026†	1.2	0.00013 mg/L	0.003846	0.00013 mg/L	0.003846	>999.9%
Si 251.611†	24388.3	0.697 mg/L	0.0021	0.697 mg/L	0.0021	0.30%
Sn 189.927†	-13.8	-0.00437 mg/L	0.000290	-0.00437 mg/L	0.000290	6.64%
Ti 334.940†	55.3	-0.00018 mg/L	0.000016	-0.00018 mg/L	0.000016	8.74%
Tl 190.801†	-0.8	-0.00023 mg/L	0.000452	-0.00023 mg/L	0.000452	197.26%
V 290.880†	39.4	0.00052 mg/L	0.000403	0.00052 mg/L	0.000403	77.24%
Zn 206.200†	-1063.0	-0.0387 mg/L	0.00041	-0.0387 mg/L	0.00041	1.05%
K 766.490†	-79.5	-0.0287 mg/L	0.01779	-0.0287 mg/L	0.01779	61.87%
Na 589.592†	259.4	0.00998 mg/L	0.018658	0.00998 mg/L	0.018658	186.96%
Sr 407.771†	419.2	0.00003 mg/L	0.000501	0.00003 mg/L	0.000501	>999.9%
Li 670.784†	-5.2	-0.00197 mg/L	0.000382	-0.00197 mg/L	0.000382	19.36%

Sequence No.: 7 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/22/2011 2:59:33 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4978385.0						22345.50	0.45%
YRADIAL	298519.1						2851.95	0.96%
Ga 417.206	1169610.5						9810.77	0.84%
GaRADIAL	57328.4						1558.67	2.72%
Ag 328.068†	79708.9	0.398	mg/L	0.0027	0.398	mg/L	0.0027	0.68%
QC value within limits for Ag 328.068 Recovery = 99.38%								
Al 396.153†	51704.2	9.96	mg/L	0.044	9.96	mg/L	0.044	0.45%
QC value within limits for Al 396.153 Recovery = 99.59%								
As 188.979†	423.3	0.381	mg/L	0.0036	0.381	mg/L	0.0036	0.93%
QC value within limits for As 188.979 Recovery = 95.36%								
Ba 233.527†	57676.2	0.977	mg/L	0.0059	0.977	mg/L	0.0059	0.60%
QC value within limits for Ba 233.527 Recovery = 97.67%								
Be 234.861†	28676.0	0.0500	mg/L	0.00028	0.0500	mg/L	0.00028	0.56%
QC value within limits for Be 234.861 Recovery = 99.91%								
B 249.677†	25847.8	0.493	mg/L	0.0017	0.493	mg/L	0.0017	0.34%
QC value within limits for B 249.677 Recovery = 98.51%								
Ca 227.546†	1027.7	9.96	mg/L	0.152	9.96	mg/L	0.152	1.53%
QC value within limits for Ca 227.546 Recovery = 99.55%								
Cd 228.802†	857.4	0.0478	mg/L	0.00067	0.0478	mg/L	0.00067	1.41%
QC value within limits for Cd 228.802 Recovery = 95.66%								
Co 228.616†	3734.7	0.189	mg/L	0.0016	0.189	mg/L	0.0016	0.84%
QC value within limits for Co 228.616 Recovery = 94.39%								
Cr 267.716†	55932.1	0.484	mg/L	0.0023	0.484	mg/L	0.0023	0.48%
QC value within limits for Cr 267.716 Recovery = 96.83%								
Cu 327.393†	71950.7	0.490	mg/L	0.0022	0.490	mg/L	0.0022	0.45%
QC value within limits for Cu 327.393 Recovery = 97.90%								
Fe 239.562†	1790.3	3.89	mg/L	0.060	3.89	mg/L	0.060	1.53%
QC value within limits for Fe 239.562 Recovery = 97.23%								
Mg 279.077†	8150.1	9.73	mg/L	0.092	9.73	mg/L	0.092	0.94%
QC value within limits for Mg 279.077 Recovery = 97.31%								

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Mn 257.610†	220004.7	0.492 mg/L	0.0025	0.492 mg/L	0.0025	0.51%
QC value within limits for Mn 257.610 Recovery = 98.30%						
Mo 202.031†	13126.1	0.973 mg/L	0.0018	0.973 mg/L	0.0018	0.19%
QC value within limits for Mo 202.031 Recovery = 97.32%						
Ni 231.604†	16729.8	0.484 mg/L	0.0038	0.484 mg/L	0.0038	0.79%
QC value within limits for Ni 231.604 Recovery = 96.85%						
Pb 220.353†	2836.4	0.495 mg/L	0.0039	0.495 mg/L	0.0039	0.78%
QC value within limits for Pb 220.353 Recovery = 98.91%						
Sb 206.836†	1864.5	1.18 mg/L	0.016	1.18 mg/L	0.016	1.38%
QC value within limits for Sb 206.836 Recovery = 97.99%						
Se 196.026†	548.6	0.384 mg/L	0.0030	0.384 mg/L	0.0030	0.78%
QC value within limits for Se 196.026 Recovery = 95.88%						
Si 251.611†	169962.6	4.93 mg/L	0.037	4.93 mg/L	0.037	0.75%
QC value within limits for Si 251.611 Recovery = 98.55%						
Sn 189.927†	5635.0	0.959 mg/L	0.0080	0.959 mg/L	0.0080	0.83%
QC value within limits for Sn 189.927 Recovery = 95.85%						
Ti 334.940†	727351.3	0.994 mg/L	0.0073	0.994 mg/L	0.0073	0.74%
QC value within limits for Ti 334.940 Recovery = 99.39%						
Tl 190.801†	830.4	0.498 mg/L	0.0027	0.498 mg/L	0.0027	0.54%
QC value within limits for Tl 190.801 Recovery = 99.70%						
V 290.880†	145977.3	0.965 mg/L	0.0049	0.965 mg/L	0.0049	0.51%
QC value within limits for V 290.880 Recovery = 96.49%						
Zn 206.200†	31043.5	0.920 mg/L	0.0051	0.920 mg/L	0.0051	0.56%
QC value within limits for Zn 206.200 Recovery = 92.04%						
K 766.490†	131823.2	49.1 mg/L	0.15	49.1 mg/L	0.15	0.30%
QC value within limits for K 766.490 Recovery = 98.24%						
Na 589.592†	686709.7	49.3 mg/L	0.77	49.3 mg/L	0.77	1.56%
QC value within limits for Na 589.592 Recovery = 98.54%						
Sr 407.771†	1004185.4	0.961 mg/L	0.0768	0.961 mg/L	0.0768	7.99%
QC value within limits for Sr 407.771 Recovery = 96.14%						
Li 670.784†	83007.5	0.990 mg/L	0.0015	0.990 mg/L	0.0015	0.15%
QC value within limits for Li 670.784 Recovery = 99.01%						

All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/22/2011 3:06:11 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5065943.3						55671.12	1.10%
YRADIAL	307214.1						3908.87	1.27%
Ga 417.206	1194508.6						15871.27	1.33%
GaRADIAL	58470.2						1202.45	2.06%
Ag 328.068†	275.6	0.00067	mg/L	0.000272	0.00067	mg/L	0.000272	40.39%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-17.4	-0.00080	mg/L	0.003616	-0.00080	mg/L	0.003616	454.39%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.5	-0.00109	mg/L	0.001287	-0.00109	mg/L	0.001287	117.57%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-3.5	-0.00047	mg/L	0.000120	-0.00047	mg/L	0.000120	25.69%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-14.6	-0.00002	mg/L	0.000031	-0.00002	mg/L	0.000031	156.07%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	130.7	0.00293	mg/L	0.000412	0.00293	mg/L	0.000412	14.04%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	4.1	0.0384	mg/L	0.02420	0.0384	mg/L	0.02420	62.98%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-0.5	-0.00008	mg/L	0.000045	-0.00008	mg/L	0.000045	57.07%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	8.1	0.00030	mg/L	0.000164	0.00030	mg/L	0.000164	55.00%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-20.9	-0.00060	mg/L	0.000159	-0.00060	mg/L	0.000159	26.33%

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QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 327.393†	-14.4	-0.00031	mg/L	0.000557	-0.00031	mg/L	0.000557 182.02%
QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe 239.562†	0.6	0.00243	mg/L	0.002013	0.00243	mg/L	0.002013 82.90%
QC value within limits for Fe 239.562 Recovery = Not calculated							
Mg 279.077†	3.1	0.00163	mg/L	0.005546	0.00163	mg/L	0.005546 339.57%
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	-7.1	-0.00044	mg/L	0.000010	-0.00044	mg/L	0.000010 2.18%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	2.7	-0.00024	mg/L	0.000225	-0.00024	mg/L	0.000225 92.56%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	2.4	-0.00017	mg/L	0.000087	-0.00017	mg/L	0.000087 52.37%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	-9.7	-0.00384	mg/L	0.001675	-0.00384	mg/L	0.001675 43.62%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	2.0	-0.00021	mg/L	0.002515	-0.00021	mg/L	0.002515 >999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.1	0.00075	mg/L	0.006650	0.00075	mg/L	0.006650 881.71%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	170.2	-0.00937	mg/L	0.000442	-0.00937	mg/L	0.000442 4.72%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-5.3	-0.00292	mg/L	0.000623	-0.00292	mg/L	0.000623 21.30%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	63.3	-0.00017	mg/L	0.000204	-0.00017	mg/L	0.000204 118.56%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.6	-0.00008	mg/L	0.001189	-0.00008	mg/L	0.001189 >999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	43.2	0.00055	mg/L	0.000271	0.00055	mg/L	0.000271 49.55%
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-1073.9	-0.0391	mg/L	0.00059	-0.0391	mg/L	0.00059 1.51%
QC value less than the lower limit for Zn 206.200 Recovery = Not calculated							
K 766.490†	118.1	0.0443	mg/L	0.00542	0.0443	mg/L	0.00542 12.24%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	168.5	0.00366	mg/L	0.010160	0.00366	mg/L	0.010160 277.27%
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	16.5	-0.00035	mg/L	0.000177	-0.00035	mg/L	0.000177 49.89%
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	188.6	0.00034	mg/L	0.000502	0.00034	mg/L	0.000502 146.72%
QC value within limits for Li 670.784 Recovery = Not calculated							

QC Failed. Continue with analysis.

Sequence No.: 9 **Autosampler Location: 65**
Sample ID: PBW 04 WG357204-02 **Date Collected: 2/22/2011 3:12:46 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 04 WG357204-02

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: PBW 04 WG357204-02

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5260034.6						18142.53	0.34%
YRADIAL	316975.4						5537.99	1.75%
Ga 417.206	1192941.9						10711.88	0.90%
GaRADIAL	60746.5						1270.89	2.09%
Ag 328.068†	270.1	0.00064	mg/L	0.000382	0.00064	mg/L	0.000382	59.32%
Al 396.153†	-82.4	-0.0133	mg/L	0.00643	-0.0133	mg/L	0.00643	48.25%
As 188.979†	0.1	-0.00054	mg/L	0.000879	-0.00054	mg/L	0.000879	163.82%
Ba 233.527†	123.8	0.00168	mg/L	0.000153	0.00168	mg/L	0.000153	9.15%
Be 234.861†	-95.0	-0.00016	mg/L	0.000004	-0.00016	mg/L	0.000004	2.53%
B 249.677†	112.8	0.00261	mg/L	0.000464	0.00261	mg/L	0.000464	17.77%
Ca 227.546†	-8.2	-0.0773	mg/L	0.09544	-0.0773	mg/L	0.09544	123.44%
Cd 228.802†	6.6	0.00031	mg/L	0.000077	0.00031	mg/L	0.000077	24.95%
Co 228.616†	-4.5	-0.00035	mg/L	0.000193	-0.00035	mg/L	0.000193	55.61%
Cr 267.716†	21.9	-0.00023	mg/L	0.000109	-0.00023	mg/L	0.000109	46.96%
Cu 327.393†	693.6	0.00450	mg/L	0.000268	0.00450	mg/L	0.000268	5.97%
Fe 239.562†	1.2	0.00371	mg/L	0.002782	0.00371	mg/L	0.002782	75.08%

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Mg 279.077†	2.5	0.00098	mg/L	0.000749	0.00098	mg/L	0.000749 76.56%
Mn 257.610†	-52.7	-0.00054	mg/L	0.000009	-0.00054	mg/L	0.000009 1.74%
Mo 202.031†	-0.1	-0.00045	mg/L	0.000364	-0.00045	mg/L	0.000364 80.83%
Ni 231.604†	-0.7	-0.00025	mg/L	0.000069	-0.00025	mg/L	0.000069 27.13%
Pb 220.353†	-7.2	-0.00342	mg/L	0.000360	-0.00342	mg/L	0.000360 10.51%
Sb 206.836†	1.8	-0.00032	mg/L	0.000768	-0.00032	mg/L	0.000768 238.87%
Se 196.026†	1.0	-0.00006	mg/L	0.002294	-0.00006	mg/L	0.002294 >999.9%
Si 251.611†	167.8	-0.00943	mg/L	0.000602	-0.00943	mg/L	0.000602 6.38%
Sn 189.927†	7.2	-0.00078	mg/L	0.000405	-0.00078	mg/L	0.000405 51.75%
Ti 334.940†	-24.4	-0.00029	mg/L	0.000150	-0.00029	mg/L	0.000150 51.16%
Tl 190.801†	-3.2	-0.00158	mg/L	0.002675	-0.00158	mg/L	0.002675 169.20%
V 290.880†	-264.7	-0.00149	mg/L	0.000279	-0.00149	mg/L	0.000279 18.74%
Zn 206.200†	-713.2	-0.0283	mg/L	0.00051	-0.0283	mg/L	0.00051 1.81%
K 766.490†	116.3	0.0436	mg/L	0.02823	0.0436	mg/L	0.02823 64.76%
Na 589.592†	-76.0	-0.0133	mg/L	0.00078	-0.0133	mg/L	0.00078 5.88%
Sr 407.771†	-105.4	-0.00047	mg/L	0.000062	-0.00047	mg/L	0.000062 13.21%
Li 670.784†	5.0	-0.00185	mg/L	0.000053	-0.00185	mg/L	0.000053 2.87%

Sequence No.: 10 **Autosampler Location: 66**
Sample ID: LCSW 04 WG357204-03 **Date Collected: 2/22/2011 3:19:27 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 04 WG357204-03

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: LCSW 04 WG357204-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4981850.1						62286.23	1.25%
YRADIAL	303315.5						5054.30	1.67%
Ga 417.206	1148848.0						18553.52	1.61%
GaRADIAL	57946.1						1312.33	2.26%
Ag 328.068†	40315.8	0.201	mg/L	0.0042	0.201	mg/L	0.0042	2.08%
Al 396.153†	25537.1	4.92	mg/L	0.033	4.92	mg/L	0.033	0.67%
As 188.979†	209.8	0.189	mg/L	0.0030	0.189	mg/L	0.0030	1.61%
Ba 233.527†	29056.3	0.492	mg/L	0.0022	0.492	mg/L	0.0022	0.44%
Be 234.861†	13870.3	0.0242	mg/L	0.00037	0.0242	mg/L	0.00037	1.52%
B 249.677†	50992.6	0.962	mg/L	0.0147	0.962	mg/L	0.0147	1.53%
Ca 227.546†	497.0	4.82	mg/L	0.050	4.82	mg/L	0.050	1.05%
Cd 228.802†	433.3	0.0242	mg/L	0.00032	0.0242	mg/L	0.00032	1.32%
Co 228.616†	1893.1	0.0957	mg/L	0.00106	0.0957	mg/L	0.00106	1.11%
Cr 267.716†	28163.1	0.244	mg/L	0.0017	0.244	mg/L	0.0017	0.71%
Cu 327.393†	37482.4	0.255	mg/L	0.0056	0.255	mg/L	0.0056	2.20%
Fe 239.562†	875.4	1.90	mg/L	0.040	1.90	mg/L	0.040	2.12%
Mg 279.077†	4053.3	4.84	mg/L	0.095	4.84	mg/L	0.095	1.96%
Mn 257.610†	112181.4	0.250	mg/L	0.0014	0.250	mg/L	0.0014	0.58%
Mo 202.031†	6597.5	0.489	mg/L	0.0038	0.489	mg/L	0.0038	0.78%
Ni 231.604†	8376.1	0.242	mg/L	0.0010	0.242	mg/L	0.0010	0.40%
Pb 220.353†	1429.2	0.248	mg/L	0.0034	0.248	mg/L	0.0034	1.38%
Sb 206.836†	936.7	0.590	mg/L	0.0088	0.590	mg/L	0.0088	1.49%
Se 196.026†	267.6	0.187	mg/L	0.0033	0.187	mg/L	0.0033	1.76%
Si 251.611†	87674.9	2.54	mg/L	0.038	2.54	mg/L	0.038	1.51%
Sn 189.927†	18.2	0.00109	mg/L	0.000096	0.00109	mg/L	0.000096	8.79%
Ti 334.940†	360720.2	0.493	mg/L	0.0010	0.493	mg/L	0.0010	0.20%
Tl 190.801†	410.1	0.246	mg/L	0.0015	0.246	mg/L	0.0015	0.62%
V 290.880†	73864.1	0.488	mg/L	0.0042	0.488	mg/L	0.0042	0.86%
Zn 206.200†	15032.5	0.442	mg/L	0.0029	0.442	mg/L	0.0029	0.66%
K 766.490†	64336.7	23.9	mg/L	0.17	23.9	mg/L	0.17	0.71%
Na 589.592†	339747.3	24.0	mg/L	0.13	24.0	mg/L	0.13	0.55%
Sr 407.771†	485894.3	0.465	mg/L	0.0350	0.465	mg/L	0.0350	7.52%
Li 670.784†	40858.2	0.486	mg/L	0.0039	0.486	mg/L	0.0039	0.81%

Sequence No.: 11 **Autosampler Location: 67**
Sample ID: FBLK WG357124-01 **Date Collected: 2/22/2011 3:26:06 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**

Approved: February 23, 2011

Pierre Morris

Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG357124-01

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: FBLK WG357124-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4946039.0						16970.78	0.34%
YRADIAL	300590.6						3659.22	1.22%
Ga 417.206	1166688.1						13640.75	1.17%
GaRADIAL	56982.6						1021.11	1.79%
Ag 328.068†	125.0	-0.00008	mg/L	0.000702	-0.00008	mg/L	0.000702	847.86%
Al 396.153†	309.6	0.0623	mg/L	0.00938	0.0623	mg/L	0.00938	15.07%
As 188.979†	1.2	0.00051	mg/L	0.001738	0.00051	mg/L	0.001738	339.76%
Ba 233.527†	180.3	0.00264	mg/L	0.000088	0.00264	mg/L	0.000088	3.35%
Be 234.861†	-87.2	-0.00017	mg/L	0.000033	-0.00017	mg/L	0.000033	19.38%
B 249.677†	532.4	0.0110	mg/L	0.00072	0.0110	mg/L	0.00072	6.57%
Ca 227.546†	8.5	0.0799	mg/L	0.05079	0.0799	mg/L	0.05079	63.61%
Cd 228.802†	5.8	0.00026	mg/L	0.000247	0.00026	mg/L	0.000247	94.95%
Co 228.616†	-4.3	-0.00034	mg/L	0.000212	-0.00034	mg/L	0.000212	61.65%
Cr 267.716†	62.0	0.00011	mg/L	0.000092	0.00011	mg/L	0.000092	81.15%
Cu 327.393†	994.2	0.00655	mg/L	0.000780	0.00655	mg/L	0.000780	11.91%
Fe 239.562†	58.6	0.128	mg/L	0.0069	0.128	mg/L	0.0069	5.35%
Mg 279.077†	63.2	0.0733	mg/L	0.00444	0.0733	mg/L	0.00444	6.05%
Mn 257.610†	802.1	0.00270	mg/L	0.000029	0.00270	mg/L	0.000029	1.07%
Mo 202.031†	-6.9	-0.00095	mg/L	0.000265	-0.00095	mg/L	0.000265	28.07%
Ni 231.604†	21.0	0.00038	mg/L	0.000362	0.00038	mg/L	0.000362	96.22%
Pb 220.353†	-7.1	-0.00340	mg/L	0.000100	-0.00340	mg/L	0.000100	2.95%
Sb 206.836†	3.7	0.00084	mg/L	0.001165	0.00084	mg/L	0.001165	139.04%
Se 196.026†	4.7	0.00259	mg/L	0.003870	0.00259	mg/L	0.003870	149.61%
Si 251.611†	2664.8	0.0634	mg/L	0.00154	0.0634	mg/L	0.00154	2.43%
Sn 189.927†	12.3	0.00009	mg/L	0.000030	0.00009	mg/L	0.000030	32.91%
Ti 334.940†	1491.9	0.00178	mg/L	0.000054	0.00178	mg/L	0.000054	3.04%
Tl 190.801†	-9.5	-0.00529	mg/L	0.003646	-0.00529	mg/L	0.003646	68.90%
V 290.880†	82.3	0.00081	mg/L	0.000298	0.00081	mg/L	0.000298	36.52%
Zn 206.200†	-368.0	-0.0180	mg/L	0.00022	-0.0180	mg/L	0.00022	1.22%
K 766.490†	524.1	0.0493	mg/L	0.01418	0.0493	mg/L	0.01418	28.78%
Na 589.592†	1891037.7	145	mg/L	2.7	145	mg/L	2.7	1.84%
Sr 407.771†	666.0	0.00025	mg/L	0.000061	0.00025	mg/L	0.000061	23.93%
Li 670.784†	269.3	0.00131	mg/L	0.000399	0.00131	mg/L	0.000399	30.53%

Sequence No.: 12 **Autosampler Location: 68**
Sample ID: FBLK WG357124-02 **Date Collected: 2/22/2011 3:32:48 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG357124-02

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: FBLK WG357124-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5298689.5						29873.74	0.56%
YRADIAL	321929.6						8381.83	2.60%
Ga 417.206	1209621.1						15682.48	1.30%
GaRADIAL	61468.5						1458.28	2.37%
Ag 328.068†	234.0	0.00045	mg/L	0.000363	0.00045	mg/L	0.000363	80.00%
Al 396.153†	765.2	0.150	mg/L	0.0027	0.150	mg/L	0.0027	1.82%
As 188.979†	-0.3	-0.00094	mg/L	0.000791	-0.00094	mg/L	0.000791	84.41%
Ba 233.527†	77.1	0.00089	mg/L	0.000017	0.00089	mg/L	0.000017	1.92%
Be 234.861†	-72.9	-0.00016	mg/L	0.000026	-0.00016	mg/L	0.000026	15.99%
B 249.677†	264.8	0.00624	mg/L	0.000571	0.00624	mg/L	0.000571	9.15%
Ca 227.546†	18.4	0.173	mg/L	0.0372	0.173	mg/L	0.0372	21.42%
Cd 228.802†	6.6	0.00031	mg/L	0.000331	0.00031	mg/L	0.000331	105.02%

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Co 228.616†	3.3	0.00004 mg/L	0.000059	0.00004 mg/L	0.000059	163.85%
Cr 267.716†	39.8	-0.00008 mg/L	0.000059	-0.00008 mg/L	0.000059	70.55%
Cu 327.393†	975.6	0.00644 mg/L	0.000349	0.00644 mg/L	0.000349	5.42%
Fe 239.562†	95.9	0.210 mg/L	0.0011	0.210 mg/L	0.0011	0.52%
Mg 279.077†	68.7	0.0799 mg/L	0.00854	0.0799 mg/L	0.00854	10.69%
Mn 257.610†	1962.2	0.00394 mg/L	0.000018	0.00394 mg/L	0.000018	0.45%
Mo 202.031†	2.4	-0.00025 mg/L	0.000464	-0.00025 mg/L	0.000464	184.01%
Ni 231.604†	8.8	0.00002 mg/L	0.000107	0.00002 mg/L	0.000107	543.17%
Pb 220.353†	-11.9	-0.00422 mg/L	0.000857	-0.00422 mg/L	0.000857	20.28%
Sb 206.836†	0.7	-0.00102 mg/L	0.002196	-0.00102 mg/L	0.002196	215.65%
Se 196.026†	1.0	0.00011 mg/L	0.003326	0.00011 mg/L	0.003326	>999.9%
Si 251.611†	2319.1	0.0533 mg/L	0.00227	0.0533 mg/L	0.00227	4.25%
Sn 189.927†	5.4	-0.00108 mg/L	0.000903	-0.00108 mg/L	0.000903	83.20%
Ti 334.940†	3212.5	0.00413 mg/L	0.000136	0.00413 mg/L	0.000136	3.30%
Tl 190.801†	0.2	0.00045 mg/L	0.001810	0.00045 mg/L	0.001810	400.21%
V 290.880†	-159.1	-0.00077 mg/L	0.000541	-0.00077 mg/L	0.000541	69.82%
Zn 206.200†	-577.3	-0.0243 mg/L	0.00044	-0.0243 mg/L	0.00044	1.81%
K 766.490†	60.4	0.0229 mg/L	0.02472	0.0229 mg/L	0.02472	107.86%
Na 589.592†	608.1	0.0342 mg/L	0.00924	0.0342 mg/L	0.00924	27.00%
Sr 407.771†	272.6	-0.00013 mg/L	0.000154	-0.00013 mg/L	0.000154	115.26%
Li 670.784†	18.9	-0.00169 mg/L	0.001296	-0.00169 mg/L	0.001296	76.86%

Sequence No.: 13 **Autosampler Location: 69**
Sample ID: L1102040804 **Date Collected: 2/22/2011 3:39:30 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102040804

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102040804

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4961381.7						29374.97	0.59%
YRADIAL	300160.9						5759.80	1.92%
Ga 417.206	1171218.9						8195.42	0.70%
GaRADIAL	56599.8						302.32	0.53%
Ag 328.068†	584.7	0.00216	mg/L	0.000734	0.00216	mg/L	0.000734	34.00%
Al 396.153†	735.5	0.144	mg/L	0.0218	0.144	mg/L	0.0218	15.06%
As 188.979†	9.5	0.00673	mg/L	0.003685	0.00673	mg/L	0.003685	54.77%
Ba 233.527†	4804.4	0.0808	mg/L	0.00051	0.0808	mg/L	0.00051	0.64%
Be 234.861†	-63.0	-0.00014	mg/L	0.000011	-0.00014	mg/L	0.000011	8.10%
B 249.677†	1947.3	0.0384	mg/L	0.00027	0.0384	mg/L	0.00027	0.71%
Ca 227.546†	7273.4	68.2	mg/L	0.67	68.2	mg/L	0.67	0.98%
Cd 228.802†	7.2	0.00030	mg/L	0.000139	0.00030	mg/L	0.000139	45.88%
Co 228.616†	23.0	0.00101	mg/L	0.000479	0.00101	mg/L	0.000479	47.32%
Cr 267.716†	100.1	0.00036	mg/L	0.000157	0.00036	mg/L	0.000157	44.11%
Cu 327.393†	605.3	0.00394	mg/L	0.000992	0.00394	mg/L	0.000992	25.17%
Fe 239.562†	143.7	0.313	mg/L	0.0045	0.313	mg/L	0.0045	1.44%
Mg 279.077†	2319.1	2.77	mg/L	0.025	2.77	mg/L	0.025	0.90%
Mn 257.610†	88397.9	0.197	mg/L	0.0023	0.197	mg/L	0.0023	1.19%
Mo 202.031†	0.2	-0.00037	mg/L	0.000538	-0.00037	mg/L	0.000538	145.36%
Ni 231.604†	85.7	0.00221	mg/L	0.000068	0.00221	mg/L	0.000068	3.07%
Pb 220.353†	-22.7	-0.00285	mg/L	0.001080	-0.00285	mg/L	0.001080	37.86%
Sb 206.836†	11.7	0.00592	mg/L	0.004095	0.00592	mg/L	0.004095	69.16%
Se 196.026†	-30.3	-0.00471	mg/L	0.006968	-0.00471	mg/L	0.006968	147.97%
Si 251.611†	13415.0	0.377	mg/L	0.0100	0.377	mg/L	0.0100	2.65%
Sn 189.927†	14.1	0.00039	mg/L	0.001370	0.00039	mg/L	0.001370	355.86%
Ti 334.940†	5614.6	0.00810	mg/L	0.000262	0.00810	mg/L	0.000262	3.24%
Tl 190.801†	93.2	0.0492	mg/L	0.00091	0.0492	mg/L	0.00091	1.85%
V 290.880†	-91.7	-0.00033	mg/L	0.000160	-0.00033	mg/L	0.000160	49.06%
Zn 206.200†	-546.4	-0.0233	mg/L	0.00043	-0.0233	mg/L	0.00043	1.84%
K 766.490†	1040.8	0.237	mg/L	0.0052	0.237	mg/L	0.0052	2.20%
Na 589.592†	1923325.0	148	mg/L	3.8	148	mg/L	3.8	2.58%
Sr 407.771†	64670.4	0.0616	mg/L	0.00441	0.0616	mg/L	0.00441	7.17%
Li 670.784†	265.6	0.00126	mg/L	0.000190	0.00126	mg/L	0.000190	15.02%

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Sequence No.: 14 **Autosampler Location: 70**
Sample ID: L1102040805 **Date Collected: 2/22/2011 3:46:11 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102040805

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102040805

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4919364.2						106554.52	2.17%
YRADIAL	300506.4						4273.76	1.42%
Ga 417.206	1143560.9						26257.69	2.30%
GaRADIAL	57111.2						550.79	0.96%
Ag 328.068†	545.0	0.00199	mg/L	0.000240	0.00199	mg/L	0.000240	12.07%
Al 396.153†	-12.9	0.00006	mg/L	0.012998	0.00006	mg/L	0.012998	>999.9%
As 188.979†	11.0	0.00769	mg/L	0.000929	0.00769	mg/L	0.000929	12.08%
Ba 233.527†	5864.4	0.0987	mg/L	0.00206	0.0987	mg/L	0.00206	2.09%
Be 234.861†	-99.4	-0.00016	mg/L	0.000040	-0.00016	mg/L	0.000040	25.36%
B 249.677†	2155.2	0.0413	mg/L	0.00115	0.0413	mg/L	0.00115	2.79%
Ca 227.546†	8903.1	83.4	mg/L	1.87	83.4	mg/L	1.87	2.25%
Cd 228.802†	8.3	0.00035	mg/L	0.000283	0.00035	mg/L	0.000283	80.51%
Co 228.616†	15.1	0.00061	mg/L	0.000196	0.00061	mg/L	0.000196	31.95%
Cr 267.716†	46.4	-0.00008	mg/L	0.000070	-0.00008	mg/L	0.000070	92.48%
Cu 327.393†	344.4	0.00214	mg/L	0.000714	0.00214	mg/L	0.000714	33.33%
Fe 239.562†	29.3	0.0647	mg/L	0.00267	0.0647	mg/L	0.00267	4.13%
Mg 279.077†	1480.7	1.77	mg/L	0.016	1.77	mg/L	0.016	0.90%
Mn 257.610†	58813.8	0.131	mg/L	0.0040	0.131	mg/L	0.0040	3.05%
Mo 202.031†	15.4	0.00073	mg/L	0.000296	0.00073	mg/L	0.000296	40.77%
Ni 231.604†	72.1	0.00182	mg/L	0.000267	0.00182	mg/L	0.000267	14.70%
Pb 220.353†	-31.5	-0.00363	mg/L	0.000222	-0.00363	mg/L	0.000222	6.11%
Sb 206.836†	16.9	0.00917	mg/L	0.002015	0.00917	mg/L	0.002015	21.96%
Se 196.026†	-27.8	0.00079	mg/L	0.003157	0.00079	mg/L	0.003157	400.95%
Si 251.611†	16273.0	0.460	mg/L	0.0170	0.460	mg/L	0.0170	3.68%
Sn 189.927†	12.8	0.00016	mg/L	0.001035	0.00016	mg/L	0.001035	635.71%
Ti 334.940†	2408.5	0.00387	mg/L	0.000340	0.00387	mg/L	0.000340	8.79%
Tl 190.801†	99.9	0.0516	mg/L	0.00090	0.0516	mg/L	0.00090	1.75%
V 290.880†	62.0	0.00067	mg/L	0.001279	0.00067	mg/L	0.001279	191.06%
Zn 206.200†	-517.6	-0.0225	mg/L	0.00102	-0.0225	mg/L	0.00102	4.53%
K 766.490†	1221.2	0.301	mg/L	0.0365	0.301	mg/L	0.0365	12.11%
Na 589.592†	1955932.4	151	mg/L	1.3	151	mg/L	1.3	0.87%
Sr 407.771†	59210.0	0.0564	mg/L	0.00402	0.0564	mg/L	0.00402	7.14%
Li 670.784†	231.5	0.00085	mg/L	0.001546	0.00085	mg/L	0.001546	180.87%

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Sequence No.: 15 **Autosampler Location: 71**
Sample ID: L1102049101 **Date Collected: 2/22/2011 3:52:55 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049101

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102049101

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5039106.7						54119.19	1.07%
YRADIAL	313736.2						3035.49	0.97%
Ga 417.206	1179217.7						16688.55	1.42%
GaRADIAL	59251.8						809.61	1.37%
Ag 328.068†	689.8	0.00198	mg/L	0.000847	0.00198	mg/L	0.000847	42.83%
Al 396.153†	305.1	0.0614	mg/L	0.01520	0.0614	mg/L	0.01520	24.77%
As 188.979†	3.9	0.00254	mg/L	0.001268	0.00254	mg/L	0.001268	49.83%
Ba 233.527†	2081.9	0.0348	mg/L	0.00025	0.0348	mg/L	0.00025	0.71%

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Be 234.861†	-133.0	-0.00020 mg/L	0.000023	-0.00020 mg/L	0.000023	11.84%
B 249.677†	1056.6	0.0207 mg/L	0.00123	0.0207 mg/L	0.00123	5.93%
Ca 227.546†	1964.4	19.9 mg/L	0.30	19.9 mg/L	0.30	1.49%
Cd 228.802†	23.1	0.00196 mg/L	0.000164	0.00196 mg/L	0.000164	8.40%
Co 228.616†	119.6	0.00577 mg/L	0.000317	0.00577 mg/L	0.000317	5.50%
Cr 267.716†	328.2	0.00233 mg/L	0.000008	0.00233 mg/L	0.000008	0.34%
Cu 327.393†	1464145.9	9.93 mg/L	0.102	9.93 mg/L	0.102	1.03%
Fe 239.562†	52.6	0.115 mg/L	0.0004	0.115 mg/L	0.0004	0.33%
Mg 279.077†	1099.3	1.31 mg/L	0.012	1.31 mg/L	0.012	0.94%
Mn 257.610†	116263.9	0.259 mg/L	0.0062	0.259 mg/L	0.0062	2.38%
Mo 202.031†	-0.2	-0.00060 mg/L	0.000538	-0.00060 mg/L	0.000538	90.25%
Ni 231.604†	58171.5	1.68 mg/L	0.039	1.68 mg/L	0.039	2.31%
Pb 220.353†	7.1	-0.00760 mg/L	0.001098	-0.00760 mg/L	0.001098	14.46%
Sb 206.836†	5.1	0.00174 mg/L	0.001465	0.00174 mg/L	0.001465	84.40%
Se 196.026†	-9.9	-0.00322 mg/L	0.006913	-0.00322 mg/L	0.006913	214.39%
Si 251.611†	33836.6	0.972 mg/L	0.0256	0.972 mg/L	0.0256	2.63%
Sn 189.927†	11.3	-0.00009 mg/L	0.000658	-0.00009 mg/L	0.000658	734.31%
Ti 334.940†	3817.5	0.00514 mg/L	0.000265	0.00514 mg/L	0.000265	5.15%
Tl 190.801†	39.3	0.0221 mg/L	0.00344	0.0221 mg/L	0.00344	15.55%
V 290.880†	-42.3	-0.00001 mg/L	0.001331	-0.00001 mg/L	0.001331	>999.9%
Zn 206.200†	14620.4	0.431 mg/L	0.0089	0.431 mg/L	0.0089	2.06%
K 766.490†	2016.0	0.599 mg/L	0.0143	0.599 mg/L	0.0143	2.38%
Na 589.592†	1907604.2	146 mg/L	0.7	146 mg/L	0.7	0.51%
Sr 407.771†	44416.9	0.0422 mg/L	0.00382	0.0422 mg/L	0.00382	9.06%
Li 670.784†	504.2	0.00411 mg/L	0.000558	0.00411 mg/L	0.000558	13.57%

Sequence No.: 16 **Autosampler Location: 72**
Sample ID: L1102049101PS WG357223-01 **Date Collected: 2/22/2011 3:59:42 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049101PS WG357223-01

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102049101PS WG357223-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4972413.9						58252.77	1.17%
YRADIAL	307686.8						6347.04	2.06%
Ga 417.206	1162386.1						29426.88	2.53%
GaRADIAL	58958.4						1247.57	2.12%
Ag 328.068†	40759.5	0.202	mg/L	0.0049	0.202	mg/L	0.0049	2.42%
Al 396.153†	25675.1	4.95	mg/L	0.022	4.95	mg/L	0.022	0.45%
As 188.979†	219.5	0.197	mg/L	0.0046	0.197	mg/L	0.0046	2.32%
Ba 233.527†	30619.9	0.518	mg/L	0.0069	0.518	mg/L	0.0069	1.33%
Be 234.861†	14212.1	0.0248	mg/L	0.00059	0.0248	mg/L	0.00059	2.40%
B 249.677†	53083.0	1.00	mg/L	0.030	1.00	mg/L	0.030	3.03%
Ca 227.546†	2356.6	23.7	mg/L	0.52	23.7	mg/L	0.52	2.21%
Cd 228.802†	450.9	0.0258	mg/L	0.00063	0.0258	mg/L	0.00063	2.44%
Co 228.616†	1987.1	0.100	mg/L	0.0010	0.100	mg/L	0.0010	0.98%
Cr 267.716†	28478.7	0.246	mg/L	0.0030	0.246	mg/L	0.0030	1.20%
Cu 327.393†	1384029.3	9.39	mg/L	0.055	9.39	mg/L	0.055	0.59%
Fe 239.562†	939.5	2.04	mg/L	0.050	2.04	mg/L	0.050	2.46%
Mg 279.077†	5090.8	6.08	mg/L	0.168	6.08	mg/L	0.168	2.76%
Mn 257.610†	217116.2	0.485	mg/L	0.0072	0.485	mg/L	0.0072	1.49%
Mo 202.031†	6790.8	0.503	mg/L	0.0035	0.503	mg/L	0.0035	0.69%
Ni 231.604†	61821.5	1.79	mg/L	0.023	1.79	mg/L	0.023	1.27%
Pb 220.353†	1447.2	0.245	mg/L	0.0005	0.245	mg/L	0.0005	0.21%
Sb 206.836†	952.8	0.600	mg/L	0.0125	0.600	mg/L	0.0125	2.09%
Se 196.026†	269.0	0.192	mg/L	0.0043	0.192	mg/L	0.0043	2.25%
Si 251.611†	119699.1	3.47	mg/L	0.096	3.47	mg/L	0.096	2.77%
Sn 189.927†	1.6	-0.00174	mg/L	0.000935	-0.00174	mg/L	0.000935	53.67%
Ti 334.940†	368431.7	0.504	mg/L	0.0000	0.504	mg/L	0.0000	0.01%
Tl 190.801†	448.6	0.268	mg/L	0.0019	0.268	mg/L	0.0019	0.70%
V 290.880†	75012.1	0.496	mg/L	0.0097	0.496	mg/L	0.0097	1.96%
Zn 206.200†	29044.5	0.862	mg/L	0.0145	0.862	mg/L	0.0145	1.68%
K 766.490†	67502.6	24.9	mg/L	0.14	24.9	mg/L	0.14	0.57%
Na 589.592†	2094013.9	163	mg/L	3.0	163	mg/L	3.0	1.87%

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Sr 407.771†	534680.3	0.512 mg/L	0.0420	0.512 mg/L	0.0420	8.20%
Li 670.784†	41220.4	0.491 mg/L	0.0056	0.491 mg/L	0.0056	1.14%

Sequence No.: 17 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/22/2011 4:06:28 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4917464.1						72357.68	1.47%
YRADIAL	300064.8						7671.52	2.56%
Ga 417.206	1161406.5						32452.79	2.79%
GaRADIAL	57307.8						713.17	1.24%
Ag 328.068†	78820.6	0.393	mg/L	0.0147	0.393	mg/L	0.0147	3.74%
QC value within limits for Ag 328.068 Recovery = 98.27%								
Al 396.153†	51339.9	9.89	mg/L	0.040	9.89	mg/L	0.040	0.41%
QC value within limits for Al 396.153 Recovery = 98.89%								
As 188.979†	426.4	0.384	mg/L	0.0074	0.384	mg/L	0.0074	1.93%
QC value within limits for As 188.979 Recovery = 96.06%								
Ba 233.527†	57464.9	0.973	mg/L	0.0244	0.973	mg/L	0.0244	2.51%
QC value within limits for Ba 233.527 Recovery = 97.31%								
Be 234.861†	28505.2	0.0497	mg/L	0.00181	0.0497	mg/L	0.00181	3.65%
QC value within limits for Be 234.861 Recovery = 99.31%								
B 249.677†	26058.2	0.497	mg/L	0.0174	0.497	mg/L	0.0174	3.50%
QC value within limits for B 249.677 Recovery = 99.34%								
Ca 227.546†	1029.0	9.97	mg/L	0.237	9.97	mg/L	0.237	2.38%
QC value within limits for Ca 227.546 Recovery = 99.66%								
Cd 228.802†	863.8	0.0482	mg/L	0.00137	0.0482	mg/L	0.00137	2.85%
QC value within limits for Cd 228.802 Recovery = 96.39%								
Co 228.616†	3772.8	0.191	mg/L	0.0031	0.191	mg/L	0.0031	1.61%
QC value within limits for Co 228.616 Recovery = 95.37%								
Cr 267.716†	55533.2	0.481	mg/L	0.0135	0.481	mg/L	0.0135	2.80%
QC value within limits for Cr 267.716 Recovery = 96.14%								
Cu 327.393†	71667.7	0.488	mg/L	0.0186	0.488	mg/L	0.0186	3.82%
QC value within limits for Cu 327.393 Recovery = 97.52%								
Fe 239.562†	1803.4	3.92	mg/L	0.042	3.92	mg/L	0.042	1.07%
QC value within limits for Fe 239.562 Recovery = 97.94%								
Mg 279.077†	8175.0	9.76	mg/L	0.146	9.76	mg/L	0.146	1.50%
QC value within limits for Mg 279.077 Recovery = 97.61%								
Mn 257.610†	218874.7	0.489	mg/L	0.0133	0.489	mg/L	0.0133	2.72%
QC value within limits for Mn 257.610 Recovery = 97.79%								
Mo 202.031†	13116.9	0.973	mg/L	0.0249	0.973	mg/L	0.0249	2.56%
QC value within limits for Mo 202.031 Recovery = 97.25%								
Ni 231.604†	16672.9	0.483	mg/L	0.0120	0.483	mg/L	0.0120	2.48%
QC value within limits for Ni 231.604 Recovery = 96.52%								
Pb 220.353†	2877.6	0.502	mg/L	0.0079	0.502	mg/L	0.0079	1.58%
QC value within limits for Pb 220.353 Recovery = 100.34%								
Sb 206.836†	1879.7	1.19	mg/L	0.036	1.19	mg/L	0.036	3.03%
QC value within limits for Sb 206.836 Recovery = 98.78%								
Se 196.026†	557.4	0.390	mg/L	0.0142	0.390	mg/L	0.0142	3.65%
QC value within limits for Se 196.026 Recovery = 97.43%								
Si 251.611†	167681.7	4.86	mg/L	0.170	4.86	mg/L	0.170	3.51%
QC value within limits for Si 251.611 Recovery = 97.22%								
Sn 189.927†	5714.2	0.972	mg/L	0.0141	0.972	mg/L	0.0141	1.45%
QC value within limits for Sn 189.927 Recovery = 97.20%								
Ti 334.940†	725744.1	0.992	mg/L	0.0046	0.992	mg/L	0.0046	0.46%
QC value within limits for Ti 334.940 Recovery = 99.17%								
Tl 190.801†	829.7	0.498	mg/L	0.0106	0.498	mg/L	0.0106	2.12%
QC value within limits for Tl 190.801 Recovery = 99.61%								
V 290.880†	145297.6	0.960	mg/L	0.0267	0.960	mg/L	0.0267	2.78%
QC value within limits for V 290.880 Recovery = 96.04%								
Zn 206.200†	30791.7	0.913	mg/L	0.0209	0.913	mg/L	0.0209	2.29%
QC value within limits for Zn 206.200 Recovery = 91.29%								

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K 766.490† 131020.9 48.8 mg/L 0.25 48.8 mg/L 0.25 0.51%
QC value within limits for K 766.490 Recovery = 97.64%
Na 589.592† 682939.6 49.0 mg/L 0.63 49.0 mg/L 0.63 1.28%
QC value within limits for Na 589.592 Recovery = 97.98%
Sr 407.771† 982407.9 0.941 mg/L 0.0726 0.941 mg/L 0.0726 7.72%
QC value within limits for Sr 407.771 Recovery = 94.06%
Li 670.784† 82459.4 0.984 mg/L 0.0036 0.984 mg/L 0.0036 0.36%
QC value within limits for Li 670.784 Recovery = 98.35%
All analyte(s) passed QC.

Sequence No.: 18 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/22/2011 4:13:10 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5129520.7						35045.02	0.68%
YRADIAL	310285.0						10434.14	3.36%
Ga 417.206	1205954.8						18085.28	1.50%
GaRADIAL	58862.1						453.84	0.77%
Ag 328.068†	239.9	0.00050	mg/L	0.000486	0.00050	mg/L	0.000486	98.07%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	36.0	0.00949	mg/L	0.008647	0.00949	mg/L	0.008647	91.08%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.5	-0.00112	mg/L	0.003492	-0.00112	mg/L	0.003492	310.89%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	16.4	-0.00013	mg/L	0.000080	-0.00013	mg/L	0.000080	59.66%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-10.1	-0.00001	mg/L	0.000019	-0.00001	mg/L	0.000019	156.11%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	559.2	0.0110	mg/L	0.00036	0.0110	mg/L	0.00036	3.32%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	5.0	0.0469	mg/L	0.05855	0.0469	mg/L	0.05855	124.72%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	1.5	0.00003	mg/L	0.000238	0.00003	mg/L	0.000238	689.45%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	9.1	0.00035	mg/L	0.000224	0.00035	mg/L	0.000224	63.84%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-10.8	-0.00052	mg/L	0.000186	-0.00052	mg/L	0.000186	36.12%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	143.1	0.00076	mg/L	0.000725	0.00076	mg/L	0.000725	95.15%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.8	0.00290	mg/L	0.003698	0.00290	mg/L	0.003698	127.67%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	3.9	0.00256	mg/L	0.007222	0.00256	mg/L	0.007222	281.62%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-7.7	-0.00044	mg/L	0.000010	-0.00044	mg/L	0.000010	2.35%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.0	0.00015	mg/L	0.000280	0.00015	mg/L	0.000280	185.28%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	8.0	0.00000	mg/L	0.000218	0.00000	mg/L	0.000218	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-12.3	-0.00429	mg/L	0.000243	-0.00429	mg/L	0.000243	5.67%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.9	0.00036	mg/L	0.001230	0.00036	mg/L	0.001230	342.58%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	7.3	0.00435	mg/L	0.002128	0.00435	mg/L	0.002128	48.92%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	47.2	-0.0130	mg/L	0.00028	-0.0130	mg/L	0.00028	2.13%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-1.0	-0.00219	mg/L	0.000687	-0.00219	mg/L	0.000687	31.38%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	205.5	0.00002	mg/L	0.000218	0.00002	mg/L	0.000218	986.04%

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QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 0.1 0.00035 mg/L 0.000657 0.00035 mg/L 0.000657 186.38%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† -6.9 0.00022 mg/L 0.000807 0.00022 mg/L 0.000807 375.16%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† -1095.2 -0.0397 mg/L 0.00049 -0.0397 mg/L 0.00049 1.24%
QC value less than the lower limit for Zn 206.200 Recovery = Not calculated
K 766.490† 80.2 0.0302 mg/L 0.01335 0.0302 mg/L 0.01335 44.21%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 789.6 0.0468 mg/L 0.01821 0.0468 mg/L 0.01821 38.89%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† 341.6 -0.00004 mg/L 0.000107 -0.00004 mg/L 0.000107 249.30%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 46.9 -0.00135 mg/L 0.000699 -0.00135 mg/L 0.000699 51.79%
QC value within limits for Li 670.784 Recovery = Not calculated
QC Failed. Continue with analysis.

Sequence No.: 19 **Autosampler Location: 73**
Sample ID: L1102049101DL WG357223-02 **Date Collected: 2/22/2011 4:19:49 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049101DL WG357223-02

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102049101DL WG357223-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5093368.1						22620.50	0.44%
YRADIAL	303089.4						6405.24	2.11%
Ga 417.206	1210836.9						13679.08	1.13%
GaRADIAL	57572.0						1128.25	1.96%
Ag 328.068†	328.2	0.00078	mg/L	0.000562	0.00078	mg/L	0.000562	71.62%
Al 396.153†	42.8	0.0108	mg/L	0.00493	0.0108	mg/L	0.00493	45.60%
As 188.979†	0.2	-0.00052	mg/L	0.001697	-0.00052	mg/L	0.001697	329.13%
Ba 233.527†	420.1	0.00669	mg/L	0.000077	0.00669	mg/L	0.000077	1.15%
Be 234.861†	-48.3	-0.00007	mg/L	0.000041	-0.00007	mg/L	0.000041	56.24%
B 249.677†	724.0	0.0142	mg/L	0.00006	0.0142	mg/L	0.00006	0.39%
Ca 227.546†	376.9	3.84	mg/L	0.097	3.84	mg/L	0.097	2.51%
Cd 228.802†	5.6	0.00041	mg/L	0.000104	0.00041	mg/L	0.000104	25.39%
Co 228.616†	27.8	0.00126	mg/L	0.000137	0.00126	mg/L	0.000137	10.90%
Cr 267.716†	62.4	0.00010	mg/L	0.000138	0.00010	mg/L	0.000138	139.17%
Cu 327.393†	289072.9	1.96	mg/L	0.023	1.96	mg/L	0.023	1.16%
Fe 239.562†	11.2	0.0255	mg/L	0.00244	0.0255	mg/L	0.00244	9.58%
Mg 279.077†	238.4	0.283	mg/L	0.0165	0.283	mg/L	0.0165	5.84%
Mn 257.610†	23324.7	0.0517	mg/L	0.00108	0.0517	mg/L	0.00108	2.09%
Mo 202.031†	6.0	-0.00002	mg/L	0.000327	-0.00002	mg/L	0.000327	>999.9%
Ni 231.604†	11858.7	0.343	mg/L	0.0081	0.343	mg/L	0.0081	2.36%
Pb 220.353†	-4.8	-0.00431	mg/L	0.000724	-0.00431	mg/L	0.000724	16.82%
Sb 206.836†	3.9	0.00102	mg/L	0.001481	0.00102	mg/L	0.001481	145.68%
Se 196.026†	-4.0	-0.00266	mg/L	0.002683	-0.00266	mg/L	0.002683	100.83%
Si 251.611†	7254.5	0.197	mg/L	0.0066	0.197	mg/L	0.0066	3.36%
Sn 189.927†	5.5	-0.00108	mg/L	0.000479	-0.00108	mg/L	0.000479	44.36%
Ti 334.940†	868.1	0.00096	mg/L	0.000047	0.00096	mg/L	0.000047	4.84%
Tl 190.801†	10.3	0.00610	mg/L	0.000618	0.00610	mg/L	0.000618	10.14%
V 290.880†	-102.6	-0.00042	mg/L	0.000426	-0.00042	mg/L	0.000426	102.48%
Zn 206.200†	2208.4	0.0592	mg/L	0.00061	0.0592	mg/L	0.00061	1.03%
K 766.490†	450.7	0.138	mg/L	0.0159	0.138	mg/L	0.0159	11.50%
Na 589.592†	405746.5	28.7	mg/L	0.57	28.7	mg/L	0.57	1.98%
Sr 407.771†	9778.8	0.00900	mg/L	0.000711	0.00900	mg/L	0.000711	7.90%
Li 670.784†	344.7	0.00221	mg/L	0.001565	0.00221	mg/L	0.001565	70.90%

Sequence No.: 20 L1102052101 **Autosampler Location: 74**
Sample ID: ~~**L1102042101**~~ **Date Collected: 2/22/2011 4:26:31 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 23, 2011
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L1102052101

Nebulizer Parameters: ~~L1102042101~~

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

L1102052101

Mean Data: ~~L1102042101~~

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5107614.8						58615.75	1.15%
YRADIAL	314422.0						4121.41	1.31%
Ga 417.206	1177825.6						13097.02	1.11%
GaRADIAL	58742.6						1550.38	2.64%
Ag 328.068†	125.3	-0.00019	mg/L	0.000487	-0.00019	mg/L	0.000487	259.30%
Al 396.153†	959.6	0.188	mg/L	0.0145	0.188	mg/L	0.0145	7.74%
As 188.979†	-0.7	-0.00131	mg/L	0.001801	-0.00131	mg/L	0.001801	137.85%
Ba 233.527†	3870.4	0.0650	mg/L	0.00051	0.0650	mg/L	0.00051	0.79%
Be 234.861†	-0.3	0.00006	mg/L	0.000021	0.00006	mg/L	0.000021	34.83%
B 249.677†	901.2	0.0180	mg/L	0.00090	0.0180	mg/L	0.00090	5.03%
Ca 227.546†	279.7	2.62	mg/L	0.040	2.62	mg/L	0.040	1.53%
Cd 228.802†	7.6	0.00075	mg/L	0.000067	0.00075	mg/L	0.000067	8.95%
Co 228.616†	672.2	0.0343	mg/L	0.00024	0.0343	mg/L	0.00024	0.71%
Cr 267.716†	247.7	0.00139	mg/L	0.000193	0.00139	mg/L	0.000193	13.88%
Cu 327.393†	1117.4	0.00739	mg/L	0.000318	0.00739	mg/L	0.000318	4.31%
Fe 239.562†	98.2	0.214	mg/L	0.0047	0.214	mg/L	0.0047	2.20%
Mg 279.077†	1362.6	1.62	mg/L	0.029	1.62	mg/L	0.029	1.78%
Mn 257.610†	342104.4	0.759	mg/L	0.0027	0.759	mg/L	0.0027	0.36%
Mo 202.031†	-0.8	-0.00033	mg/L	0.000442	-0.00033	mg/L	0.000442	132.79%
Ni 231.604†	560.4	0.0160	mg/L	0.00028	0.0160	mg/L	0.00028	1.74%
Pb 220.353†	-8.1	-0.00353	mg/L	0.000322	-0.00353	mg/L	0.000322	9.12%
Sb 206.836†	5.2	0.00181	mg/L	0.002499	0.00181	mg/L	0.002499	138.40%
Se 196.026†	7.1	0.00465	mg/L	0.005462	0.00465	mg/L	0.005462	117.40%
Si 251.611†	20260.5	0.577	mg/L	0.0086	0.577	mg/L	0.0086	1.49%
Sn 189.927†	6.5	-0.00091	mg/L	0.000757	-0.00091	mg/L	0.000757	82.91%
Ti 334.940†	7696.5	0.0103	mg/L	0.00023	0.0103	mg/L	0.00023	2.20%
Tl 190.801†	4.3	0.00367	mg/L	0.002078	0.00367	mg/L	0.002078	56.59%
V 290.880†	-62.6	-0.00014	mg/L	0.000858	-0.00014	mg/L	0.000858	617.78%
Zn 206.200†	-573.3	-0.0241	mg/L	0.00049	-0.0241	mg/L	0.00049	2.03%
K 766.490†	1074.0	0.264	mg/L	0.0201	0.264	mg/L	0.0201	7.60%
Na 589.592†	1755827.9	133	mg/L	1.8	133	mg/L	1.8	1.31%
Sr 407.771†	12330.5	0.0114	mg/L	0.00073	0.0114	mg/L	0.00073	6.43%
Li 670.784†	224.3	0.00077	mg/L	0.001013	0.00077	mg/L	0.001013	131.70%

Sequence No.: 21 **Autosampler Location: 75**
Sample ID: L1102053501 WG357204-01 **Date Collected: 2/22/2011 4:33:16 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053501 WG357204-01

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102053501 WG357204-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5001224.4						59777.96	1.20%
YRADIAL	301922.1						5872.06	1.94%
Ga 417.206	1190325.4						18657.60	1.57%
GaRADIAL	58274.1						784.95	1.35%
Ag 328.068†	1152.2	0.00503	mg/L	0.000578	0.00503	mg/L	0.000578	11.51%
Al 396.153†	47.5	0.0117	mg/L	0.00579	0.0117	mg/L	0.00579	49.39%
As 188.979†	8.5	0.00308	mg/L	0.000249	0.00308	mg/L	0.000249	8.09%
Ba 233.527†	3229.8	0.0542	mg/L	0.00061	0.0542	mg/L	0.00061	1.13%
Be 234.861†	-88.6	-0.00016	mg/L	0.000009	-0.00016	mg/L	0.000009	5.64%
B 249.677†	1548.0	0.0298	mg/L	0.00043	0.0298	mg/L	0.00043	1.44%
Ca 227.546†	21416.3	201	mg/L	6.6	201	mg/L	6.6	3.28%
Cd 228.802†	4.3	0.00014	mg/L	0.000091	0.00014	mg/L	0.000091	67.07%
Co 228.616†	3.1	0.00002	mg/L	0.000450	0.00002	mg/L	0.000450	>999.9%

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Cr 267.716†	18.7	-0.00026	mg/L	0.000254	-0.00026	mg/L	0.000254 96.71%
Cu 327.393†	-304.8	-0.00226	mg/L	0.000124	-0.00226	mg/L	0.000124 5.49%
Fe 239.562†	20.6	0.0460	mg/L	0.00834	0.0460	mg/L	0.00834 18.15%
Mg 279.077†	1615.7	1.93	mg/L	0.037	1.93	mg/L	0.037 1.95%
Mn 257.610†	2449.9	0.00511	mg/L	0.000058	0.00511	mg/L	0.000058 1.14%
Mo 202.031†	3.4	-0.00018	mg/L	0.000091	-0.00018	mg/L	0.000091 49.59%
Ni 231.604†	10.9	0.00003	mg/L	0.000266	0.00003	mg/L	0.000266 876.11%
Pb 220.353†	-40.8	0.00041	mg/L	0.001095	0.00041	mg/L	0.001095 269.77%
Sb 206.836†	20.3	0.0113	mg/L	0.00221	0.0113	mg/L	0.00221 19.50%
Se 196.026†	-37.7	0.0233	mg/L	0.00737	0.0233	mg/L	0.00737 31.64%
Si 251.611†	11060.8	0.308	mg/L	0.0064	0.308	mg/L	0.0064 2.06%
Sn 189.927†	3.3	-0.00144	mg/L	0.001315	-0.00144	mg/L	0.001315 91.09%
Ti 334.940†	798.8	0.00284	mg/L	0.000296	0.00284	mg/L	0.000296 10.42%
Tl 190.801†	138.9	0.0637	mg/L	0.00234	0.0637	mg/L	0.00234 3.67%
V 290.880†	-69.8	-0.00020	mg/L	0.000149	-0.00020	mg/L	0.000149 74.23%
Zn 206.200†	-480.3	-0.0214	mg/L	0.00081	-0.0214	mg/L	0.00081 3.78%
K 766.490†	687.1	0.253	mg/L	0.0385	0.253	mg/L	0.0385 15.24%
Na 589.592†	23411.9	1.62	mg/L	0.008	1.62	mg/L	0.008 0.49%
Sr 407.771†	66353.2	0.0632	mg/L	0.00538	0.0632	mg/L	0.00538 8.52%
Li 670.784†	20.9	-0.00166	mg/L	0.001096	-0.00166	mg/L	0.001096 65.94%

Sequence No.: 22 **Autosampler Location: 76**
Sample ID: L1102053501S WG357204-04 **Date Collected: 2/22/2011 4:39:56 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053501S WG357204-04

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102053501S WG357204-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4882466.1						85904.79	1.76%
YRADIAL	303373.0						3510.01	1.16%
Ga 417.206	1169483.9						21865.33	1.87%
GaRADIAL	58970.2						1640.33	2.78%
Ag 328.068†	40681.7	0.203	mg/L	0.0037	0.203	mg/L	0.0037	1.82%
Al 396.153†	25297.4	4.87	mg/L	0.038	4.87	mg/L	0.038	0.79%
As 188.979†	213.2	0.188	mg/L	0.0016	0.188	mg/L	0.0016	0.83%
Ba 233.527†	31715.4	0.537	mg/L	0.0097	0.537	mg/L	0.0097	1.81%
Be 234.861†	13936.1	0.0243	mg/L	0.00046	0.0243	mg/L	0.00046	1.90%
B 249.677†	52256.1	0.986	mg/L	0.0174	0.986	mg/L	0.0174	1.76%
Ca 227.546†	22902.2	215	mg/L	2.5	215	mg/L	2.5	1.18%
Cd 228.802†	411.6	0.0229	mg/L	0.00056	0.0229	mg/L	0.00056	2.44%
Co 228.616†	1823.4	0.0921	mg/L	0.00223	0.0921	mg/L	0.00223	2.42%
Cr 267.716†	27950.4	0.242	mg/L	0.0059	0.242	mg/L	0.0059	2.45%
Cu 327.393†	35530.3	0.242	mg/L	0.0039	0.242	mg/L	0.0039	1.63%
Fe 239.562†	911.1	1.98	mg/L	0.039	1.98	mg/L	0.039	1.98%
Mg 279.077†	5492.7	6.56	mg/L	0.125	6.56	mg/L	0.125	1.91%
Mn 257.610†	114135.1	0.255	mg/L	0.0045	0.255	mg/L	0.0045	1.75%
Mo 202.031†	6684.1	0.495	mg/L	0.0095	0.495	mg/L	0.0095	1.92%
Ni 231.604†	8131.4	0.235	mg/L	0.0045	0.235	mg/L	0.0045	1.90%
Pb 220.353†	1359.7	0.246	mg/L	0.0061	0.246	mg/L	0.0061	2.49%
Sb 206.836†	930.8	0.586	mg/L	0.0128	0.586	mg/L	0.0128	2.18%
Se 196.026†	222.5	0.208	mg/L	0.0046	0.208	mg/L	0.0046	2.19%
Si 251.611†	109989.1	3.19	mg/L	0.058	3.19	mg/L	0.058	1.81%
Sn 189.927†	12.6	0.00014	mg/L	0.000537	0.00014	mg/L	0.000537	375.78%
Ti 334.940†	366296.1	0.503	mg/L	0.0025	0.503	mg/L	0.0025	0.50%
Tl 190.801†	529.5	0.298	mg/L	0.0095	0.298	mg/L	0.0095	3.18%
V 290.880†	75003.1	0.496	mg/L	0.0089	0.496	mg/L	0.0089	1.79%
Zn 206.200†	14948.8	0.440	mg/L	0.0117	0.440	mg/L	0.0117	2.67%
K 766.490†	65343.0	24.2	mg/L	0.29	24.2	mg/L	0.29	1.19%
Na 589.592†	360083.2	25.4	mg/L	0.72	25.4	mg/L	0.72	2.83%
Sr 407.771†	540214.1	0.517	mg/L	0.0403	0.517	mg/L	0.0403	7.79%
Li 670.784†	40209.6	0.479	mg/L	0.0065	0.479	mg/L	0.0065	1.35%

Sequence No.: 23 **Autosampler Location: 77**

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Sample ID: L1102053501SD WG357204-05 **Date Collected: 2/22/2011 4:46:39 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053501SD WG357204-05

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102053501SD WG357204-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4959260.2						36937.84	0.74%
YRADIAL	303770.8						3979.13	1.31%
Ga 417.206	1176438.6						18009.15	1.53%
GaRADIAL	58611.3						1181.18	2.02%
Ag 328.068†	39708.0	0.198	mg/L	0.0028	0.198	mg/L	0.0028	1.40%
Al 396.153†	25740.8	4.96	mg/L	0.014	4.96	mg/L	0.014	0.28%
As 188.979†	209.7	0.185	mg/L	0.0063	0.185	mg/L	0.0063	3.42%
Ba 233.527†	30695.5	0.520	mg/L	0.0035	0.520	mg/L	0.0035	0.68%
Be 234.861†	13627.5	0.0237	mg/L	0.00041	0.0237	mg/L	0.00041	1.71%
B 249.677†	51032.3	0.964	mg/L	0.0118	0.964	mg/L	0.0118	1.23%
Ca 227.546†	22160.0	208	mg/L	3.7	208	mg/L	3.7	1.78%
Cd 228.802†	404.7	0.0225	mg/L	0.00013	0.0225	mg/L	0.00013	0.59%
Co 228.616†	1775.5	0.0896	mg/L	0.00046	0.0896	mg/L	0.00046	0.51%
Cr 267.716†	27068.4	0.234	mg/L	0.0018	0.234	mg/L	0.0018	0.77%
Cu 327.393†	35245.9	0.240	mg/L	0.0046	0.240	mg/L	0.0046	1.90%
Fe 239.562†	995.6	2.16	mg/L	0.018	2.16	mg/L	0.018	0.85%
Mg 279.077†	5449.1	6.50	mg/L	0.070	6.50	mg/L	0.070	1.08%
Mn 257.610†	111108.0	0.248	mg/L	0.0018	0.248	mg/L	0.0018	0.73%
Mo 202.031†	6509.0	0.482	mg/L	0.0035	0.482	mg/L	0.0035	0.72%
Ni 231.604†	7939.2	0.230	mg/L	0.0016	0.230	mg/L	0.0016	0.71%
Pb 220.353†	1323.9	0.240	mg/L	0.0012	0.240	mg/L	0.0012	0.52%
Sb 206.836†	907.4	0.572	mg/L	0.0090	0.572	mg/L	0.0090	1.57%
Se 196.026†	222.3	0.206	mg/L	0.0049	0.206	mg/L	0.0049	2.39%
Si 251.611†	96753.4	2.80	mg/L	0.049	2.80	mg/L	0.049	1.75%
Sn 189.927†	13.7	0.00032	mg/L	0.001301	0.00032	mg/L	0.001301	408.28%
Ti 334.940†	354697.7	0.487	mg/L	0.0017	0.487	mg/L	0.0017	0.35%
Tl 190.801†	528.8	0.298	mg/L	0.0056	0.298	mg/L	0.0056	1.89%
V 290.880†	72230.8	0.478	mg/L	0.0041	0.478	mg/L	0.0041	0.86%
Zn 206.200†	14430.3	0.424	mg/L	0.0020	0.424	mg/L	0.0020	0.47%
K 766.490†	64281.1	23.8	mg/L	0.21	23.8	mg/L	0.21	0.86%
Na 589.592†	355375.5	25.1	mg/L	0.34	25.1	mg/L	0.34	1.34%
Sr 407.771†	531778.5	0.509	mg/L	0.0346	0.509	mg/L	0.0346	6.81%
Li 670.784†	39903.8	0.475	mg/L	0.0023	0.475	mg/L	0.0023	0.48%

Sequence No.: 24 **Autosampler Location: 78**
Sample ID: L1102040801 **Date Collected: 2/22/2011 4:53:19 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102040801

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102040801

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4663346.7						42201.79	0.90%
YRADIAL	289450.9						8200.73	2.83%
Ga 417.206	1106313.8						20202.26	1.83%
GaRADIAL	56563.9						718.41	1.27%
Ag 328.068†	310.4	0.00083	mg/L	0.000095	0.00083	mg/L	0.000095	11.39%
Al 396.153†	1170.5	0.228	mg/L	0.0087	0.228	mg/L	0.0087	3.83%
As 188.979†	2.3	0.00118	mg/L	0.000871	0.00118	mg/L	0.000871	73.97%
Ba 233.527†	498.9	0.00803	mg/L	0.000150	0.00803	mg/L	0.000150	1.86%
Be 234.861†	-113.3	-0.00023	mg/L	0.000031	-0.00023	mg/L	0.000031	13.73%

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B 249.677†	1581.4	0.0309 mg/L	0.00199	0.0309 mg/L	0.00199	6.44%
Ca 227.546†	1590.5	14.9 mg/L	0.31	14.9 mg/L	0.31	2.06%
Cd 228.802†	4.3	0.00017 mg/L	0.000208	0.00017 mg/L	0.000208	120.91%
Co 228.616†	1.0	-0.00009 mg/L	0.000128	-0.00009 mg/L	0.000128	135.71%
Cr 267.716†	470.9	0.00365 mg/L	0.000097	0.00365 mg/L	0.000097	2.66%
Cu 327.393†	1074.9	0.00712 mg/L	0.000525	0.00712 mg/L	0.000525	7.38%
Fe 239.562†	95.2	0.208 mg/L	0.0048	0.208 mg/L	0.0048	2.31%
Mg 279.077†	424.5	0.505 mg/L	0.0047	0.505 mg/L	0.0047	0.92%
Mn 257.610†	1685.8	0.0108 mg/L	0.00008	0.0108 mg/L	0.00008	0.71%
Mo 202.031†	33.8	0.00208 mg/L	0.000253	0.00208 mg/L	0.000253	12.19%
Ni 231.604†	4.2	-0.00012 mg/L	0.000099	-0.00012 mg/L	0.000099	81.86%
Pb 220.353†	-12.6	-0.00363 mg/L	0.002218	-0.00363 mg/L	0.002218	61.17%
Sb 206.836†	5.6	0.00208 mg/L	0.002554	0.00208 mg/L	0.002554	123.01%
Se 196.026†	-6.6	-0.00153 mg/L	0.003483	-0.00153 mg/L	0.003483	227.61%
Si 251.611†	54454.3	1.57 mg/L	0.006	1.57 mg/L	0.006	0.37%
Sn 189.927†	9.1	-0.00046 mg/L	0.000807	-0.00046 mg/L	0.000807	176.61%
Ti 334.940†	7984.1	0.0108 mg/L	0.00241	0.0108 mg/L	0.00241	22.29%
Tl 190.801†	24.2	0.0133 mg/L	0.00183	0.0133 mg/L	0.00183	13.78%
V 290.880†	742.1	0.00518 mg/L	0.000095	0.00518 mg/L	0.000095	1.83%
Zn 206.200†	-698.5	-0.0279 mg/L	0.00064	-0.0279 mg/L	0.00064	2.30%
K 766.490†	10392.9	3.07 mg/L	0.081	3.07 mg/L	0.081	2.65%
Na 589.592†	10948962.1	773 mg/L	0.0	773 mg/L	0.0	0.00%
Sr 407.771†	71381.6	0.0680 mg/L	0.00539	0.0680 mg/L	0.00539	7.93%
Li 670.784†	3030.5	0.0343 mg/L	0.00026	0.0343 mg/L	0.00026	0.75%

Sequence No.: 25 **Autosampler Location: 79**
Sample ID: L1102040802 **Date Collected: 2/22/2011 5:00:05 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102040802

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102040802

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4397989.6						28438.73	0.65%
YRADIAL	283046.2						5340.25	1.89%
Ga 417.206	1051857.2						9279.67	0.88%
GaRADIAL	55226.4						1880.36	3.40%
Ag 328.068†	378.9	0.00106	mg/L	0.000246	0.00106	mg/L	0.000246	23.20%
Al 396.153†	4318.8	0.835	mg/L	0.0194	0.835	mg/L	0.0194	2.32%
As 188.979†	7.5	0.00598	mg/L	0.002986	0.00598	mg/L	0.002986	49.96%
Ba 233.527†	963.4	0.0159	mg/L	0.00007	0.0159	mg/L	0.00007	0.42%
Be 234.861†	43.2	-0.00028	mg/L	0.000159	-0.00028	mg/L	0.000159	55.76%
B 249.677†	1031.1	0.0274	mg/L	0.00050	0.0274	mg/L	0.00050	1.81%
Ca 227.546†	2444.7	22.9	mg/L	0.25	22.9	mg/L	0.25	1.09%
Cd 228.802†	5.0	0.00018	mg/L	0.000108	0.00018	mg/L	0.000108	59.91%
Co 228.616†	11.4	0.00039	mg/L	0.000149	0.00039	mg/L	0.000149	38.67%
Cr 267.716†	473.5	0.00365	mg/L	0.000093	0.00365	mg/L	0.000093	2.56%
Cu 327.393†	769.8	0.00524	mg/L	0.000517	0.00524	mg/L	0.000517	9.88%
Fe 239.562†	843.1	1.83	mg/L	0.071	1.83	mg/L	0.071	3.88%
Mg 279.077†	660.3	0.785	mg/L	0.0155	0.785	mg/L	0.0155	1.97%
Mn 257.610†	10730.3	0.0239	mg/L	0.00038	0.0239	mg/L	0.00038	1.58%
Mo 202.031†	22.6	0.00133	mg/L	0.000237	0.00133	mg/L	0.000237	17.85%
Ni 231.604†	36.8	0.00082	mg/L	0.000185	0.00082	mg/L	0.000185	22.53%
Pb 220.353†	1.4	-0.00088	mg/L	0.001005	-0.00088	mg/L	0.001005	114.68%
Sb 206.836†	12.2	0.00620	mg/L	0.001641	0.00620	mg/L	0.001641	26.49%
Se 196.026†	-12.4	-0.00305	mg/L	0.003458	-0.00305	mg/L	0.003458	113.27%
Si 251.611†	21279.1	0.606	mg/L	0.0142	0.606	mg/L	0.0142	2.35%
Sn 189.927†	1.2	-0.00180	mg/L	0.000524	-0.00180	mg/L	0.000524	29.08%
Ti 334.940†	10919.3	0.0149	mg/L	0.00031	0.0149	mg/L	0.00031	2.06%
Tl 190.801†	34.9	0.0189	mg/L	0.00351	0.0189	mg/L	0.00351	18.60%
V 290.880†	1037.8	0.00726	mg/L	0.000884	0.00726	mg/L	0.000884	12.17%
Zn 206.200†	-756.3	-0.0296	mg/L	0.00093	-0.0296	mg/L	0.00093	3.13%
K 766.490†	28541.8	10.6	mg/L	0.19	10.6	mg/L	0.19	1.75%
Na 589.592†	Saturated2							
Sr 407.771†	238992.5	0.228	mg/L	0.0179	0.228	mg/L	0.0179	7.83%

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Li 670.784†	3966.8	0.0455 mg/L	0.00157	0.0455 mg/L	0.00157	3.44%

Sequence No.: 26 **Autosampler Location: 80**
Sample ID: L1102049201 **Date Collected: 2/22/2011 5:06:46 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049201

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102049201

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5291164.1						60825.44	1.15%
YRADIAL	316277.5						8880.53	2.81%
Ga 417.206	1228241.7						21088.41	1.72%
GaRADIAL	60686.6						1097.59	1.81%
Ag 328.068†	248.3	0.00052	mg/L	0.000515	0.00052	mg/L	0.000515	98.45%
Al 396.153†	353.1	0.0706	mg/L	0.00675	0.0706	mg/L	0.00675	9.56%
As 188.979†	-0.3	-0.00090	mg/L	0.002797	-0.00090	mg/L	0.002797	310.26%
Ba 233.527†	61.1	0.00062	mg/L	0.000075	0.00062	mg/L	0.000075	12.07%
Be 234.861†	-68.8	-0.00013	mg/L	0.000021	-0.00013	mg/L	0.000021	15.83%
B 249.677†	588.4	0.0121	mg/L	0.00047	0.0121	mg/L	0.00047	3.84%
Ca 227.546†	110.3	1.03	mg/L	0.041	1.03	mg/L	0.041	3.94%
Cd 228.802†	6.6	0.00032	mg/L	0.000037	0.00032	mg/L	0.000037	11.62%
Co 228.616†	8.9	0.00031	mg/L	0.000055	0.00031	mg/L	0.000055	17.50%
Cr 267.716†	110.7	0.00053	mg/L	0.000108	0.00053	mg/L	0.000108	20.44%
Cu 327.393†	1431.6	0.00953	mg/L	0.000778	0.00953	mg/L	0.000778	8.17%
Fe 239.562†	67.4	0.148	mg/L	0.0033	0.148	mg/L	0.0033	2.26%
Mg 279.077†	441.6	0.525	mg/L	0.0124	0.525	mg/L	0.0124	2.37%
Mn 257.610†	9077.5	0.0198	mg/L	0.00035	0.0198	mg/L	0.00035	1.76%
Mo 202.031†	53.6	0.00354	mg/L	0.000375	0.00354	mg/L	0.000375	10.60%
Ni 231.604†	5.6	-0.00007	mg/L	0.000132	-0.00007	mg/L	0.000132	180.39%
Pb 220.353†	-8.4	-0.00356	mg/L	0.000850	-0.00356	mg/L	0.000850	23.90%
Sb 206.836†	6.8	0.00287	mg/L	0.002123	0.00287	mg/L	0.002123	74.10%
Se 196.026†	-1.9	-0.00176	mg/L	0.003331	-0.00176	mg/L	0.003331	189.68%
Si 251.611†	14014.3	0.394	mg/L	0.0116	0.394	mg/L	0.0116	2.94%
Sn 189.927†	6.0	-0.00099	mg/L	0.000115	-0.00099	mg/L	0.000115	11.56%
Ti 334.940†	7419.9	0.00989	mg/L	0.000340	0.00989	mg/L	0.000340	3.43%
Tl 190.801†	-0.5	0.00004	mg/L	0.003476	0.00004	mg/L	0.003476	>999.9%
V 290.880†	-257.8	-0.00143	mg/L	0.000698	-0.00143	mg/L	0.000698	48.65%
Zn 206.200†	283.7	0.00142	mg/L	0.000744	0.00142	mg/L	0.000744	52.55%
K 766.490†	1475.7	0.545	mg/L	0.0094	0.545	mg/L	0.0094	1.72%
Na 589.592†	16286.8	1.12	mg/L	0.044	1.12	mg/L	0.044	3.87%
Sr 407.771†	3301.4	0.00278	mg/L	0.000225	0.00278	mg/L	0.000225	8.09%
Li 670.784†	76.1	-0.00100	mg/L	0.000201	-0.00100	mg/L	0.000201	20.03%

Sequence No.: 27 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/22/2011 5:13:25 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4888321.3						30664.19	0.63%
YRADIAL	295538.3						6277.79	2.12%
Ga 417.206	1149113.5						12230.35	1.06%
GaRADIAL	56723.1						991.07	1.75%
Ag 328.068†	81370.8	0.406	mg/L	0.0032	0.406	mg/L	0.0032	0.78%

Approved: February 23, 2011

Pierre Morris

QC value within limits for Ag 328.068 Recovery = 101.46%

Al 396.153†	51589.0	9.94 mg/L	0.021	9.94 mg/L	0.021	0.21%
QC value within limits for Al 396.153 Recovery = 99.36%						
As 188.979†	429.1	0.387 mg/L	0.0052	0.387 mg/L	0.0052	1.35%
QC value within limits for As 188.979 Recovery = 96.66%						
Ba 233.527†	58774.5	0.995 mg/L	0.0060	0.995 mg/L	0.0060	0.60%
QC value within limits for Ba 233.527 Recovery = 99.53%						
Be 234.861†	29294.7	0.0511 mg/L	0.00035	0.0511 mg/L	0.00035	0.69%
QC value within limits for Be 234.861 Recovery = 102.11%						
B 249.677†	26770.8	0.510 mg/L	0.0067	0.510 mg/L	0.0067	1.31%
QC value within limits for B 249.677 Recovery = 101.99%						
Ca 227.546†	1033.6	10.0 mg/L	0.07	10.0 mg/L	0.07	0.71%
QC value within limits for Ca 227.546 Recovery = 100.18%						
Cd 228.802†	872.4	0.0487 mg/L	0.00054	0.0487 mg/L	0.00054	1.10%
QC value within limits for Cd 228.802 Recovery = 97.35%						
Co 228.616†	3790.9	0.192 mg/L	0.0012	0.192 mg/L	0.0012	0.62%
QC value within limits for Co 228.616 Recovery = 95.82%						
Cr 267.716†	56890.7	0.492 mg/L	0.0040	0.492 mg/L	0.0040	0.81%
QC value within limits for Cr 267.716 Recovery = 98.49%						
Cu 327.393†	73954.8	0.503 mg/L	0.0067	0.503 mg/L	0.0067	1.34%
QC value within limits for Cu 327.393 Recovery = 100.62%						
Fe 239.562†	1790.5	3.89 mg/L	0.072	3.89 mg/L	0.072	1.86%
QC value within limits for Fe 239.562 Recovery = 97.24%						
Mg 279.077†	8163.4	9.75 mg/L	0.164	9.75 mg/L	0.164	1.68%
QC value within limits for Mg 279.077 Recovery = 97.47%						
Mn 257.610†	224267.7	0.501 mg/L	0.0025	0.501 mg/L	0.0025	0.51%
QC value within limits for Mn 257.610 Recovery = 100.19%						
Mo 202.031†	13460.3	0.998 mg/L	0.0090	0.998 mg/L	0.0090	0.90%
QC value within limits for Mo 202.031 Recovery = 99.80%						
Ni 231.604†	17107.8	0.495 mg/L	0.0016	0.495 mg/L	0.0016	0.33%
QC value within limits for Ni 231.604 Recovery = 99.04%						
Pb 220.353†	2904.6	0.506 mg/L	0.0050	0.506 mg/L	0.0050	0.98%
QC value within limits for Pb 220.353 Recovery = 101.30%						
Sb 206.836†	1889.7	1.19 mg/L	0.015	1.19 mg/L	0.015	1.29%
QC value within limits for Sb 206.836 Recovery = 99.32%						
Se 196.026†	551.0	0.385 mg/L	0.0026	0.385 mg/L	0.0026	0.68%
QC value within limits for Se 196.026 Recovery = 96.30%						
Si 251.611†	172655.9	5.01 mg/L	0.036	5.01 mg/L	0.036	0.72%
QC value within limits for Si 251.611 Recovery = 100.11%						
Sn 189.927†	5747.7	0.978 mg/L	0.0058	0.978 mg/L	0.0058	0.59%
QC value within limits for Sn 189.927 Recovery = 97.77%						
Ti 334.940†	729865.7	0.997 mg/L	0.0032	0.997 mg/L	0.0032	0.32%
QC value within limits for Ti 334.940 Recovery = 99.74%						
Tl 190.801†	832.1	0.499 mg/L	0.0061	0.499 mg/L	0.0061	1.21%
QC value within limits for Tl 190.801 Recovery = 99.90%						
V 290.880†	149016.5	0.985 mg/L	0.0082	0.985 mg/L	0.0082	0.83%
QC value within limits for V 290.880 Recovery = 98.49%						
Zn 206.200†	31395.4	0.931 mg/L	0.0015	0.931 mg/L	0.0015	0.16%
QC value within limits for Zn 206.200 Recovery = 93.10%						
K 766.490†	132503.2	49.4 mg/L	0.23	49.4 mg/L	0.23	0.47%
QC value within limits for K 766.490 Recovery = 98.75%						
Na 589.592†	689064.4	49.4 mg/L	0.56	49.4 mg/L	0.56	1.14%
QC value within limits for Na 589.592 Recovery = 98.89%						
Sr 407.771†	970155.6	0.929 mg/L	0.0856	0.929 mg/L	0.0856	9.22%
QC value within limits for Sr 407.771 Recovery = 92.88%						
Li 670.784†	82534.1	0.984 mg/L	0.0011	0.984 mg/L	0.0011	0.11%
QC value within limits for Li 670.784 Recovery = 98.44%						

All analyte(s) passed QC.

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Sequence No.: 28 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/22/2011 5:20:07 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: CCB

Approved: February 23, 2011

Pierre Morris

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5124617.0						95125.98	1.86%
YRADIAL	299807.0						2697.19	0.90%
Ga 417.206	1185075.1						24266.74	2.05%
GaRADIAL	57272.3						702.76	1.23%
Ag 328.068†	341.6	0.00100	mg/L	0.000550	0.00100	mg/L	0.000550	55.00%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-43.8	-0.00589	mg/L	0.017093	-0.00589	mg/L	0.017093	290.40%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.3	-0.00032	mg/L	0.000596	-0.00032	mg/L	0.000596	183.94%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	15.5	-0.00015	mg/L	0.000077	-0.00015	mg/L	0.000077	50.78%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-34.2	-0.00005	mg/L	0.000027	-0.00005	mg/L	0.000027	50.53%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	529.4	0.0104	mg/L	0.00018	0.0104	mg/L	0.00018	1.70%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	1.2	0.0107	mg/L	0.06907	0.0107	mg/L	0.06907	646.79%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	4.3	0.00018	mg/L	0.000220	0.00018	mg/L	0.000220	119.80%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	7.0	0.00024	mg/L	0.000091	0.00024	mg/L	0.000091	37.41%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-17.6	-0.00058	mg/L	0.000029	-0.00058	mg/L	0.000029	5.08%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	141.4	0.00075	mg/L	0.000618	0.00075	mg/L	0.000618	82.39%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	2.3	0.00623	mg/L	0.005004	0.00623	mg/L	0.005004	80.26%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	0.2	-0.00182	mg/L	0.001307	-0.00182	mg/L	0.001307	71.93%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	3.6	-0.00042	mg/L	0.000031	-0.00042	mg/L	0.000031	7.47%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.8	0.00006	mg/L	0.000233	0.00006	mg/L	0.000233	367.97%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	1.4	-0.00019	mg/L	0.000417	-0.00019	mg/L	0.000417	213.87%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-9.2	-0.00376	mg/L	0.000674	-0.00376	mg/L	0.000674	17.93%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.5	-0.00114	mg/L	0.001392	-0.00114	mg/L	0.001392	122.49%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	3.5	0.00170	mg/L	0.001888	0.00170	mg/L	0.001888	110.80%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	63.2	-0.0125	mg/L	0.00094	-0.0125	mg/L	0.00094	7.52%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	4.1	-0.00131	mg/L	0.000876	-0.00131	mg/L	0.000876	66.93%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	202.1	0.00002	mg/L	0.000127	0.00002	mg/L	0.000127	743.32%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.9	0.00194	mg/L	0.002951	0.00194	mg/L	0.002951	152.12%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-227.3	-0.00124	mg/L	0.001464	-0.00124	mg/L	0.001464	117.92%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-1257.8	-0.0445	mg/L	0.00030	-0.0445	mg/L	0.00030	0.68%
QC value less than the lower limit for Zn 206.200 Recovery = Not calculated								
K 766.490†	67.8	0.0255	mg/L	0.00315	0.0255	mg/L	0.00315	12.34%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	2094.3	0.137	mg/L	0.0261	0.137	mg/L	0.0261	18.96%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	590.9	0.00020	mg/L	0.000458	0.00020	mg/L	0.000458	234.28%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	111.3	-0.00058	mg/L	0.001362	-0.00058	mg/L	0.001362	234.47%
QC value within limits for Li 670.784 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 29 **Autosampler Location: 81**
Sample ID: PBW R3 WG356894-02 **Date Collected: 2/22/2011 5:26:47 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 23, 2011

Pierce Morris

Nebulizer Parameters: PBW R3 WG356894-02

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: PBW R3 WG356894-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5220628.6						67759.27	1.30%
YRADIAL	310099.8						7422.85	2.39%
Ga 417.206	1239687.2						19293.75	1.56%
GaRADIAL	58984.6						2110.31	3.58%
Ag 328.068†	399.8	0.00129	mg/L	0.000901	0.00129	mg/L	0.000901	69.86%
Al 396.153†	-37.2	-0.00461	mg/L	0.004846	-0.00461	mg/L	0.004846	105.10%
As 188.979†	2.3	0.00150	mg/L	0.000904	0.00150	mg/L	0.000904	60.27%
Ba 233.527†	34.7	0.00017	mg/L	0.000015	0.00017	mg/L	0.000015	8.96%
Be 234.861†	-6.8	-0.00001	mg/L	0.000030	-0.00001	mg/L	0.000030	458.90%
B 249.677†	402.9	0.00806	mg/L	0.000418	0.00806	mg/L	0.000418	5.18%
Ca 227.546†	6.0	0.0560	mg/L	0.03855	0.0560	mg/L	0.03855	68.81%
Cd 228.802†	1.7	0.00003	mg/L	0.000104	0.00003	mg/L	0.000104	404.83%
Co 228.616†	9.0	0.00034	mg/L	0.000213	0.00034	mg/L	0.000213	61.92%
Cr 267.716†	-18.8	-0.00059	mg/L	0.000047	-0.00059	mg/L	0.000047	8.03%
Cu 327.393†	101.2	0.00048	mg/L	0.000461	0.00048	mg/L	0.000461	96.64%
Fe 239.562†	1.4	0.00432	mg/L	0.004313	0.00432	mg/L	0.004313	99.86%
Mg 279.077†	3.9	0.00264	mg/L	0.006485	0.00264	mg/L	0.006485	245.75%
Mn 257.610†	-55.8	-0.00055	mg/L	0.000013	-0.00055	mg/L	0.000013	2.37%
Mo 202.031†	8.4	0.00018	mg/L	0.000249	0.00018	mg/L	0.000249	140.55%
Ni 231.604†	-6.7	-0.00043	mg/L	0.000447	-0.00043	mg/L	0.000447	104.44%
Pb 220.353†	-11.2	-0.00410	mg/L	0.000649	-0.00410	mg/L	0.000649	15.83%
Sb 206.836†	0.2	-0.00134	mg/L	0.000716	-0.00134	mg/L	0.000716	53.55%
Se 196.026†	1.7	0.00046	mg/L	0.001125	0.00046	mg/L	0.001125	245.63%
Si 251.611†	81.3	-0.0120	mg/L	0.00002	-0.0120	mg/L	0.00002	0.13%
Sn 189.927†	-5.5	-0.00294	mg/L	0.000409	-0.00294	mg/L	0.000409	13.90%
Ti 334.940†	194.9	0.00001	mg/L	0.000058	0.00001	mg/L	0.000058	746.96%
Tl 190.801†	0.1	0.00031	mg/L	0.002061	0.00031	mg/L	0.002061	662.60%
V 290.880†	-288.0	-0.00164	mg/L	0.000433	-0.00164	mg/L	0.000433	26.32%
Zn 206.200†	-1254.9	-0.0444	mg/L	0.00025	-0.0444	mg/L	0.00025	0.56%
K 766.490†	49.2	0.0187	mg/L	0.02507	0.0187	mg/L	0.02507	134.11%
Na 589.592†	1460.8	0.0935	mg/L	0.00475	0.0935	mg/L	0.00475	5.08%
Sr 407.771†	458.5	0.00007	mg/L	0.000065	0.00007	mg/L	0.000065	94.61%
Li 670.784†	171.3	0.00014	mg/L	0.000120	0.00014	mg/L	0.000120	88.07%

Sequence No.: 30 WG356894-03 **Autosampler Location: 82**
Sample ID: LCSW R3 ~~WG3568934-03~~ **Date Collected: 2/22/2011 5:33:26 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

WG356894-03

Nebulizer Parameters: LCSW R3 ~~WG3568934-03~~

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

WG356894-03

Mean Data: LCSW R3 ~~WG3568934-03~~

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4913663.7						57886.04	1.18%
YRADIAL	307078.1						11036.75	3.59%
Ga 417.206	1176918.3						17904.86	1.52%
GaRADIAL	58419.2						1042.19	1.78%
Ag 328.068†	40110.8	0.200	mg/L	0.0040	0.200	mg/L	0.0040	1.98%
Al 396.153†	25846.9	4.98	mg/L	0.025	4.98	mg/L	0.025	0.50%
As 188.979†	214.3	0.193	mg/L	0.0069	0.193	mg/L	0.0069	3.56%
Ba 233.527†	29489.7	0.499	mg/L	0.0059	0.499	mg/L	0.0059	1.18%
Be 234.861†	14265.0	0.0249	mg/L	0.00034	0.0249	mg/L	0.00034	1.35%
B 249.677†	53470.3	1.01	mg/L	0.017	1.01	mg/L	0.017	1.73%
Ca 227.546†	522.9	5.06	mg/L	0.097	5.06	mg/L	0.097	1.91%
Cd 228.802†	433.3	0.0242	mg/L	0.00049	0.0242	mg/L	0.00049	2.01%
Co 228.616†	1936.6	0.0979	mg/L	0.00144	0.0979	mg/L	0.00144	1.47%
Cr 267.716†	28266.2	0.244	mg/L	0.0023	0.244	mg/L	0.0023	0.95%

Approved: February 23, 2011

Pierre Morris

Cu 327.393†	35843.6	0.244	mg/L	0.0054	0.244	mg/L	0.0054	2.23%
Fe 239.562†	878.3	1.91	mg/L	0.050	1.91	mg/L	0.050	2.63%
Mg 279.077†	4063.4	4.85	mg/L	0.151	4.85	mg/L	0.151	3.10%
Mn 257.610†	113595.2	0.254	mg/L	0.0028	0.254	mg/L	0.0028	1.09%
Mo 202.031†	6699.7	0.497	mg/L	0.0042	0.497	mg/L	0.0042	0.85%
Ni 231.604†	8523.7	0.247	mg/L	0.0028	0.247	mg/L	0.0028	1.13%
Pb 220.353†	1471.5	0.255	mg/L	0.0035	0.255	mg/L	0.0035	1.37%
Sb 206.836†	942.4	0.594	mg/L	0.0083	0.594	mg/L	0.0083	1.40%
Se 196.026†	268.2	0.187	mg/L	0.0062	0.187	mg/L	0.0062	3.30%
Si 251.611†	87049.1	2.52	mg/L	0.047	2.52	mg/L	0.047	1.85%
Sn 189.927†	-11.7	-0.00400	mg/L	0.000417	-0.00400	mg/L	0.000417	10.42%
Ti 334.940†	361140.0	0.493	mg/L	0.0054	0.493	mg/L	0.0054	1.10%
Tl 190.801†	428.1	0.257	mg/L	0.0052	0.257	mg/L	0.0052	2.02%
V 290.880†	73804.9	0.488	mg/L	0.0067	0.488	mg/L	0.0067	1.38%
Zn 206.200†	14906.4	0.438	mg/L	0.0049	0.438	mg/L	0.0049	1.12%
K 766.490†	65049.2	24.1	mg/L	0.27	24.1	mg/L	0.27	1.11%
Na 589.592†	343287.4	24.2	mg/L	0.30	24.2	mg/L	0.30	1.25%
Sr 407.771†	480379.4	0.460	mg/L	0.0391	0.460	mg/L	0.0391	8.51%
Li 670.784†	40995.5	0.488	mg/L	0.0054	0.488	mg/L	0.0054	1.10%

Sequence No.: 31 **Autosampler Location: 83**
Sample ID: L1102044501 WG356894-01 **Date Collected: 2/22/2011 5:40:07 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102044501 WG356894-01

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102044501 WG356894-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4994561.2						37078.29	0.74%
YRADIAL	300810.5						8738.80	2.91%
Ga 417.206	1228390.0						19731.03	1.61%
GaRADIAL	59313.8						799.56	1.35%
Ag 328.068†	618.2	0.00235	mg/L	0.000300	0.00235	mg/L	0.000300	12.76%
Al 396.153†	-74.9	-0.0119	mg/L	0.01453	-0.0119	mg/L	0.01453	122.30%
As 188.979†	4.4	0.00262	mg/L	0.001970	0.00262	mg/L	0.001970	75.14%
Ba 233.527†	55.2	0.00050	mg/L	0.000047	0.00050	mg/L	0.000047	9.41%
Be 234.861†	-4.4	0.00000	mg/L	0.000016	0.00000	mg/L	0.000016	>999.9%
B 249.677†	626.4	0.0123	mg/L	0.00046	0.0123	mg/L	0.00046	3.75%
Ca 227.546†	4015.8	37.6	mg/L	0.68	37.6	mg/L	0.68	1.81%
Cd 228.802†	2.1	0.00004	mg/L	0.000108	0.00004	mg/L	0.000108	264.50%
Co 228.616†	14.3	0.00062	mg/L	0.000263	0.00062	mg/L	0.000263	42.39%
Cr 267.716†	91.7	0.00035	mg/L	0.000126	0.00035	mg/L	0.000126	35.85%
Cu 327.393†	-33.5	-0.00044	mg/L	0.000566	-0.00044	mg/L	0.000566	128.77%
Fe 239.562†	5.3	0.0115	mg/L	0.00721	0.0115	mg/L	0.00721	62.59%
Mg 279.077†	37413.4	44.7	mg/L	0.18	44.7	mg/L	0.18	0.40%
Mn 257.610†	15092.8	0.0326	mg/L	0.00070	0.0326	mg/L	0.00070	2.15%
Mo 202.031†	10.4	0.00034	mg/L	0.000067	0.00034	mg/L	0.000067	20.00%
Ni 231.604†	70.4	0.00178	mg/L	0.000222	0.00178	mg/L	0.000222	12.49%
Pb 220.353†	-18.6	-0.00358	mg/L	0.001600	-0.00358	mg/L	0.001600	44.67%
Sb 206.836†	10.4	0.00512	mg/L	0.001807	0.00512	mg/L	0.001807	35.29%
Se 196.026†	-19.3	-0.00475	mg/L	0.002345	-0.00475	mg/L	0.002345	49.41%
Si 251.611†	9269.4	0.256	mg/L	0.0065	0.256	mg/L	0.0065	2.53%
Sn 189.927†	3.6	-0.00140	mg/L	0.000258	-0.00140	mg/L	0.000258	18.44%
Ti 334.940†	-334.1	-0.00034	mg/L	0.000245	-0.00034	mg/L	0.000245	72.12%
Tl 190.801†	78.4	0.0429	mg/L	0.00273	0.0429	mg/L	0.00273	6.36%
V 290.880†	-1500.9	-0.00966	mg/L	0.001786	-0.00966	mg/L	0.001786	18.49%
Zn 206.200†	-1163.7	-0.0417	mg/L	0.00017	-0.0417	mg/L	0.00017	0.42%
K 766.490†	2743.5	1.00	mg/L	0.048	1.00	mg/L	0.048	4.81%
Na 589.592†	155117.5	10.8	mg/L	0.08	10.8	mg/L	0.08	0.71%
Sr 407.771†	52052.0	0.0495	mg/L	0.00376	0.0495	mg/L	0.00376	7.59%
Li 670.784†	317.3	0.00188	mg/L	0.000714	0.00188	mg/L	0.000714	37.96%

Sequence No.: 32 **Autosampler Location: 84**
Sample ID: L1102044501D WG356894-04 **Date Collected: 2/22/2011 5:46:45 PM**

Approved: February 23, 2011

Pierre Morris

Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102044501D WG356894-04

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102044501D WG356894-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4895924.6						46843.68	0.96%
YRADIAL	291651.6						2574.58	0.88%
Ga 417.206	1197237.7						12649.83	1.06%
GaRADIAL	57165.2						977.77	1.71%
Ag 328.068†	566.2	0.00209	mg/L	0.000778	0.00209	mg/L	0.000778	37.19%
Al 396.153†	-19.7	-0.00123	mg/L	0.010162	-0.00123	mg/L	0.010162	823.39%
As 188.979†	4.8	0.00299	mg/L	0.001483	0.00299	mg/L	0.001483	49.56%
Ba 233.527†	47.9	0.00038	mg/L	0.000107	0.00038	mg/L	0.000107	28.33%
Be 234.861†	-19.7	-0.00003	mg/L	0.000036	-0.00003	mg/L	0.000036	140.72%
B 249.677†	580.9	0.0114	mg/L	0.00015	0.0114	mg/L	0.00015	1.31%
Ca 227.546†	4228.9	39.6	mg/L	0.57	39.6	mg/L	0.57	1.43%
Cd 228.802†	1.7	0.00002	mg/L	0.000031	0.00002	mg/L	0.000031	202.90%
Co 228.616†	12.8	0.00054	mg/L	0.000148	0.00054	mg/L	0.000148	27.39%
Cr 267.716†	84.6	0.00029	mg/L	0.000166	0.00029	mg/L	0.000166	57.40%
Cu 327.393†	-40.9	-0.00049	mg/L	0.000506	-0.00049	mg/L	0.000506	103.33%
Fe 239.562†	3.3	0.00697	mg/L	0.010222	0.00697	mg/L	0.010222	146.76%
Mg 279.077†	39699.5	47.4	mg/L	0.10	47.4	mg/L	0.10	0.21%
Mn 257.610†	15963.0	0.0345	mg/L	0.00066	0.0345	mg/L	0.00066	1.92%
Mo 202.031†	2.9	-0.00022	mg/L	0.000617	-0.00022	mg/L	0.000617	278.95%
Ni 231.604†	78.9	0.00202	mg/L	0.000130	0.00202	mg/L	0.000130	6.42%
Pb 220.353†	-22.5	-0.00416	mg/L	0.000198	-0.00416	mg/L	0.000198	4.76%
Sb 206.836†	8.2	0.00370	mg/L	0.001548	0.00370	mg/L	0.001548	41.89%
Se 196.026†	-22.7	-0.00659	mg/L	0.002879	-0.00659	mg/L	0.002879	43.68%
Si 251.611†	9766.8	0.270	mg/L	0.0059	0.270	mg/L	0.0059	2.18%
Sn 189.927†	-0.8	-0.00215	mg/L	0.000297	-0.00215	mg/L	0.000297	13.84%
Ti 334.940†	-325.9	-0.00031	mg/L	0.000295	-0.00031	mg/L	0.000295	95.73%
Tl 190.801†	72.9	0.0395	mg/L	0.00427	0.0395	mg/L	0.00427	10.81%
V 290.880†	-1381.9	-0.00887	mg/L	0.000473	-0.00887	mg/L	0.000473	5.33%
Zn 206.200†	-1163.2	-0.0417	mg/L	0.00014	-0.0417	mg/L	0.00014	0.33%
K 766.490†	2994.3	1.10	mg/L	0.048	1.10	mg/L	0.048	4.43%
Na 589.592†	164840.1	11.5	mg/L	0.10	11.5	mg/L	0.10	0.89%
Sr 407.771†	54422.7	0.0518	mg/L	0.00434	0.0518	mg/L	0.00434	8.38%
Li 670.784†	371.2	0.00252	mg/L	0.002059	0.00252	mg/L	0.002059	81.56%

Sequence No.: 33 WG356894-05 **Autosampler Location: 85**
Sample ID: L1102044501S ~~WG357894-05~~ **Date Collected: 2/22/2011 5:53:25 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

---WG356894-05---

Nebulizer Parameters: L1102044501S ~~WG357894-05~~

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

---WG356894-05---

Mean Data: L1102044501S ~~WG357894-05~~

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5031406.7						58848.11	1.17%
YRADIAL	297483.4						5253.70	1.77%
Ga 417.206	1237455.7						22632.39	1.83%
GaRADIAL	58409.2						2051.84	3.51%
Ag 328.068†	4462.7	0.0216	mg/L	0.00010	0.0216	mg/L	0.00010	0.48%
Al 396.153†	2639.7	0.511	mg/L	0.0093	0.511	mg/L	0.0093	1.81%
As 188.979†	28.1	0.0241	mg/L	0.00481	0.0241	mg/L	0.00481	20.00%
Ba 233.527†	2951.1	0.0496	mg/L	0.00029	0.0496	mg/L	0.00029	0.59%
Be 234.861†	1369.9	0.00240	mg/L	0.000012	0.00240	mg/L	0.000012	0.52%
B 249.677†	5450.4	0.103	mg/L	0.0020	0.103	mg/L	0.0020	1.89%

Approved: February 23, 2011

Pierre Morris

Ca 227.546†	4116.9	38.6	mg/L	0.61	38.6	mg/L	0.61	1.57%
Cd 228.802†	42.6	0.00228	mg/L	0.000122	0.00228	mg/L	0.000122	5.36%
Co 228.616†	189.8	0.00949	mg/L	0.000143	0.00949	mg/L	0.000143	1.51%
Cr 267.716†	2929.7	0.0249	mg/L	0.00032	0.0249	mg/L	0.00032	1.27%
Cu 327.393†	3317.8	0.0224	mg/L	0.00076	0.0224	mg/L	0.00076	3.39%
Fe 239.562†	97.6	0.212	mg/L	0.0062	0.212	mg/L	0.0062	2.95%
Mg 279.077†	39022.1	46.6	mg/L	1.00	46.6	mg/L	1.00	2.15%
Mn 257.610†	26352.5	0.0577	mg/L	0.00053	0.0577	mg/L	0.00053	0.92%
Mo 202.031†	676.4	0.0497	mg/L	0.00137	0.0497	mg/L	0.00137	2.76%
Ni 231.604†	907.9	0.0260	mg/L	0.00024	0.0260	mg/L	0.00024	0.92%
Pb 220.353†	121.1	0.0209	mg/L	0.00102	0.0209	mg/L	0.00102	4.89%
Sb 206.836†	99.5	0.0614	mg/L	0.00106	0.0614	mg/L	0.00106	1.73%
Se 196.026†	8.2	0.0146	mg/L	0.00158	0.0146	mg/L	0.00158	10.83%
Si 251.611†	17500.2	0.495	mg/L	0.0026	0.495	mg/L	0.0026	0.53%
Sn 189.927†	-4.7	-0.00281	mg/L	0.000407	-0.00281	mg/L	0.000407	14.51%
Ti 334.940†	35315.9	0.0484	mg/L	0.00077	0.0484	mg/L	0.00077	1.59%
Tl 190.801†	120.6	0.0682	mg/L	0.00040	0.0682	mg/L	0.00040	0.58%
V 290.880†	5987.1	0.0398	mg/L	0.00166	0.0398	mg/L	0.00166	4.17%
Zn 206.200†	363.8	0.00391	mg/L	0.000749	0.00391	mg/L	0.000749	19.13%
K 766.490†	9298.3	3.42	mg/L	0.049	3.42	mg/L	0.049	1.42%
Na 589.592†	194784.8	13.6	mg/L	0.37	13.6	mg/L	0.37	2.69%
Sr 407.771†	102850.9	0.0982	mg/L	0.00756	0.0982	mg/L	0.00756	7.70%
Li 670.784†	4300.9	0.0495	mg/L	0.00094	0.0495	mg/L	0.00094	1.90%

Sequence No.: 34 **Autosampler Location: 86**
Sample ID: L1102044502 DL0.1 **Date Collected: 2/22/2011 6:00:09 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102044502 DL0.1

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102044502 DL0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4973185.5						24231.59	0.49%
YRADIAL	296394.7						6143.75	2.07%
Ga 417.206	1231758.2						5762.10	0.47%
GaRADIAL	58006.1						574.23	0.99%
Ag 328.068†	626.8	0.00239	mg/L	0.000537	0.00239	mg/L	0.000537	22.46%
Al 396.153†	-55.9	-0.00823	mg/L	0.002806	-0.00823	mg/L	0.002806	34.10%
As 188.979†	3.3	0.00167	mg/L	0.002991	0.00167	mg/L	0.002991	179.49%
Ba 233.527†	115.8	0.00153	mg/L	0.000123	0.00153	mg/L	0.000123	8.06%
Be 234.861†	3.0	0.00002	mg/L	0.000012	0.00002	mg/L	0.000012	80.28%
B 249.677†	453.0	0.00902	mg/L	0.000330	0.00902	mg/L	0.000330	3.66%
Ca 227.546†	3986.5	37.4	mg/L	0.23	37.4	mg/L	0.23	0.62%
Cd 228.802†	4.2	0.00017	mg/L	0.000011	0.00017	mg/L	0.000011	6.36%
Co 228.616†	20.2	0.00092	mg/L	0.000327	0.00092	mg/L	0.000327	35.52%
Cr 267.716†	91.0	0.00034	mg/L	0.000044	0.00034	mg/L	0.000044	12.86%
Cu 327.393†	-111.1	-0.00097	mg/L	0.000800	-0.00097	mg/L	0.000800	82.80%
Fe 239.562†	3.3	0.00713	mg/L	0.002813	0.00713	mg/L	0.002813	39.46%
Mg 279.077†	37793.2	45.1	mg/L	0.07	45.1	mg/L	0.07	0.16%
Mn 257.610†	17722.7	0.0384	mg/L	0.00019	0.0384	mg/L	0.00019	0.50%
Mo 202.031†	13.0	0.00053	mg/L	0.000392	0.00053	mg/L	0.000392	74.10%
Ni 231.604†	77.0	0.00197	mg/L	0.000356	0.00197	mg/L	0.000356	18.05%
Pb 220.353†	-24.6	-0.00464	mg/L	0.001102	-0.00464	mg/L	0.001102	23.77%
Sb 206.836†	8.2	0.00370	mg/L	0.002220	0.00370	mg/L	0.002220	60.04%
Se 196.026†	-18.9	-0.00452	mg/L	0.002574	-0.00452	mg/L	0.002574	56.95%
Si 251.611†	9255.9	0.256	mg/L	0.0013	0.256	mg/L	0.0013	0.51%
Sn 189.927†	1.4	-0.00178	mg/L	0.000817	-0.00178	mg/L	0.000817	45.88%
Ti 334.940†	-324.6	-0.00033	mg/L	0.000113	-0.00033	mg/L	0.000113	34.38%
Tl 190.801†	75.3	0.0411	mg/L	0.00575	0.0411	mg/L	0.00575	14.01%
V 290.880†	-1450.5	-0.00933	mg/L	0.000783	-0.00933	mg/L	0.000783	8.40%
Zn 206.200†	-1205.0	-0.0430	mg/L	0.00032	-0.0430	mg/L	0.00032	0.73%
K 766.490†	2763.4	1.01	mg/L	0.031	1.01	mg/L	0.031	3.04%
Na 589.592†	156808.8	11.0	mg/L	0.10	11.0	mg/L	0.10	0.89%
Sr 407.771†	51998.5	0.0495	mg/L	0.00434	0.0495	mg/L	0.00434	8.78%
Li 670.784†	391.1	0.00276	mg/L	0.000915	0.00276	mg/L	0.000915	33.12%

Approved: February 23, 2011

Pierce Morris

Sequence No.: 35 **Autosampler Location: 87**
Sample ID: L1102044503 DL0.1 **Date Collected: 2/22/2011 6:06:54 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102044503 DL0.1

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102044503 DL0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4946782.1						76130.99	1.54%
YRADIAL	294733.9						4124.49	1.40%
Ga 417.206	1207075.7						32747.93	2.71%
GaRADIAL	57789.5						270.29	0.47%
Ag 328.068†	463.0	0.00158	mg/L	0.000492	0.00158	mg/L	0.000492	31.11%
Al 396.153†	-54.1	-0.00788	mg/L	0.012387	-0.00788	mg/L	0.012387	157.15%
As 188.979†	4.7	0.00298	mg/L	0.003424	0.00298	mg/L	0.003424	114.85%
Ba 233.527†	49.9	0.00041	mg/L	0.000091	0.00041	mg/L	0.000091	22.18%
Be 234.861†	-2.8	0.00000	mg/L	0.000012	0.00000	mg/L	0.000012	647.52%
B 249.677†	382.8	0.00771	mg/L	0.000345	0.00771	mg/L	0.000345	4.48%
Ca 227.546†	3677.2	34.5	mg/L	0.83	34.5	mg/L	0.83	2.41%
Cd 228.802†	1.0	-0.00003	mg/L	0.000156	-0.00003	mg/L	0.000156	562.28%
Co 228.616†	5.5	0.00017	mg/L	0.000238	0.00017	mg/L	0.000238	142.32%
Cr 267.716†	91.8	0.00036	mg/L	0.000020	0.00036	mg/L	0.000020	5.63%
Cu 327.393†	-130.5	-0.00110	mg/L	0.000529	-0.00110	mg/L	0.000529	48.18%
Fe 239.562†	3.7	0.00806	mg/L	0.003610	0.00806	mg/L	0.003610	44.80%
Mg 279.077†	36456.9	43.5	mg/L	0.12	43.5	mg/L	0.12	0.28%
Mn 257.610†	5891.3	0.0122	mg/L	0.00020	0.0122	mg/L	0.00020	1.60%
Mo 202.031†	14.3	0.00062	mg/L	0.000214	0.00062	mg/L	0.000214	34.35%
Ni 231.604†	31.9	0.00067	mg/L	0.000196	0.00067	mg/L	0.000196	29.42%
Pb 220.353†	-16.7	-0.00340	mg/L	0.001064	-0.00340	mg/L	0.001064	31.32%
Sb 206.836†	6.3	0.00250	mg/L	0.000951	0.00250	mg/L	0.000951	38.01%
Se 196.026†	-23.4	-0.00840	mg/L	0.005427	-0.00840	mg/L	0.005427	64.61%
Si 251.611†	8884.8	0.245	mg/L	0.0071	0.245	mg/L	0.0071	2.89%
Sn 189.927†	2.5	-0.00158	mg/L	0.000294	-0.00158	mg/L	0.000294	18.62%
Ti 334.940†	-343.9	-0.00038	mg/L	0.000195	-0.00038	mg/L	0.000195	50.74%
Tl 190.801†	68.9	0.0375	mg/L	0.00234	0.0375	mg/L	0.00234	6.23%
V 290.880†	-1443.1	-0.00928	mg/L	0.002081	-0.00928	mg/L	0.002081	22.42%
Zn 206.200†	-1266.9	-0.0448	mg/L	0.00025	-0.0448	mg/L	0.00025	0.57%
K 766.490†	2089.8	0.757	mg/L	0.0332	0.757	mg/L	0.0332	4.38%
Na 589.592†	223800.3	15.7	mg/L	0.15	15.7	mg/L	0.15	0.93%
Sr 407.771†	42866.5	0.0407	mg/L	0.00338	0.0407	mg/L	0.00338	8.29%
Li 670.784†	291.7	0.00157	mg/L	0.000159	0.00157	mg/L	0.000159	10.07%

Sequence No.: 36 **Autosampler Location: 88**
Sample ID: L1102044504 DL0.1 **Date Collected: 2/22/2011 6:13:36 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102044504 DL0.1

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102044504 DL0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4992332.0						48588.71	0.97%
YRADIAL	303023.3						12993.55	4.29%
Ga 417.206	1223833.3						3960.99	0.32%
GaRADIAL	59505.3						1528.10	2.57%
Ag 328.068†	609.4	0.00231	mg/L	0.000387	0.00231	mg/L	0.000387	16.77%
Al 396.153†	-27.2	-0.00270	mg/L	0.006596	-0.00270	mg/L	0.006596	244.48%

Approved: February 23, 2011

Pierre Morris

As 188.979†	6.9	0.00499	mg/L	0.002415	0.00499	mg/L	0.002415 48.43%
Ba 233.527†	76.7	0.00086	mg/L	0.000064	0.00086	mg/L	0.000064 7.44%
Be 234.861†	0.4	0.00001	mg/L	0.000034	0.00001	mg/L	0.000034 533.96%
B 249.677†	330.1	0.00672	mg/L	0.000113	0.00672	mg/L	0.000113 1.68%
Ca 227.546†	3573.7	33.5	mg/L	0.23	33.5	mg/L	0.23 0.70%
Cd 228.802†	1.3	-0.00002	mg/L	0.000113	-0.00002	mg/L	0.000113 500.09%
Co 228.616†	9.2	0.00036	mg/L	0.000072	0.00036	mg/L	0.000072 20.07%
Cr 267.716†	86.6	0.00032	mg/L	0.000084	0.00032	mg/L	0.000084 26.49%
Cu 327.393†	-86.5	-0.00080	mg/L	0.000407	-0.00080	mg/L	0.000407 50.96%
Fe 239.562†	4.7	0.0101	mg/L	0.00382	0.0101	mg/L	0.00382 37.66%
Mg 279.077†	35457.3	42.3	mg/L	2.05	42.3	mg/L	2.05 4.84%
Mn 257.610†	6247.2	0.0130	mg/L	0.00008	0.0130	mg/L	0.00008 0.59%
Mo 202.031†	8.8	0.00021	mg/L	0.000154	0.00021	mg/L	0.000154 72.29%
Ni 231.604†	49.2	0.00117	mg/L	0.000335	0.00117	mg/L	0.000335 28.73%
Pb 220.353†	-25.0	-0.00488	mg/L	0.000262	-0.00488	mg/L	0.000262 5.38%
Sb 206.836†	6.4	0.00257	mg/L	0.001693	0.00257	mg/L	0.001693 65.75%
Se 196.026†	-22.3	-0.00786	mg/L	0.006821	-0.00786	mg/L	0.006821 86.75%
Si 251.611†	8434.4	0.232	mg/L	0.0027	0.232	mg/L	0.0027 1.15%
Sn 189.927†	3.3	-0.00144	mg/L	0.000196	-0.00144	mg/L	0.000196 13.58%
Ti 334.940†	-364.3	-0.00042	mg/L	0.000124	-0.00042	mg/L	0.000124 29.43%
Tl 190.801†	73.0	0.0400	mg/L	0.00407	0.0400	mg/L	0.00407 10.17%
V 290.880†	-1507.3	-0.00970	mg/L	0.000946	-0.00970	mg/L	0.000946 9.74%
Zn 206.200†	-1317.6	-0.0463	mg/L	0.00015	-0.0463	mg/L	0.00015 0.31%
K 766.490†	1960.0	0.709	mg/L	0.0558	0.709	mg/L	0.0558 7.86%
Na 589.592†	218083.0	15.3	mg/L	0.11	15.3	mg/L	0.11 0.73%
Sr 407.771†	41802.0	0.0397	mg/L	0.00266	0.0397	mg/L	0.00266 6.71%
Li 670.784†	379.4	0.00262	mg/L	0.002257	0.00262	mg/L	0.002257 86.03%

Sequence No.: 37 **Autosampler Location: 89**
Sample ID: L1102044505 DL0.1 **Date Collected: 2/22/2011 6:20:23 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102044505 DL0.1

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102044505 DL0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4976345.6						44797.81	0.90%
YRADIAL	291469.5						581.36	0.20%
Ga 417.206	1236260.0						16268.62	1.32%
GaRADIAL	57562.1						831.81	1.45%
Ag 328.068†	579.9	0.00216	mg/L	0.000600	0.00216	mg/L	0.000600	27.78%
Al 396.153†	-96.2	-0.0160	mg/L	0.00541	-0.0160	mg/L	0.00541	33.79%
As 188.979†	6.0	0.00414	mg/L	0.003406	0.00414	mg/L	0.003406	82.30%
Ba 233.527†	47.5	0.00037	mg/L	0.000113	0.00037	mg/L	0.000113	30.81%
Be 234.861†	16.8	0.00004	mg/L	0.000006	0.00004	mg/L	0.000006	16.61%
B 249.677†	246.2	0.00514	mg/L	0.000231	0.00514	mg/L	0.000231	4.49%
Ca 227.546†	3925.7	36.8	mg/L	0.44	36.8	mg/L	0.44	1.19%
Cd 228.802†	1.1	-0.00002	mg/L	0.000124	-0.00002	mg/L	0.000124	523.70%
Co 228.616†	14.1	0.00061	mg/L	0.000322	0.00061	mg/L	0.000322	52.73%
Cr 267.716†	146.1	0.00083	mg/L	0.000100	0.00083	mg/L	0.000100	11.97%
Cu 327.393†	-76.5	-0.00073	mg/L	0.000218	-0.00073	mg/L	0.000218	29.67%
Fe 239.562†	2.8	0.00519	mg/L	0.002400	0.00519	mg/L	0.002400	46.24%
Mg 279.077†	61071.3	72.9	mg/L	0.33	72.9	mg/L	0.33	0.46%
Mn 257.610†	2209.7	0.00353	mg/L	0.000105	0.00353	mg/L	0.000105	2.97%
Mo 202.031†	16.9	0.00081	mg/L	0.000501	0.00081	mg/L	0.000501	61.83%
Ni 231.604†	5.2	-0.00011	mg/L	0.000097	-0.00011	mg/L	0.000097	87.73%
Pb 220.353†	-21.7	-0.00415	mg/L	0.000468	-0.00415	mg/L	0.000468	11.28%
Sb 206.836†	8.3	0.00377	mg/L	0.001746	0.00377	mg/L	0.001746	46.32%
Se 196.026†	-21.4	-0.00641	mg/L	0.005148	-0.00641	mg/L	0.005148	80.28%
Si 251.611†	9629.2	0.266	mg/L	0.0027	0.266	mg/L	0.0027	1.00%
Sn 189.927†	3.5	-0.00141	mg/L	0.000647	-0.00141	mg/L	0.000647	45.81%
Ti 334.940†	-446.1	-0.00050	mg/L	0.000053	-0.00050	mg/L	0.000053	10.48%
Tl 190.801†	77.6	0.0424	mg/L	0.00350	0.0424	mg/L	0.00350	8.25%
V 290.880†	-1730.4	-0.0112	mg/L	0.00114	-0.0112	mg/L	0.00114	10.22%
Zn 206.200†	-1298.8	-0.0458	mg/L	0.00030	-0.0458	mg/L	0.00030	0.65%

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K 766.490†	1552.8	0.571 mg/L	0.0136	0.571 mg/L	0.0136	2.39%
Na 589.592†	50754.1	3.53 mg/L	0.010	3.53 mg/L	0.010	0.28%
Sr 407.771†	55116.8	0.0524 mg/L	0.00363	0.0524 mg/L	0.00363	6.93%
Li 670.784†	343.6	0.00219 mg/L	0.001489	0.00219 mg/L	0.001489	67.84%

Sequence No.: 38 **Autosampler Location: 90**
Sample ID: L1102044506 DL0.1 **Date Collected: 2/22/2011 6:27:04 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102044506 DL0.1

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102044506 DL0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4931666.2						38450.79	0.78%
YRADIAL	297069.1						3708.03	1.25%
Ga 417.206	1208742.2						15060.19	1.25%
GaRADIAL	58317.9						442.77	0.76%
Ag 328.068†	623.9	0.00238	mg/L	0.000471	0.00238	mg/L	0.000471	19.78%
Al 396.153†	-121.5	-0.0209	mg/L	0.00964	-0.0209	mg/L	0.00964	46.14%
As 188.979†	6.2	0.00426	mg/L	0.001645	0.00426	mg/L	0.001645	38.64%
Ba 233.527†	57.6	0.00054	mg/L	0.000100	0.00054	mg/L	0.000100	18.51%
Be 234.861†	-25.5	-0.00004	mg/L	0.000025	-0.00004	mg/L	0.000025	64.89%
B 249.677†	217.2	0.00462	mg/L	0.000230	0.00462	mg/L	0.000230	4.98%
Ca 227.546†	3949.3	37.0	mg/L	0.57	37.0	mg/L	0.57	1.55%
Cd 228.802†	1.8	0.00001	mg/L	0.000090	0.00001	mg/L	0.000090	702.88%
Co 228.616†	9.6	0.00038	mg/L	0.000112	0.00038	mg/L	0.000112	29.79%
Cr 267.716†	148.8	0.00086	mg/L	0.000064	0.00086	mg/L	0.000064	7.48%
Cu 327.393†	-74.6	-0.00072	mg/L	0.000979	-0.00072	mg/L	0.000979	136.24%
Fe 239.562†	4.1	0.00824	mg/L	0.001701	0.00824	mg/L	0.001701	20.63%
Mg 279.077†	59628.9	71.2	mg/L	0.88	71.2	mg/L	0.88	1.24%
Mn 257.610†	2330.6	0.00382	mg/L	0.000057	0.00382	mg/L	0.000057	1.50%
Mo 202.031†	12.0	0.00044	mg/L	0.000421	0.00044	mg/L	0.000421	94.90%
Ni 231.604†	7.5	-0.00004	mg/L	0.000153	-0.00004	mg/L	0.000153	356.51%
Pb 220.353†	-26.1	-0.00490	mg/L	0.000239	-0.00490	mg/L	0.000239	4.87%
Sb 206.836†	5.8	0.00218	mg/L	0.001349	0.00218	mg/L	0.001349	62.04%
Se 196.026†	-22.3	-0.00694	mg/L	0.004622	-0.00694	mg/L	0.004622	66.61%
Si 251.611†	9752.4	0.270	mg/L	0.0092	0.270	mg/L	0.0092	3.40%
Sn 189.927†	2.8	-0.00154	mg/L	0.001030	-0.00154	mg/L	0.001030	66.71%
Ti 334.940†	-381.3	-0.00041	mg/L	0.000224	-0.00041	mg/L	0.000224	54.58%
Tl 190.801†	68.2	0.0369	mg/L	0.00148	0.0369	mg/L	0.00148	4.02%
V 290.880†	-1633.9	-0.0105	mg/L	0.00117	-0.0105	mg/L	0.00117	11.06%
Zn 206.200†	-1254.3	-0.0444	mg/L	0.00007	-0.0444	mg/L	0.00007	0.17%
K 766.490†	1554.9	0.572	mg/L	0.0373	0.572	mg/L	0.0373	6.53%
Na 589.592†	49484.4	3.44	mg/L	0.061	3.44	mg/L	0.061	1.79%
Sr 407.771†	53168.1	0.0506	mg/L	0.00290	0.0506	mg/L	0.00290	5.72%
Li 670.784†	253.2	0.00111	mg/L	0.000361	0.00111	mg/L	0.000361	32.40%

Sequence No.: 39 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/22/2011 6:33:43 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4917303.0						23995.53	0.49%
YRADIAL	298706.2						3389.14	1.13%

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Ga 417.206	1153590.2				9900.58	0.86%
GaRADIAL	57152.7				756.48	1.32%
Ag 328.068†	79690.2	0.397 mg/L	0.0021	0.397 mg/L	0.0021	0.54%
QC value within limits for Ag 328.068 Recovery = 99.36%						
Al 396.153†	51061.0	9.83 mg/L	0.096	9.83 mg/L	0.096	0.97%
QC value within limits for Al 396.153 Recovery = 98.35%						
As 188.979†	434.8	0.392 mg/L	0.0054	0.392 mg/L	0.0054	1.38%
QC value within limits for As 188.979 Recovery = 97.98%						
Ba 233.527†	57911.3	0.981 mg/L	0.0058	0.981 mg/L	0.0058	0.59%
QC value within limits for Ba 233.527 Recovery = 98.07%						
Be 234.861†	28915.1	0.0504 mg/L	0.00034	0.0504 mg/L	0.00034	0.67%
QC value within limits for Be 234.861 Recovery = 100.74%						
B 249.677†	25994.6	0.495 mg/L	0.0026	0.495 mg/L	0.0026	0.52%
QC value within limits for B 249.677 Recovery = 99.09%						
Ca 227.546†	1039.5	10.1 mg/L	0.03	10.1 mg/L	0.03	0.27%
QC value within limits for Ca 227.546 Recovery = 100.68%						
Cd 228.802†	874.5	0.0488 mg/L	0.00027	0.0488 mg/L	0.00027	0.55%
QC value within limits for Cd 228.802 Recovery = 97.54%						
Co 228.616†	3810.3	0.193 mg/L	0.0011	0.193 mg/L	0.0011	0.56%
QC value within limits for Co 228.616 Recovery = 96.33%						
Cr 267.716†	55916.0	0.484 mg/L	0.0046	0.484 mg/L	0.0046	0.95%
QC value within limits for Cr 267.716 Recovery = 96.80%						
Cu 327.393†	71853.6	0.489 mg/L	0.0034	0.489 mg/L	0.0034	0.69%
QC value within limits for Cu 327.393 Recovery = 97.77%						
Fe 239.562†	1791.4	3.89 mg/L	0.009	3.89 mg/L	0.009	0.22%
QC value within limits for Fe 239.562 Recovery = 97.29%						
Mg 279.077†	8210.7	9.80 mg/L	0.066	9.80 mg/L	0.066	0.68%
QC value within limits for Mg 279.077 Recovery = 98.03%						
Mn 257.610†	220447.8	0.492 mg/L	0.0031	0.492 mg/L	0.0031	0.63%
QC value within limits for Mn 257.610 Recovery = 98.49%						
Mo 202.031†	13181.5	0.977 mg/L	0.0037	0.977 mg/L	0.0037	0.38%
QC value within limits for Mo 202.031 Recovery = 97.73%						
Ni 231.604†	16853.9	0.488 mg/L	0.0032	0.488 mg/L	0.0032	0.66%
QC value within limits for Ni 231.604 Recovery = 97.57%						
Pb 220.353†	2917.4	0.509 mg/L	0.0034	0.509 mg/L	0.0034	0.67%
QC value within limits for Pb 220.353 Recovery = 101.72%						
Sb 206.836†	1911.1	1.21 mg/L	0.008	1.21 mg/L	0.008	0.70%
QC value within limits for Sb 206.836 Recovery = 100.44%						
Se 196.026†	560.6	0.392 mg/L	0.0052	0.392 mg/L	0.0052	1.33%
QC value within limits for Se 196.026 Recovery = 97.97%						
Si 251.611†	169445.3	4.91 mg/L	0.021	4.91 mg/L	0.021	0.42%
QC value within limits for Si 251.611 Recovery = 98.25%						
Sn 189.927†	5745.1	0.977 mg/L	0.0061	0.977 mg/L	0.0061	0.63%
QC value within limits for Sn 189.927 Recovery = 97.73%						
Ti 334.940†	724597.2	0.990 mg/L	0.0034	0.990 mg/L	0.0034	0.34%
QC value within limits for Ti 334.940 Recovery = 99.02%						
Tl 190.801†	837.9	0.503 mg/L	0.0045	0.503 mg/L	0.0045	0.89%
QC value within limits for Tl 190.801 Recovery = 100.55%						
V 290.880†	145818.2	0.964 mg/L	0.0084	0.964 mg/L	0.0084	0.87%
QC value within limits for V 290.880 Recovery = 96.38%						
Zn 206.200†	31099.0	0.922 mg/L	0.0063	0.922 mg/L	0.0063	0.69%
QC value within limits for Zn 206.200 Recovery = 92.21%						
K 766.490†	131472.0	49.0 mg/L	0.42	49.0 mg/L	0.42	0.86%
QC value within limits for K 766.490 Recovery = 97.98%						
Na 589.592†	681834.8	48.9 mg/L	0.25	48.9 mg/L	0.25	0.52%
QC value within limits for Na 589.592 Recovery = 97.82%						
Sr 407.771†	953006.5	0.912 mg/L	0.0794	0.912 mg/L	0.0794	8.70%
QC value within limits for Sr 407.771 Recovery = 91.24%						
Li 670.784†	81985.2	0.978 mg/L	0.0068	0.978 mg/L	0.0068	0.70%
QC value within limits for Li 670.784 Recovery = 97.79%						

All analyte(s) passed QC.

Sequence No.: 40 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/22/2011 6:40:22 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Approved: February 23, 2011

Pierre Morris

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5211874.6						20609.12	0.40%
YRADIAL	308723.9						5196.20	1.68%
Ga 417.206	1220808.7						4985.22	0.41%
GaRADIAL	58348.1						357.76	0.61%
Ag 328.068†	407.8	0.00133	mg/L	0.000847	0.00133	mg/L	0.000847	63.69%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-32.8	-0.00377	mg/L	0.009595	-0.00377	mg/L	0.009595	254.64%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.1	-0.00164	mg/L	0.001115	-0.00164	mg/L	0.001115	67.99%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	7.5	-0.00029	mg/L	0.000013	-0.00029	mg/L	0.000013	4.60%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-12.1	-0.00002	mg/L	0.000021	-0.00002	mg/L	0.000021	137.99%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	239.0	0.00497	mg/L	0.000258	0.00497	mg/L	0.000258	5.19%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	4.4	0.0406	mg/L	0.05163	0.0406	mg/L	0.05163	127.14%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	1.4	0.00004	mg/L	0.000139	0.00004	mg/L	0.000139	387.67%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	10.4	0.00042	mg/L	0.000297	0.00042	mg/L	0.000297	70.91%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-15.6	-0.00056	mg/L	0.000032	-0.00056	mg/L	0.000032	5.72%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	86.0	0.00037	mg/L	0.000389	0.00037	mg/L	0.000389	104.43%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.2	0.00167	mg/L	0.001292	0.00167	mg/L	0.001292	77.27%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	5.4	0.00443	mg/L	0.002683	0.00443	mg/L	0.002683	60.57%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-2.5	-0.00043	mg/L	0.000014	-0.00043	mg/L	0.000014	3.35%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	7.3	0.00010	mg/L	0.000166	0.00010	mg/L	0.000166	166.67%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-0.9	-0.00026	mg/L	0.000142	-0.00026	mg/L	0.000142	54.85%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-12.3	-0.00429	mg/L	0.000822	-0.00429	mg/L	0.000822	19.16%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-1.4	-0.00235	mg/L	0.002116	-0.00235	mg/L	0.002116	90.01%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	8.0	0.00488	mg/L	0.003113	0.00488	mg/L	0.003113	63.78%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	21.6	-0.0137	mg/L	0.00042	-0.0137	mg/L	0.00042	3.10%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	0.1	-0.00199	mg/L	0.000418	-0.00199	mg/L	0.000418	20.98%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	104.2	-0.00012	mg/L	0.000155	-0.00012	mg/L	0.000155	132.74%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-0.8	-0.00023	mg/L	0.001529	-0.00023	mg/L	0.001529	666.21%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-209.3	-0.00112	mg/L	0.001116	-0.00112	mg/L	0.001116	99.38%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-1397.8	-0.0487	mg/L	0.00010	-0.0487	mg/L	0.00010	0.20%
QC value less than the lower limit for Zn 206.200 Recovery = Not calculated								
K 766.490†	100.6	0.0378	mg/L	0.04967	0.0378	mg/L	0.04967	131.57%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	597.5	0.0335	mg/L	0.00496	0.0335	mg/L	0.00496	14.82%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	-31.5	-0.00040	mg/L	0.000063	-0.00040	mg/L	0.000063	15.79%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	125.4	-0.00041	mg/L	0.000797	-0.00041	mg/L	0.000797	193.32%
QC value within limits for Li 670.784 Recovery = Not calculated								

QC Failed. Continue with analysis.

Sequence No.: 41 **Autosampler Location: 91**
Sample ID: L1102045001 **Date Collected: 2/22/2011 6:46:58 PM**
Analyst: PDM **Data Type: Original**

Approved: February 23, 2011

Pierre Morris

Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102045001

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102045001

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5027795.1						89001.16	1.77%
YRADIAL	300182.7						4351.95	1.45%
Ga 417.206	1240132.0						23648.47	1.91%
GaRADIAL	58523.1						712.73	1.22%
Ag 328.068†	640.6	0.00241	mg/L	0.000511	0.00241	mg/L	0.000511	21.18%
Al 396.153†	154.5	0.0324	mg/L	0.00202	0.0324	mg/L	0.00202	6.23%
As 188.979†	7.2	0.00492	mg/L	0.000839	0.00492	mg/L	0.000839	17.03%
Ba 233.527†	2586.6	0.0433	mg/L	0.00077	0.0433	mg/L	0.00077	1.77%
Be 234.861†	56.7	0.00003	mg/L	0.000117	0.00003	mg/L	0.000117	341.99%
B 249.677†	1242.8	0.0257	mg/L	0.00028	0.0257	mg/L	0.00028	1.10%
Ca 227.546†	5449.9	51.1	mg/L	0.82	51.1	mg/L	0.82	1.61%
Cd 228.802†	4.4	0.00016	mg/L	0.000104	0.00016	mg/L	0.000104	67.08%
Co 228.616†	8.9	0.00032	mg/L	0.000309	0.00032	mg/L	0.000309	96.72%
Cr 267.716†	142.9	0.00078	mg/L	0.000017	0.00078	mg/L	0.000017	2.24%
Cu 327.393†	148.6	0.00085	mg/L	0.000217	0.00085	mg/L	0.000217	25.63%
Fe 239.562†	185.4	0.404	mg/L	0.0043	0.404	mg/L	0.0043	1.08%
Mg 279.077†	8390.1	10.0	mg/L	0.01	10.0	mg/L	0.01	0.10%
Mn 257.610†	38974.3	0.0868	mg/L	0.00242	0.0868	mg/L	0.00242	2.79%
Mo 202.031†	18.8	0.00099	mg/L	0.000312	0.00099	mg/L	0.000312	31.60%
Ni 231.604†	249.7	0.00697	mg/L	0.000169	0.00697	mg/L	0.000169	2.42%
Pb 220.353†	-25.8	-0.00421	mg/L	0.000687	-0.00421	mg/L	0.000687	16.33%
Sb 206.836†	9.1	0.00427	mg/L	0.000338	0.00427	mg/L	0.000338	7.90%
Se 196.026†	-28.8	-0.00789	mg/L	0.002836	-0.00789	mg/L	0.002836	35.94%
Si 251.611†	108624.0	3.15	mg/L	0.081	3.15	mg/L	0.081	2.58%
Sn 189.927†	-3.2	-0.00255	mg/L	0.000654	-0.00255	mg/L	0.000654	25.61%
Ti 334.940†	-454.9	-0.00037	mg/L	0.000147	-0.00037	mg/L	0.000147	39.69%
Tl 190.801†	91.4	0.0494	mg/L	0.00214	0.0494	mg/L	0.00214	4.33%
V 290.880†	-605.7	-0.00372	mg/L	0.000876	-0.00372	mg/L	0.000876	23.58%
Zn 206.200†	952.0	0.0213	mg/L	0.00155	0.0213	mg/L	0.00155	7.28%
K 766.490†	6233.0	2.28	mg/L	0.045	2.28	mg/L	0.045	1.98%
Na 589.592†	346494.7	24.5	mg/L	0.22	24.5	mg/L	0.22	0.90%
Sr 407.771†	209698.8	0.201	mg/L	0.0182	0.201	mg/L	0.0182	9.06%
Li 670.784†	463.5	0.00363	mg/L	0.000832	0.00363	mg/L	0.000832	22.94%

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Sequence No.: 42 **Autosampler Location: 92**
Sample ID: L1102045001PS WG357225-01 **Date Collected: 2/22/2011 6:53:39 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102045001PS WG357225-01

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102045001PS WG357225-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4968738.1						54660.68	1.10%
YRADIAL	305184.3						907.55	0.30%
Ga 417.206	1219251.8						1380.34	0.11%
GaRADIAL	59138.1						1694.33	2.87%
Ag 328.068†	39797.3	0.198	mg/L	0.0022	0.198	mg/L	0.0022	1.10%
Al 396.153†	25131.4	4.84	mg/L	0.041	4.84	mg/L	0.041	0.85%
As 188.979†	217.9	0.195	mg/L	0.0018	0.195	mg/L	0.0018	0.92%
Ba 233.527†	31483.1	0.533	mg/L	0.0056	0.533	mg/L	0.0056	1.05%
Be 234.861†	14337.4	0.0249	mg/L	0.00027	0.0249	mg/L	0.00027	1.09%
B 249.677†	53303.8	1.01	mg/L	0.013	1.01	mg/L	0.013	1.31%
Ca 227.546†	5472.0	51.4	mg/L	0.16	51.4	mg/L	0.16	0.31%

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Cd 228.802†	420.7	0.0234	mg/L	0.00013	0.0234	mg/L	0.00013	0.57%
Co 228.616†	1907.6	0.0964	mg/L	0.00090	0.0964	mg/L	0.00090	0.93%
Cr 267.716†	28438.9	0.246	mg/L	0.0033	0.246	mg/L	0.0033	1.35%
Cu 327.393†	35409.6	0.241	mg/L	0.0036	0.241	mg/L	0.0036	1.48%
Fe 239.562†	1062.4	2.31	mg/L	0.023	2.31	mg/L	0.023	0.98%
Mg 279.077†	11632.2	13.9	mg/L	0.17	13.9	mg/L	0.17	1.21%
Mn 257.610†	147790.6	0.330	mg/L	0.0043	0.330	mg/L	0.0043	1.29%
Mo 202.031†	6835.2	0.507	mg/L	0.0051	0.507	mg/L	0.0051	1.00%
Ni 231.604†	8692.0	0.251	mg/L	0.0025	0.251	mg/L	0.0025	0.99%
Pb 220.353†	1436.3	0.252	mg/L	0.0040	0.252	mg/L	0.0040	1.60%
Sb 206.836†	945.7	0.596	mg/L	0.0044	0.596	mg/L	0.0044	0.73%
Se 196.026†	249.1	0.186	mg/L	0.0025	0.186	mg/L	0.0025	1.36%
Si 251.611†	184470.1	5.36	mg/L	0.062	5.36	mg/L	0.062	1.15%
Sn 189.927†	-12.8	-0.00419	mg/L	0.001135	-0.00419	mg/L	0.001135	27.07%
Ti 334.940†	366759.3	0.502	mg/L	0.0020	0.502	mg/L	0.0020	0.40%
Tl 190.801†	500.0	0.295	mg/L	0.0025	0.295	mg/L	0.0025	0.86%
V 290.880†	74707.4	0.494	mg/L	0.0075	0.494	mg/L	0.0075	1.52%
Zn 206.200†	16420.0	0.483	mg/L	0.0033	0.483	mg/L	0.0033	0.69%
K 766.490†	70999.9	26.3	mg/L	0.31	26.3	mg/L	0.31	1.19%
Na 589.592†	650688.8	46.6	mg/L	1.12	46.6	mg/L	1.12	2.41%
Sr 407.771†	664928.2	0.637	mg/L	0.0588	0.637	mg/L	0.0588	9.24%
Li 670.784†	41376.7	0.493	mg/L	0.0031	0.493	mg/L	0.0031	0.63%

Sequence No.: 43 **Autosampler Location: 93**
Sample ID: L1102045001DL WG357225-02 **Date Collected: 2/22/2011 7:00:26 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102045001DL WG357225-02

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102045001DL WG357225-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5095072.5						32013.24	0.63%
YRADIAL	302904.7						5848.71	1.93%
Ga 417.206	1244755.5						16709.85	1.34%
GaRADIAL	58441.7						535.12	0.92%
Ag 328.068†	426.9	0.00141	mg/L	0.000141	0.00141	mg/L	0.000141	9.99%
Al 396.153†	-2.0	0.00217	mg/L	0.015351	0.00217	mg/L	0.015351	706.37%
As 188.979†	0.9	0.00001	mg/L	0.003320	0.00001	mg/L	0.003320	>999.9%
Ba 233.527†	526.6	0.00848	mg/L	0.000111	0.00848	mg/L	0.000111	1.30%
Be 234.861†	-0.1	-0.00001	mg/L	0.000026	-0.00001	mg/L	0.000026	342.25%
B 249.677†	635.1	0.0128	mg/L	0.00114	0.0128	mg/L	0.00114	8.92%
Ca 227.546†	1059.2	9.92	mg/L	0.152	9.92	mg/L	0.152	1.53%
Cd 228.802†	1.5	0.00002	mg/L	0.000081	0.00002	mg/L	0.000081	323.74%
Co 228.616†	3.8	0.00007	mg/L	0.000266	0.00007	mg/L	0.000266	356.27%
Cr 267.716†	19.3	-0.00026	mg/L	0.000088	-0.00026	mg/L	0.000088	33.66%
Cu 327.393†	170.8	0.00096	mg/L	0.000198	0.00096	mg/L	0.000198	20.68%
Fe 239.562†	36.3	0.0799	mg/L	0.00383	0.0799	mg/L	0.00383	4.79%
Mg 279.077†	1730.6	2.06	mg/L	0.007	2.06	mg/L	0.007	0.36%
Mn 257.610†	7833.9	0.0171	mg/L	0.00008	0.0171	mg/L	0.00008	0.45%
Mo 202.031†	13.5	0.00057	mg/L	0.000578	0.00057	mg/L	0.000578	101.60%
Ni 231.604†	49.6	0.00119	mg/L	0.000119	0.00119	mg/L	0.000119	9.95%
Pb 220.353†	-19.8	-0.00512	mg/L	0.000797	-0.00512	mg/L	0.000797	15.56%
Sb 206.836†	-0.2	-0.00159	mg/L	0.000620	-0.00159	mg/L	0.000620	38.91%
Se 196.026†	-5.0	-0.00171	mg/L	0.001941	-0.00171	mg/L	0.001941	113.45%
Si 251.611†	22015.6	0.628	mg/L	0.0088	0.628	mg/L	0.0088	1.40%
Sn 189.927†	2.6	-0.00157	mg/L	0.000822	-0.00157	mg/L	0.000822	52.29%
Ti 334.940†	26.1	-0.00012	mg/L	0.000077	-0.00012	mg/L	0.000077	61.57%
Tl 190.801†	25.3	0.0142	mg/L	0.00125	0.0142	mg/L	0.00125	8.80%
V 290.880†	-118.3	-0.00052	mg/L	0.000429	-0.00052	mg/L	0.000429	83.02%
Zn 206.200†	-841.1	-0.0321	mg/L	0.00026	-0.0321	mg/L	0.00026	0.81%
K 766.490†	1258.1	0.460	mg/L	0.0400	0.460	mg/L	0.0400	8.69%
Na 589.592†	71612.2	4.98	mg/L	0.042	4.98	mg/L	0.042	0.84%
Sr 407.771†	42784.7	0.0406	mg/L	0.00328	0.0406	mg/L	0.00328	8.08%
Li 670.784†	199.4	0.00047	mg/L	0.000844	0.00047	mg/L	0.000844	178.93%

Approved: February 23, 2011

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Sequence No.: 44 **Autosampler Location: 94**
Sample ID: L1102045002 **Date Collected: 2/22/2011 7:07:04 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102045002

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102045002

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4909405.7						64471.60	1.31%
YRADIAL	295350.3						2344.68	0.79%
Ga 417.206	1196140.6						7449.26	0.62%
GaRADIAL	57614.6						666.58	1.16%
Ag 328.068†	765.2	0.00298	mg/L	0.000283	0.00298	mg/L	0.000283	9.50%
Al 396.153†	506.9	0.100	mg/L	0.0041	0.100	mg/L	0.0041	4.09%
As 188.979†	5.9	0.00363	mg/L	0.001454	0.00363	mg/L	0.001454	40.10%
Ba 233.527†	2983.3	0.0500	mg/L	0.00070	0.0500	mg/L	0.00070	1.41%
Be 234.861†	96.8	-0.00005	mg/L	0.000080	-0.00005	mg/L	0.000080	151.75%
B 249.677†	1926.6	0.0422	mg/L	0.00034	0.0422	mg/L	0.00034	0.81%
Ca 227.546†	6755.5	63.3	mg/L	0.68	63.3	mg/L	0.68	1.07%
Cd 228.802†	36.7	0.00199	mg/L	0.000128	0.00199	mg/L	0.000128	6.44%
Co 228.616†	37.1	0.00174	mg/L	0.000166	0.00174	mg/L	0.000166	9.55%
Cr 267.716†	217.7	0.00141	mg/L	0.000050	0.00141	mg/L	0.000050	3.57%
Cu 327.393†	17293.0	0.117	mg/L	0.0009	0.117	mg/L	0.0009	0.80%
Fe 239.562†	564.4	1.23	mg/L	0.009	1.23	mg/L	0.009	0.71%
Mg 279.077†	10262.6	12.2	mg/L	0.04	12.2	mg/L	0.04	0.34%
Mn 257.610†	69716.7	0.156	mg/L	0.0023	0.156	mg/L	0.0023	1.50%
Mo 202.031†	29.6	0.00184	mg/L	0.000814	0.00184	mg/L	0.000814	44.19%
Ni 231.604†	212.3	0.00588	mg/L	0.000087	0.00588	mg/L	0.000087	1.48%
Pb 220.353†	5.2	0.00163	mg/L	0.000400	0.00163	mg/L	0.000400	24.45%
Sb 206.836†	11.1	0.00553	mg/L	0.001524	0.00553	mg/L	0.001524	27.54%
Se 196.026†	-28.9	-0.00462	mg/L	0.002203	-0.00462	mg/L	0.002203	47.66%
Si 251.611†	98619.9	2.86	mg/L	0.020	2.86	mg/L	0.020	0.70%
Sn 189.927†	-3.9	-0.00268	mg/L	0.000526	-0.00268	mg/L	0.000526	19.62%
Ti 334.940†	616.6	0.00122	mg/L	0.000229	0.00122	mg/L	0.000229	18.85%
Tl 190.801†	95.1	0.0506	mg/L	0.00166	0.0506	mg/L	0.00166	3.28%
V 290.880†	767.8	0.00543	mg/L	0.001424	0.00543	mg/L	0.001424	26.24%
Zn 206.200†	10226.9	0.298	mg/L	0.0042	0.298	mg/L	0.0042	1.40%
K 766.490†	7162.9	2.51	mg/L	0.051	2.51	mg/L	0.051	2.04%
Na 589.592†	1826013.7	139	mg/L	1.8	139	mg/L	1.8	1.32%
Sr 407.771†	251299.3	0.240	mg/L	0.0204	0.240	mg/L	0.0204	8.48%
Li 670.784†	640.8	0.00575	mg/L	0.001058	0.00575	mg/L	0.001058	18.41%

Sequence No.: 45 **Autosampler Location: 95**
Sample ID: L1102046705 **Date Collected: 2/22/2011 7:13:48 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102046705

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102046705

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4629230.6						47666.50	1.03%
YRADIAL	292020.8						8833.94	3.03%
Ga 417.206	1148305.4						16389.91	1.43%
GaRADIAL	57855.2						1161.58	2.01%
Ag 328.068†	1502.1	0.00647	mg/L	0.000322	0.00647	mg/L	0.000322	4.97%
Al 396.153†	288.7	0.0581	mg/L	0.00659	0.0581	mg/L	0.00659	11.35%
As 188.979†	11.1	0.00358	mg/L	0.002097	0.00358	mg/L	0.002097	58.63%

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Ba 233.527†	4990.6	0.0839 mg/L	0.00081	0.0839 mg/L	0.00081	0.96%
Be 234.861†	67.3	-0.00001 mg/L	0.000048	-0.00001 mg/L	0.000048	538.10%
B 249.677†	23303.0	0.442 mg/L	0.0125	0.442 mg/L	0.0125	2.83%
Ca 227.546†	32000.1	300 mg/L	7.6	300 mg/L	7.6	2.53%
Cd 228.802†	3.3	0.00008 mg/L	0.000205	0.00008 mg/L	0.000205	259.75%
Co 228.616†	26.5	0.00120 mg/L	0.000324	0.00120 mg/L	0.000324	26.99%
Cr 267.716†	1095.7	0.00905 mg/L	0.000057	0.00905 mg/L	0.000057	0.63%
Cu 327.393†	-9.4	-0.00018 mg/L	0.000228	-0.00018 mg/L	0.000228	124.16%
Fe 239.562†	359.8	0.779 mg/L	0.0150	0.779 mg/L	0.0150	1.93%
Mg 279.077†	109286.3	130 mg/L	0.7	130 mg/L	0.7	0.57%
Mn 257.610†	15225.6	0.0423 mg/L	0.00052	0.0423 mg/L	0.00052	1.23%
Mo 202.031†	209.1	0.0151 mg/L	0.00061	0.0151 mg/L	0.00061	4.02%
Ni 231.604†	225.4	0.00624 mg/L	0.000411	0.00624 mg/L	0.000411	6.59%
Pb 220.353†	-37.6	0.00575 mg/L	0.001690	0.00575 mg/L	0.001690	29.37%
Sb 206.836†	20.9	0.0118 mg/L	0.00187	0.0118 mg/L	0.00187	15.93%
Se 196.026†	-39.2	0.0473 mg/L	0.00201	0.0473 mg/L	0.00201	4.26%
Si 251.611†	462887.6	13.5 mg/L	0.17	13.5 mg/L	0.17	1.23%
Sn 189.927†	-2.9	-0.00251 mg/L	0.000181	-0.00251 mg/L	0.000181	7.20%
Ti 334.940†	-747.4	0.00171 mg/L	0.000407	0.00171 mg/L	0.000407	23.73%
Tl 190.801†	160.5	0.0674 mg/L	0.00444	0.0674 mg/L	0.00444	6.59%
V 290.880†	-106.4	-0.00040 mg/L	0.002585	-0.00040 mg/L	0.002585	651.80%
Zn 206.200†	-1026.2	-0.0376 mg/L	0.00044	-0.0376 mg/L	0.00044	1.16%
K 766.490†	61616.9	22.1 mg/L	0.27	22.1 mg/L	0.27	1.24%
Na 589.592†	6860377.5	773 mg/L	0.0	773 mg/L	0.0	0.00%
Sr 407.771†	1394526.3	1.34 mg/L	0.123	1.34 mg/L	0.123	9.19%
Li 670.784†	3348.1	0.0381 mg/L	0.00080	0.0381 mg/L	0.00080	2.09%

Sequence No.: 46 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/22/2011 7:20:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4849557.1						36743.67	0.76%
YRADIAL	300094.2						3912.95	1.30%
Ga 417.206	1139968.5						18674.43	1.64%
GaRADIAL	56961.8						1761.20	3.09%
Ag 328.068†	80783.6	0.403	mg/L	0.0063	0.403	mg/L	0.0063	1.56%
QC value within limits for Ag 328.068 Recovery = 100.73%								
Al 396.153†	51341.9	9.89	mg/L	0.051	9.89	mg/L	0.051	0.51%
QC value within limits for Al 396.153 Recovery = 98.89%								
As 188.979†	439.4	0.396	mg/L	0.0038	0.396	mg/L	0.0038	0.95%
QC value within limits for As 188.979 Recovery = 99.01%								
Ba 233.527†	58885.7	0.997	mg/L	0.0148	0.997	mg/L	0.0148	1.49%
QC value within limits for Ba 233.527 Recovery = 99.72%								
Be 234.861†	29268.5	0.0510	mg/L	0.00087	0.0510	mg/L	0.00087	1.71%
QC value within limits for Be 234.861 Recovery = 102.01%								
B 249.677†	26759.4	0.510	mg/L	0.0078	0.510	mg/L	0.0078	1.53%
QC value within limits for B 249.677 Recovery = 101.91%								
Ca 227.546†	1038.4	10.1	mg/L	0.20	10.1	mg/L	0.20	1.97%
QC value within limits for Ca 227.546 Recovery = 100.61%								
Cd 228.802†	884.6	0.0493	mg/L	0.00086	0.0493	mg/L	0.00086	1.75%
QC value within limits for Cd 228.802 Recovery = 98.66%								
Co 228.616†	3851.7	0.195	mg/L	0.0014	0.195	mg/L	0.0014	0.72%
QC value within limits for Co 228.616 Recovery = 97.39%								
Cr 267.716†	56983.1	0.493	mg/L	0.0067	0.493	mg/L	0.0067	1.35%
QC value within limits for Cr 267.716 Recovery = 98.65%								
Cu 327.393†	72906.3	0.496	mg/L	0.0089	0.496	mg/L	0.0089	1.80%
QC value within limits for Cu 327.393 Recovery = 99.20%								
Fe 239.562†	1772.0	3.85	mg/L	0.088	3.85	mg/L	0.088	2.30%
QC value within limits for Fe 239.562 Recovery = 96.24%								
Mg 279.077†	8096.1	9.67	mg/L	0.213	9.67	mg/L	0.213	2.20%
QC value within limits for Mg 279.077 Recovery = 96.67%								

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Mn 257.610†	224354.7	0.501 mg/L	0.0061	0.501 mg/L	0.0061	1.21%
QC value within limits for Mn 257.610 Recovery = 100.23%						
Mo 202.031†	13354.0	0.990 mg/L	0.0174	0.990 mg/L	0.0174	1.76%
QC value within limits for Mo 202.031 Recovery = 99.01%						
Ni 231.604†	17065.1	0.494 mg/L	0.0084	0.494 mg/L	0.0084	1.70%
QC value within limits for Ni 231.604 Recovery = 98.79%						
Pb 220.353†	2950.5	0.514 mg/L	0.0038	0.514 mg/L	0.0038	0.74%
QC value within limits for Pb 220.353 Recovery = 102.88%						
Sb 206.836†	1917.6	1.21 mg/L	0.022	1.21 mg/L	0.022	1.83%
QC value within limits for Sb 206.836 Recovery = 100.78%						
Se 196.026†	553.9	0.387 mg/L	0.0035	0.387 mg/L	0.0035	0.91%
QC value within limits for Se 196.026 Recovery = 96.81%						
Si 251.611†	172247.6	4.99 mg/L	0.083	4.99 mg/L	0.083	1.66%
QC value within limits for Si 251.611 Recovery = 99.88%						
Sn 189.927†	5818.8	0.990 mg/L	0.0094	0.990 mg/L	0.0094	0.95%
QC value within limits for Sn 189.927 Recovery = 98.98%						
Ti 334.940†	721344.9	0.986 mg/L	0.0052	0.986 mg/L	0.0052	0.53%
QC value within limits for Ti 334.940 Recovery = 98.57%						
Tl 190.801†	858.2	0.515 mg/L	0.0085	0.515 mg/L	0.0085	1.65%
QC value within limits for Tl 190.801 Recovery = 102.93%						
V 290.880†	148542.1	0.982 mg/L	0.0123	0.982 mg/L	0.0123	1.26%
QC value within limits for V 290.880 Recovery = 98.18%						
Zn 206.200†	31632.3	0.938 mg/L	0.0167	0.938 mg/L	0.0167	1.78%
QC value within limits for Zn 206.200 Recovery = 93.80%						
K 766.490†	131895.2	49.1 mg/L	0.39	49.1 mg/L	0.39	0.80%
QC value within limits for K 766.490 Recovery = 98.30%						
Na 589.592†	688347.2	49.4 mg/L	0.28	49.4 mg/L	0.28	0.58%
QC value within limits for Na 589.592 Recovery = 98.78%						
Sr 407.771†	929622.9	0.890 mg/L	0.0750	0.890 mg/L	0.0750	8.42%
QC value less than the lower limit for Sr 407.771 Recovery = 89.00%						
Li 670.784†	82513.3	0.984 mg/L	0.0051	0.984 mg/L	0.0051	0.52%
QC value within limits for Li 670.784 Recovery = 98.42%						

QC Failed. Continue with analysis.

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Sequence No.: 47 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/22/2011 7:27:24 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5157042.1						40964.57	0.79%
YRADIAL	304860.6						5753.83	1.89%
Ga 417.206	1195442.1						12206.47	1.02%
GaRADIAL	57893.1						607.88	1.05%
Ag 328.068†	395.6	0.00127	mg/L	0.000680	0.00127	mg/L	0.000680	53.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-47.9	-0.00668	mg/L	0.002791	-0.00668	mg/L	0.002791	41.77%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.3	0.00052	mg/L	0.002480	0.00052	mg/L	0.002480	480.66%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	6.3	-0.00031	mg/L	0.000057	-0.00031	mg/L	0.000057	18.36%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-29.9	-0.00005	mg/L	0.000021	-0.00005	mg/L	0.000021	47.26%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	580.4	0.0114	mg/L	0.00045	0.0114	mg/L	0.00045	3.94%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	5.8	0.0544	mg/L	0.02879	0.0544	mg/L	0.02879	52.92%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	0.6	-0.00003	mg/L	0.000077	-0.00003	mg/L	0.000077	282.06%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	4.5	0.00012	mg/L	0.000058	0.00012	mg/L	0.000058	49.61%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	3.2	-0.00040	mg/L	0.000057	-0.00040	mg/L	0.000057	14.47%

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   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†              101.8     0.00048 mg/L      0.000352     0.00048 mg/L      0.000352  73.34%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†               -1.3    -0.00163 mg/L      0.003006    -0.00163 mg/L      0.003006 184.95%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†                2.1     0.00047 mg/L      0.004399     0.00047 mg/L      0.004399 926.62%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†                8.2    -0.00041 mg/L      0.000048    -0.00041 mg/L      0.000048  11.77%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†                6.9     0.00007 mg/L      0.000324     0.00007 mg/L      0.000324 467.45%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†                3.5    -0.00013 mg/L      0.000253    -0.00013 mg/L      0.000253 188.45%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†              -17.4    -0.00517 mg/L      0.000918    -0.00517 mg/L      0.000918  17.77%
   QC value less than the lower limit for Pb 220.353  Recovery = Not calculated
Sb 206.836†                0.5    -0.00115 mg/L      0.000544    -0.00115 mg/L      0.000544  47.32%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               -1.2    -0.00150 mg/L      0.004890    -0.00150 mg/L      0.004890 325.57%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               44.8     -0.0130 mg/L       0.00014     -0.0130 mg/L       0.00014   1.07%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               -2.3    -0.00240 mg/L      0.000304    -0.00240 mg/L      0.000304  12.65%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†              117.0    -0.00010 mg/L      0.000153    -0.00010 mg/L      0.000153 154.45%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               -0.8    -0.00023 mg/L      0.004136    -0.00023 mg/L      0.004136 >999.9%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              -322.3    -0.00187 mg/L      0.000347    -0.00187 mg/L      0.000347  18.57%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†            -1442.7     -0.0500 mg/L       0.00038     -0.0500 mg/L       0.00038   0.75%
   QC value less than the lower limit for Zn 206.200  Recovery = Not calculated
K 766.490†              145.3      0.0542 mg/L       0.03287      0.0542 mg/L       0.03287  60.64%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†            1573.3       0.101 mg/L        0.0085       0.101 mg/L        0.0085   8.41%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†               70.3    -0.00030 mg/L      0.000060    -0.00030 mg/L      0.000060  19.87%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              155.9    -0.00005 mg/L      0.002379    -0.00005 mg/L      0.002379 >999.9%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.

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Sequence No.: 48                                  Autosampler Location: 96
Sample ID: PBW 33 WG357152-02                     Date Collected: 2/22/2011 7:34:05 PM
Analyst: PDM                                      Data Type: Original
Initial Sample Wt:                                Initial Sample Vol:
Dilution:                                         Sample Prep Vol:

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Nebulizer Parameters: PBW 33 WG357152-02
Analyte                Back Pressure    Flow
All                   168.0 kPa         0.50 L/min

----------------------------------------------------------------------------------------------------------------
Mean Data: PBW 33 WG357152-02
                 Mean Corrected          Calib.                              Sample
Analyte             Intensity      Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029          5238944.4                                                    68914.87   1.32%
YRADIAL             318844.3                                                     6477.12   2.03%
Ga 417.206         1250542.1                                                    23682.67   1.89%
GaRADIAL             60470.3                                                      790.65   1.31%
Ag 328.068†            370.7     0.00115 mg/L      0.000316     0.00115 mg/L      0.000316  27.54%
Al 396.153†              6.2     0.00375 mg/L      0.016748     0.00375 mg/L      0.016748 447.05%
As 188.979†             -0.3    -0.00092 mg/L      0.003811    -0.00092 mg/L      0.003811 412.51%
Ba 233.527†              6.9    -0.00029 mg/L      0.000058    -0.00029 mg/L      0.000058  19.80%
Be 234.861†            -13.9    -0.00002 mg/L      0.000029    -0.00002 mg/L      0.000029 151.29%
B 249.677†             372.6     0.00748 mg/L      0.000136     0.00748 mg/L      0.000136   1.82%
Ca 227.546†              4.6      0.0427 mg/L       0.03502      0.0427 mg/L       0.03502  82.03%
Cd 228.802†             -0.0    -0.00005 mg/L      0.000150    -0.00005 mg/L      0.000150 289.93%
Co 228.616†             10.1     0.00040 mg/L      0.000227     0.00040 mg/L      0.000227  56.42%
Cr 267.716†            -18.0    -0.00058 mg/L      0.000106    -0.00058 mg/L      0.000106  18.30%
Cu 327.393†            174.2     0.00097 mg/L      0.000448     0.00097 mg/L      0.000448  46.03%
Fe 239.562†              1.4     0.00430 mg/L      0.000250     0.00430 mg/L      0.000250   5.80%
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Mg 279.077†	1.8	0.00012 mg/L	0.005732	0.00012 mg/L	0.005732	>999.9%
Mn 257.610†	-8.5	-0.00044 mg/L	0.000004	-0.00044 mg/L	0.000004	0.87%
Mo 202.031†	6.4	0.00003 mg/L	0.000022	0.00003 mg/L	0.000022	67.97%
Ni 231.604†	-13.7	-0.00063 mg/L	0.000261	-0.00063 mg/L	0.000261	41.31%
Pb 220.353†	-15.4	-0.00483 mg/L	0.001420	-0.00483 mg/L	0.001420	29.38%
Sb 206.836†	-2.4	-0.00296 mg/L	0.001658	-0.00296 mg/L	0.001658	56.10%
Se 196.026†	4.6	0.00250 mg/L	0.002524	0.00250 mg/L	0.002524	101.09%
Si 251.611†	145.7	-0.0101 mg/L	0.00043	-0.0101 mg/L	0.00043	4.22%
Sn 189.927†	-5.4	-0.00293 mg/L	0.000863	-0.00293 mg/L	0.000863	29.46%
Ti 334.940†	211.6	0.00003 mg/L	0.000167	0.00003 mg/L	0.000167	550.15%
Tl 190.801†	2.9	0.00195 mg/L	0.002371	0.00195 mg/L	0.002371	121.47%
V 290.880†	-40.5	-0.00001 mg/L	0.000994	-0.00001 mg/L	0.000994	>999.9%
Zn 206.200†	-1452.3	-0.0503 mg/L	0.00009	-0.0503 mg/L	0.00009	0.18%
K 766.490†	102.2	0.0383 mg/L	0.01463	0.0383 mg/L	0.01463	38.18%
Na 589.592†	1063.8	0.0659 mg/L	0.01044	0.0659 mg/L	0.01044	15.85%
Sr 407.771†	110.0	-0.00026 mg/L	0.000203	-0.00026 mg/L	0.000203	76.63%
Li 670.784†	107.9	-0.00062 mg/L	0.001453	-0.00062 mg/L	0.001453	233.72%

Sequence No.: 49 **Autosampler Location: 97**
Sample ID: LCSW 33 WG357152-03 **Date Collected: 2/22/2011 7:40:46 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 33 WG357152-03

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: LCSW 33 WG357152-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5071212.3						20039.05	0.40%
YRADIAL	310174.3						4183.36	1.35%
Ga 417.206	1221637.9						1014.10	0.08%
GaRADIAL	58673.3						1682.20	2.87%
Ag 328.068†	38916.8	0.194	mg/L	0.0033	0.194	mg/L	0.0033	1.72%
Al 396.153†	25415.7	4.90	mg/L	0.007	4.90	mg/L	0.007	0.14%
As 188.979†	205.7	0.185	mg/L	0.0025	0.185	mg/L	0.0025	1.36%
Ba 233.527†	28676.2	0.485	mg/L	0.0082	0.485	mg/L	0.0082	1.68%
Be 234.861†	13956.5	0.0243	mg/L	0.00032	0.0243	mg/L	0.00032	1.31%
B 249.677†	50700.8	0.957	mg/L	0.0270	0.957	mg/L	0.0270	2.82%
Ca 227.546†	490.4	4.76	mg/L	0.050	4.76	mg/L	0.050	1.06%
Cd 228.802†	413.8	0.0231	mg/L	0.00016	0.0231	mg/L	0.00016	0.68%
Co 228.616†	1888.7	0.0954	mg/L	0.00057	0.0954	mg/L	0.00057	0.60%
Cr 267.716†	27505.5	0.238	mg/L	0.0056	0.238	mg/L	0.0056	2.36%
Cu 327.393†	35037.3	0.238	mg/L	0.0062	0.238	mg/L	0.0062	2.60%
Fe 239.562†	866.6	1.88	mg/L	0.042	1.88	mg/L	0.042	2.25%
Mg 279.077†	4017.7	4.80	mg/L	0.112	4.80	mg/L	0.112	2.34%
Mn 257.610†	110349.7	0.246	mg/L	0.0051	0.246	mg/L	0.0051	2.07%
Mo 202.031†	6482.3	0.480	mg/L	0.0078	0.480	mg/L	0.0078	1.61%
Ni 231.604†	8337.5	0.241	mg/L	0.0056	0.241	mg/L	0.0056	2.31%
Pb 220.353†	1429.5	0.248	mg/L	0.0012	0.248	mg/L	0.0012	0.47%
Sb 206.836†	912.4	0.575	mg/L	0.0043	0.575	mg/L	0.0043	0.76%
Se 196.026†	266.5	0.186	mg/L	0.0048	0.186	mg/L	0.0048	2.56%
Si 251.611†	84710.3	2.45	mg/L	0.058	2.45	mg/L	0.058	2.38%
Sn 189.927†	2964.7	0.503	mg/L	0.0019	0.503	mg/L	0.0019	0.38%
Ti 334.940†	357046.5	0.488	mg/L	0.0037	0.488	mg/L	0.0037	0.77%
Tl 190.801†	418.5	0.251	mg/L	0.0047	0.251	mg/L	0.0047	1.85%
V 290.880†	71641.6	0.474	mg/L	0.0116	0.474	mg/L	0.0116	2.45%
Zn 206.200†	14352.3	0.422	mg/L	0.0063	0.422	mg/L	0.0063	1.49%
K 766.490†	64619.8	24.0	mg/L	0.16	24.0	mg/L	0.16	0.65%
Na 589.592†	341621.6	24.1	mg/L	0.29	24.1	mg/L	0.29	1.20%
Sr 407.771†	468404.9	0.448	mg/L	0.0333	0.448	mg/L	0.0333	7.42%
Li 670.784†	40783.0	0.485	mg/L	0.0007	0.485	mg/L	0.0007	0.14%

Sequence No.: 50 **Autosampler Location: 98**
Sample ID: L1102051202 **Date Collected: 2/22/2011 7:48:21 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**

Approved: February 23, 2011

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Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051202

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102051202

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4883668.7						32541.38	0.67%
YRADIAL	302510.9						9083.62	3.00%
Ga 417.206	1207758.5						25399.09	2.10%
GaRADIAL	58499.6						973.31	1.66%
Ag 328.068†	1079.5	0.00452	mg/L	0.000290	0.00452	mg/L	0.000290	6.43%
Al 396.153†	1152.0	0.225	mg/L	0.0087	0.225	mg/L	0.0087	3.87%
As 188.979†	5.1	0.00148	mg/L	0.000948	0.00148	mg/L	0.000948	64.28%
Ba 233.527†	4919.6	0.0827	mg/L	0.00040	0.0827	mg/L	0.00040	0.49%
Be 234.861†	57.6	0.00001	mg/L	0.000021	0.00001	mg/L	0.000021	141.53%
B 249.677†	3302.0	0.0648	mg/L	0.00104	0.0648	mg/L	0.00104	1.61%
Ca 227.546†	13660.7	128	mg/L	2.3	128	mg/L	2.3	1.82%
Cd 228.802†	3.8	0.00013	mg/L	0.000118	0.00013	mg/L	0.000118	88.34%
Co 228.616†	11.4	0.00040	mg/L	0.000165	0.00040	mg/L	0.000165	41.18%
Cr 267.716†	305.1	0.00216	mg/L	0.000013	0.00216	mg/L	0.000013	0.60%
Cu 327.393†	-188.3	-0.00141	mg/L	0.000588	-0.00141	mg/L	0.000588	41.59%
Fe 239.562†	245.6	0.533	mg/L	0.0151	0.533	mg/L	0.0151	2.84%
Mg 279.077†	41395.6	49.4	mg/L	1.57	49.4	mg/L	1.57	3.18%
Mn 257.610†	50665.8	0.113	mg/L	0.0011	0.113	mg/L	0.0011	1.00%
Mo 202.031†	33.3	0.00207	mg/L	0.000350	0.00207	mg/L	0.000350	16.87%
Ni 231.604†	49.6	0.00115	mg/L	0.000260	0.00115	mg/L	0.000260	22.51%
Pb 220.353†	-30.8	-0.00137	mg/L	0.002006	-0.00137	mg/L	0.002006	146.84%
Sb 206.836†	16.4	0.00889	mg/L	0.000807	0.00889	mg/L	0.000807	9.08%
Se 196.026†	-39.0	0.00427	mg/L	0.006507	0.00427	mg/L	0.006507	152.23%
Si 251.611†	175701.3	5.11	mg/L	0.112	5.11	mg/L	0.112	2.18%
Sn 189.927†	12.5	0.00012	mg/L	0.000684	0.00012	mg/L	0.000684	567.49%
Ti 334.940†	8786.2	0.0130	mg/L	0.00154	0.0130	mg/L	0.00154	11.79%
Tl 190.801†	134.9	0.0681	mg/L	0.00377	0.0681	mg/L	0.00377	5.53%
V 290.880†	-1377.4	-0.00881	mg/L	0.000495	-0.00881	mg/L	0.000495	5.62%
Zn 206.200†	-743.2	-0.0292	mg/L	0.00009	-0.0292	mg/L	0.00009	0.31%
K 766.490†	7457.8	2.74	mg/L	0.091	2.74	mg/L	0.091	3.32%
Na 589.592†	206569.5	14.5	mg/L	0.11	14.5	mg/L	0.11	0.79%
Sr 407.771†	558780.4	0.535	mg/L	0.0443	0.535	mg/L	0.0443	8.27%
Li 670.784†	595.3	0.00520	mg/L	0.001693	0.00520	mg/L	0.001693	32.55%

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Sequence No.: 51 **Autosampler Location: 99**
Sample ID: L1102051202PS WG357224-01 **Date Collected: 2/22/2011 7:55:06 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051202PS WG357224-01

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102051202PS WG357224-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4916830.1						50165.60	1.02%
YRADIAL	304323.2						5312.48	1.75%
Ga 417.206	1213380.5						16258.58	1.34%
GaRADIAL	58649.5						1536.80	2.62%
Ag 328.068†	40056.6	0.199	mg/L	0.0052	0.199	mg/L	0.0052	2.61%
Al 396.153†	26061.1	5.02	mg/L	0.022	5.02	mg/L	0.022	0.44%
As 188.979†	215.5	0.192	mg/L	0.0015	0.192	mg/L	0.0015	0.78%
Ba 233.527†	32940.1	0.557	mg/L	0.0092	0.557	mg/L	0.0092	1.66%
Be 234.861†	14429.5	0.0251	mg/L	0.00086	0.0251	mg/L	0.00086	3.44%
B 249.677†	54837.9	1.04	mg/L	0.025	1.04	mg/L	0.025	2.44%
Ca 227.546†	12638.8	119	mg/L	1.5	119	mg/L	1.5	1.25%
Cd 228.802†	410.4	0.0228	mg/L	0.00035	0.0228	mg/L	0.00035	1.52%

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Co 228.616†	1839.4	0.0928 mg/L	0.00136	0.0928 mg/L	0.00136	1.47%
Cr 267.716†	28306.5	0.245 mg/L	0.0044	0.245 mg/L	0.0044	1.80%
Cu 327.393†	34964.6	0.238 mg/L	0.0065	0.238 mg/L	0.0065	2.74%
Fe 239.562†	1096.1	2.38 mg/L	0.053	2.38 mg/L	0.053	2.22%
Mg 279.077†	41238.3	49.2 mg/L	0.39	49.2 mg/L	0.39	0.80%
Mn 257.610†	156502.1	0.349 mg/L	0.0060	0.349 mg/L	0.0060	1.72%
Mo 202.031†	6755.6	0.501 mg/L	0.0050	0.501 mg/L	0.0050	0.99%
Ni 231.604†	8158.0	0.236 mg/L	0.0026	0.236 mg/L	0.0026	1.09%
Pb 220.353†	1399.9	0.249 mg/L	0.0024	0.249 mg/L	0.0024	0.98%
Sb 206.836†	934.6	0.589 mg/L	0.0085	0.589 mg/L	0.0085	1.45%
Se 196.026†	229.4	0.189 mg/L	0.0046	0.189 mg/L	0.0046	2.42%
Si 251.611†	246735.7	7.17 mg/L	0.180	7.17 mg/L	0.180	2.51%
Sn 189.927†	-0.5	-0.00210 mg/L	0.000748	-0.00210 mg/L	0.000748	35.60%
Ti 334.940†	372019.8	0.509 mg/L	0.0019	0.509 mg/L	0.0019	0.38%
Tl 190.801†	535.8	0.310 mg/L	0.0045	0.310 mg/L	0.0045	1.46%
V 290.880†	73214.7	0.484 mg/L	0.0080	0.484 mg/L	0.0080	1.65%
Zn 206.200†	14618.8	0.430 mg/L	0.0077	0.430 mg/L	0.0077	1.79%
K 766.490†	72551.6	26.9 mg/L	0.04	26.9 mg/L	0.04	0.13%
Na 589.592†	530996.4	37.8 mg/L	0.70	37.8 mg/L	0.70	1.86%
Sr 407.771†	962594.9	0.922 mg/L	0.0812	0.922 mg/L	0.0812	8.81%
Li 670.784†	41221.0	0.491 mg/L	0.0032	0.491 mg/L	0.0032	0.65%

Sequence No.: 52 **Autosampler Location: 100**
Sample ID: L1102051202DL WG357224-02 **Date Collected: 2/22/2011 8:01:55 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051202DL WG357224-02

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102051202DL WG357224-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5045667.4						47779.47	0.95%
YRADIAL	303589.5						6142.32	2.02%
Ga 417.206	1224759.4						4407.42	0.36%
GaRADIAL	58983.3						1345.20	2.28%
Ag 328.068†	689.2	0.00270	mg/L	0.000361	0.00270	mg/L	0.000361	13.38%
Al 396.153†	230.2	0.0469	mg/L	0.02804	0.0469	mg/L	0.02804	59.74%
As 188.979†	4.6	0.00310	mg/L	0.001504	0.00310	mg/L	0.001504	48.46%
Ba 233.527†	992.6	0.0163	mg/L	0.00017	0.0163	mg/L	0.00017	1.02%
Be 234.861†	11.1	0.00001	mg/L	0.000010	0.00001	mg/L	0.000010	178.16%
B 249.677†	1304.4	0.0255	mg/L	0.00077	0.0255	mg/L	0.00077	3.03%
Ca 227.546†	2615.8	24.5	mg/L	0.06	24.5	mg/L	0.06	0.24%
Cd 228.802†	2.8	0.00008	mg/L	0.000179	0.00008	mg/L	0.000179	238.52%
Co 228.616†	4.8	0.00012	mg/L	0.000209	0.00012	mg/L	0.000209	173.88%
Cr 267.716†	52.1	0.00002	mg/L	0.000100	0.00002	mg/L	0.000100	634.57%
Cu 327.393†	19.0	-0.00007	mg/L	0.000347	-0.00007	mg/L	0.000347	531.93%
Fe 239.562†	51.6	0.113	mg/L	0.0024	0.113	mg/L	0.0024	2.14%
Mg 279.077†	8659.5	10.3	mg/L	0.04	10.3	mg/L	0.04	0.39%
Mn 257.610†	10331.3	0.0226	mg/L	0.00036	0.0226	mg/L	0.00036	1.59%
Mo 202.031†	12.4	0.00049	mg/L	0.000095	0.00049	mg/L	0.000095	19.52%
Ni 231.604†	10.6	0.00005	mg/L	0.000318	0.00005	mg/L	0.000318	615.88%
Pb 220.353†	-25.4	-0.00539	mg/L	0.002789	-0.00539	mg/L	0.002789	51.75%
Sb 206.836†	5.7	0.00212	mg/L	0.004212	0.00212	mg/L	0.004212	198.79%
Se 196.026†	-17.3	-0.00656	mg/L	0.003108	-0.00656	mg/L	0.003108	47.39%
Si 251.611†	35155.7	1.01	mg/L	0.006	1.01	mg/L	0.006	0.57%
Sn 189.927†	0.5	-0.00193	mg/L	0.000190	-0.00193	mg/L	0.000190	9.85%
Ti 334.940†	1552.4	0.00211	mg/L	0.000231	0.00211	mg/L	0.000231	10.97%
Tl 190.801†	58.4	0.0324	mg/L	0.00235	0.0324	mg/L	0.00235	7.26%
V 290.880†	-641.2	-0.00397	mg/L	0.000579	-0.00397	mg/L	0.000579	14.59%
Zn 206.200†	-1290.7	-0.0455	mg/L	0.00030	-0.0455	mg/L	0.00030	0.66%
K 766.490†	1530.2	0.563	mg/L	0.0391	0.563	mg/L	0.0391	6.94%
Na 589.592†	41569.2	2.89	mg/L	0.019	2.89	mg/L	0.019	0.67%
Sr 407.771†	110543.3	0.106	mg/L	0.0104	0.106	mg/L	0.0104	9.86%
Li 670.784†	166.1	0.00007	mg/L	0.002777	0.00007	mg/L	0.002777	>999.9%

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Sequence No.: 53 **Autosampler Location: 101**
Sample ID: L1102051301 **Date Collected: 2/22/2011 8:08:34 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051301

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102051301

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5220881.6						14196.98	0.27%
YRADIAL	317246.6						3990.27	1.26%
Ga 417.206	1235784.4						16697.50	1.35%
GaRADIAL	60103.7						1400.80	2.33%
Ag 328.068†	358.2	0.00108	mg/L	0.000825	0.00108	mg/L	0.000825	76.12%
Al 396.153†	-17.6	-0.00084	mg/L	0.013692	-0.00084	mg/L	0.013692	>999.9%
As 188.979†	0.1	-0.00058	mg/L	0.001038	-0.00058	mg/L	0.001038	180.26%
Ba 233.527†	9.3	-0.00026	mg/L	0.000133	-0.00026	mg/L	0.000133	52.06%
Be 234.861†	-20.1	-0.00003	mg/L	0.000024	-0.00003	mg/L	0.000024	81.08%
B 249.677†	605.1	0.0119	mg/L	0.00140	0.0119	mg/L	0.00140	11.79%
Ca 227.546†	9.2	0.0860	mg/L	0.01691	0.0860	mg/L	0.01691	19.66%
Cd 228.802†	0.5	-0.00002	mg/L	0.000046	-0.00002	mg/L	0.000046	198.78%
Co 228.616†	10.6	0.00043	mg/L	0.000214	0.00043	mg/L	0.000214	49.87%
Cr 267.716†	116.7	0.00059	mg/L	0.000063	0.00059	mg/L	0.000063	10.69%
Cu 327.393†	149.3	0.00080	mg/L	0.000314	0.00080	mg/L	0.000314	39.09%
Fe 239.562†	1.8	0.00516	mg/L	0.001877	0.00516	mg/L	0.001877	36.40%
Mg 279.077†	5.5	0.00451	mg/L	0.001869	0.00451	mg/L	0.001869	41.39%
Mn 257.610†	81.8	-0.00024	mg/L	0.000012	-0.00024	mg/L	0.000012	5.17%
Mo 202.031†	2.5	-0.00026	mg/L	0.000313	-0.00026	mg/L	0.000313	121.57%
Ni 231.604†	15.5	0.00021	mg/L	0.000286	0.00021	mg/L	0.000286	133.50%
Pb 220.353†	-16.1	-0.00495	mg/L	0.000370	-0.00495	mg/L	0.000370	7.47%
Sb 206.836†	-1.3	-0.00231	mg/L	0.002135	-0.00231	mg/L	0.002135	92.60%
Se 196.026†	5.8	0.00334	mg/L	0.000493	0.00334	mg/L	0.000493	14.75%
Si 251.611†	656.4	0.00481	mg/L	0.002482	0.00481	mg/L	0.002482	51.60%
Sn 189.927†	-5.4	-0.00294	mg/L	0.000165	-0.00294	mg/L	0.000165	5.64%
Ti 334.940†	214.4	0.00003	mg/L	0.000133	0.00003	mg/L	0.000133	387.09%
Tl 190.801†	0.7	0.00069	mg/L	0.002595	0.00069	mg/L	0.002595	378.26%
V 290.880†	-145.8	-0.00070	mg/L	0.001245	-0.00070	mg/L	0.001245	177.26%
Zn 206.200†	-1378.5	-0.0481	mg/L	0.00011	-0.0481	mg/L	0.00011	0.23%
K 766.490†	57.3	0.0216	mg/L	0.01416	0.0216	mg/L	0.01416	65.67%
Na 589.592†	3512.4	0.236	mg/L	0.0050	0.236	mg/L	0.0050	2.11%
Sr 407.771†	107.3	-0.00027	mg/L	0.000187	-0.00027	mg/L	0.000187	69.86%
Li 670.784†	223.4	0.00076	mg/L	0.001068	0.00076	mg/L	0.001068	140.79%

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Sequence No.: 54 **Autosampler Location: 102**
Sample ID: L1102051302 **Date Collected: 2/22/2011 8:15:14 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051302

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102051302

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5070285.8						3959.42	0.08%
YRADIAL	313847.9						7468.95	2.38%
Ga 417.206	1276175.9						5281.82	0.41%
GaRADIAL	60650.0						325.34	0.54%
Ag 328.068†	786.4	0.00297	mg/L	0.000311	0.00297	mg/L	0.000311	10.48%
Al 396.153†	9869.1	1.91	mg/L	0.014	1.91	mg/L	0.014	0.71%
As 188.979†	5.4	0.00329	mg/L	0.001903	0.00329	mg/L	0.001903	57.82%
Ba 233.527†	3566.0	0.0598	mg/L	0.00023	0.0598	mg/L	0.00023	0.39%

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Be 234.861†	297.6	0.00011 mg/L	0.000034	0.00011 mg/L	0.000034	31.05%
B 249.677†	2019.7	0.0460 mg/L	0.00014	0.0460 mg/L	0.00014	0.30%
Ca 227.546†	6239.9	58.5 mg/L	0.38	58.5 mg/L	0.38	0.65%
Cd 228.802†	2.3	0.00005 mg/L	0.000091	0.00005 mg/L	0.000091	176.76%
Co 228.616†	27.3	0.00114 mg/L	0.000239	0.00114 mg/L	0.000239	21.02%
Cr 267.716†	506.2	0.00389 mg/L	0.000065	0.00389 mg/L	0.000065	1.66%
Cu 327.393†	343.2	0.00239 mg/L	0.000412	0.00239 mg/L	0.000412	17.26%
Fe 239.562†	956.5	2.08 mg/L	0.019	2.08 mg/L	0.019	0.90%
Mg 279.077†	20930.1	25.0 mg/L	0.14	25.0 mg/L	0.14	0.57%
Mn 257.610†	29721.3	0.0675 mg/L	0.00073	0.0675 mg/L	0.00073	1.08%
Mo 202.031†	45.7	0.00306 mg/L	0.000244	0.00306 mg/L	0.000244	7.97%
Ni 231.604†	96.1	0.00251 mg/L	0.000063	0.00251 mg/L	0.000063	2.51%
Pb 220.353†	223.0	0.0393 mg/L	0.00072	0.0393 mg/L	0.00072	1.84%
Sb 206.836†	15.0	0.00796 mg/L	0.000660	0.00796 mg/L	0.000660	8.29%
Se 196.026†	-30.1	-0.00645 mg/L	0.000618	-0.00645 mg/L	0.000618	9.58%
Si 251.611†	334325.7	9.74 mg/L	0.083	9.74 mg/L	0.083	0.85%
Sn 189.927†	5.7	-0.00105 mg/L	0.000260	-0.00105 mg/L	0.000260	24.74%
Ti 334.940†	23832.6	0.0329 mg/L	0.00038	0.0329 mg/L	0.00038	1.16%
Tl 190.801†	98.6	0.0533 mg/L	0.00084	0.0533 mg/L	0.00084	1.58%
V 290.880†	-486.6	-0.00280 mg/L	0.000511	-0.00280 mg/L	0.000511	18.23%
Zn 206.200†	2177.4	0.0578 mg/L	0.00047	0.0578 mg/L	0.00047	0.82%
K 766.490†	5872.4	2.16 mg/L	0.046	2.16 mg/L	0.046	2.12%
Na 589.592†	99285.6	6.92 mg/L	0.044	6.92 mg/L	0.044	0.64%
Sr 407.771†	696582.4	0.667 mg/L	0.0681	0.667 mg/L	0.0681	10.21%
Li 670.784†	620.3	0.00550 mg/L	0.000839	0.00550 mg/L	0.000839	15.26%

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Sequence No.: 55 **Autosampler Location: 103**
Sample ID: L1102051303 **Date Collected: 2/22/2011 8:22:02 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051303

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102051303

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5090269.9						59267.87	1.16%
YRADIAL	309054.5						9716.64	3.14%
Ga 417.206	1286216.7						23269.22	1.81%
GaRADIAL	59127.6						1102.01	1.86%
Ag 328.068†	791.9	0.00296	mg/L	0.000355	0.00296	mg/L	0.000355	11.97%
Al 396.153†	14675.9	2.83	mg/L	0.024	2.83	mg/L	0.024	0.84%
As 188.979†	8.7	0.00628	mg/L	0.001962	0.00628	mg/L	0.001962	31.24%
Ba 233.527†	3825.1	0.0642	mg/L	0.00102	0.0642	mg/L	0.00102	1.59%
Be 234.861†	362.0	0.00009	mg/L	0.000038	0.00009	mg/L	0.000038	44.16%
B 249.677†	1963.1	0.0470	mg/L	0.00055	0.0470	mg/L	0.00055	1.17%
Ca 227.546†	6544.9	61.3	mg/L	1.17	61.3	mg/L	1.17	1.91%
Cd 228.802†	1.4	-0.00002	mg/L	0.000031	-0.00002	mg/L	0.000031	192.62%
Co 228.616†	33.2	0.00138	mg/L	0.000460	0.00138	mg/L	0.000460	33.40%
Cr 267.716†	655.7	0.00516	mg/L	0.000120	0.00516	mg/L	0.000120	2.32%
Cu 327.393†	562.2	0.00397	mg/L	0.001241	0.00397	mg/L	0.001241	31.26%
Fe 239.562†	1266.9	2.75	mg/L	0.071	2.75	mg/L	0.071	2.59%
Mg 279.077†	22350.9	26.7	mg/L	0.66	26.7	mg/L	0.66	2.47%
Mn 257.610†	35218.8	0.0800	mg/L	0.00049	0.0800	mg/L	0.00049	0.61%
Mo 202.031†	43.1	0.00290	mg/L	0.000305	0.00290	mg/L	0.000305	10.49%
Ni 231.604†	133.5	0.00360	mg/L	0.000533	0.00360	mg/L	0.000533	14.82%
Pb 220.353†	170.6	0.0303	mg/L	0.00070	0.0303	mg/L	0.00070	2.29%
Sb 206.836†	17.2	0.00938	mg/L	0.000129	0.00938	mg/L	0.000129	1.38%
Se 196.026†	-29.2	-0.00499	mg/L	0.003651	-0.00499	mg/L	0.003651	73.10%
Si 251.611†	384621.5	11.2	mg/L	0.11	11.2	mg/L	0.11	0.94%
Sn 189.927†	0.2	-0.00198	mg/L	0.000794	-0.00198	mg/L	0.000794	40.13%
Ti 334.940†	37523.6	0.0516	mg/L	0.00062	0.0516	mg/L	0.00062	1.20%
Tl 190.801†	99.8	0.0540	mg/L	0.00384	0.0540	mg/L	0.00384	7.12%
V 290.880†	-308.3	-0.00157	mg/L	0.000162	-0.00157	mg/L	0.000162	10.28%
Zn 206.200†	2139.5	0.0567	mg/L	0.00151	0.0567	mg/L	0.00151	2.66%
K 766.490†	6736.7	2.48	mg/L	0.055	2.48	mg/L	0.055	2.20%
Na 589.592†	103632.6	7.23	mg/L	0.144	7.23	mg/L	0.144	1.99%

Approved: February 23, 2011

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Sr 407.771†	697457.3	0.668	mg/L	0.0543	0.668	mg/L	0.0543 8.14%
Li 670.784†	1003.3	0.0101	mg/L	0.00072	0.0101	mg/L	0.00072 7.18%

Sequence No.: 56 **Autosampler Location: 104**
Sample ID: L1102051304 **Date Collected: 2/22/2011 8:28:46 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051304

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102051304

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5240895.2						38122.42	0.73%
YRADIAL	315498.2						7754.31	2.46%
Ga 417.206	1252138.0						11150.88	0.89%
GaRADIAL	59859.5						1009.42	1.69%
Ag 328.068†	383.1	0.00121	mg/L	0.000449	0.00121	mg/L	0.000449	37.20%
Al 396.153†	-46.8	-0.00646	mg/L	0.015769	-0.00646	mg/L	0.015769	244.01%
As 188.979†	1.2	0.00044	mg/L	0.000768	0.00044	mg/L	0.000768	174.06%
Ba 233.527†	6.6	-0.00030	mg/L	0.000074	-0.00030	mg/L	0.000074	24.49%
Be 234.861†	1.5	0.00001	mg/L	0.000016	0.00001	mg/L	0.000016	201.92%
B 249.677†	386.5	0.00776	mg/L	0.000218	0.00776	mg/L	0.000218	2.81%
Ca 227.546†	4.6	0.0435	mg/L	0.07907	0.0435	mg/L	0.07907	181.77%
Cd 228.802†	2.2	0.00006	mg/L	0.000162	0.00006	mg/L	0.000162	262.26%
Co 228.616†	5.1	0.00014	mg/L	0.000144	0.00014	mg/L	0.000144	99.41%
Cr 267.716†	46.1	-0.00002	mg/L	0.000134	-0.00002	mg/L	0.000134	555.35%
Cu 327.393†	137.3	0.00072	mg/L	0.000363	0.00072	mg/L	0.000363	50.38%
Fe 239.562†	1.7	0.00497	mg/L	0.003165	0.00497	mg/L	0.003165	63.65%
Mg 279.077†	2.3	0.00074	mg/L	0.007033	0.00074	mg/L	0.007033	955.28%
Mn 257.610†	-65.1	-0.00057	mg/L	0.000017	-0.00057	mg/L	0.000017	3.09%
Mo 202.031†	9.5	0.00026	mg/L	0.000515	0.00026	mg/L	0.000515	198.29%
Ni 231.604†	16.5	0.00024	mg/L	0.000133	0.00024	mg/L	0.000133	54.40%
Pb 220.353†	-14.3	-0.00464	mg/L	0.000494	-0.00464	mg/L	0.000494	10.65%
Sb 206.836†	0.1	-0.00139	mg/L	0.001036	-0.00139	mg/L	0.001036	74.73%
Se 196.026†	1.1	0.00004	mg/L	0.003165	0.00004	mg/L	0.003165	>999.9%
Si 251.611†	823.5	0.00968	mg/L	0.001147	0.00968	mg/L	0.001147	11.85%
Sn 189.927†	-7.0	-0.00320	mg/L	0.000147	-0.00320	mg/L	0.000147	4.57%
Ti 334.940†	163.9	-0.00003	mg/L	0.000153	-0.00003	mg/L	0.000153	438.80%
Tl 190.801†	-0.5	-0.00005	mg/L	0.002279	-0.00005	mg/L	0.002279	>999.9%
V 290.880†	-306.9	-0.00177	mg/L	0.001239	-0.00177	mg/L	0.001239	70.10%
Zn 206.200†	-1486.4	-0.0513	mg/L	0.00007	-0.0513	mg/L	0.00007	0.14%
K 766.490†	-11.6	-0.00390	mg/L	0.012879	-0.00390	mg/L	0.012879	330.56%
Na 589.592†	3366.7	0.226	mg/L	0.0073	0.226	mg/L	0.0073	3.23%
Sr 407.771†	36.7	-0.00034	mg/L	0.000218	-0.00034	mg/L	0.000218	64.99%
Li 670.784†	113.0	-0.00056	mg/L	0.001739	-0.00056	mg/L	0.001739	309.75%

Sequence No.: 57 **Autosampler Location: 105**
Sample ID: L1102051306 WG357152-01 **Date Collected: 2/22/2011 8:35:25 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051306 WG357152-01

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102051306 WG357152-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4965374.6						83974.34	1.69%
YRADIAL	308402.8						2213.22	0.72%
Ga 417.206	1214651.7						16825.89	1.39%
GaRADIAL	58836.4						1251.71	2.13%

Approved: February 23, 2011

Pierre Morris

Ag 328.068†	695.7	0.00259 mg/L	0.000531	0.00259 mg/L	0.000531	20.53%
Al 396.153†	11.3	0.00466 mg/L	0.020562	0.00466 mg/L	0.020562	441.64%
As 188.979†	5.2	0.00290 mg/L	0.002605	0.00290 mg/L	0.002605	89.75%
Ba 233.527†	5308.2	0.0893 mg/L	0.00169	0.0893 mg/L	0.00169	1.90%
Be 234.861†	10.6	-0.00001 mg/L	0.000029	-0.00001 mg/L	0.000029	406.32%
B 249.677†	2281.4	0.0446 mg/L	0.00069	0.0446 mg/L	0.00069	1.54%
Ca 227.546†	6295.0	59.0 mg/L	0.81	59.0 mg/L	0.81	1.37%
Cd 228.802†	0.1	-0.00007 mg/L	0.000086	-0.00007 mg/L	0.000086	117.11%
Co 228.616†	14.4	0.00059 mg/L	0.000101	0.00059 mg/L	0.000101	17.14%
Cr 267.716†	281.3	0.00198 mg/L	0.000105	0.00198 mg/L	0.000105	5.30%
Cu 327.393†	-214.6	-0.00164 mg/L	0.000173	-0.00164 mg/L	0.000173	10.54%
Fe 239.562†	117.7	0.256 mg/L	0.0023	0.256 mg/L	0.0023	0.89%
Mg 279.077†	18910.6	22.6 mg/L	0.15	22.6 mg/L	0.15	0.67%
Mn 257.610†	30422.1	0.0685 mg/L	0.00113	0.0685 mg/L	0.00113	1.65%
Mo 202.031†	110.9	0.00781 mg/L	0.000113	0.00781 mg/L	0.000113	1.45%
Ni 231.604†	75.4	0.00191 mg/L	0.000191	0.00191 mg/L	0.000191	9.97%
Pb 220.353†	-30.7	-0.00463 mg/L	0.000916	-0.00463 mg/L	0.000916	19.78%
Sb 206.836†	7.9	0.00359 mg/L	0.000741	0.00359 mg/L	0.000741	20.62%
Se 196.026†	-28.4	-0.00567 mg/L	0.002262	-0.00567 mg/L	0.002262	39.87%
Si 251.611†	159732.5	4.64 mg/L	0.044	4.64 mg/L	0.044	0.94%
Sn 189.927†	4.2	-0.00129 mg/L	0.000264	-0.00129 mg/L	0.000264	20.37%
Ti 334.940†	120.5	0.00049 mg/L	0.000141	0.00049 mg/L	0.000141	28.55%
Tl 190.801†	96.0	0.0513 mg/L	0.00290	0.0513 mg/L	0.00290	5.64%
V 290.880†	-748.9	-0.00468 mg/L	0.000703	-0.00468 mg/L	0.000703	15.03%
Zn 206.200†	-1428.1	-0.0496 mg/L	0.00005	-0.0496 mg/L	0.00005	0.10%
K 766.490†	9826.2	3.59 mg/L	0.032	3.59 mg/L	0.032	0.89%
Na 589.592†	613881.4	43.9 mg/L	0.50	43.9 mg/L	0.50	1.14%
Sr 407.771†	778671.7	0.746 mg/L	0.0696	0.746 mg/L	0.0696	9.33%
Li 670.784†	2257.4	0.0251 mg/L	0.00098	0.0251 mg/L	0.00098	3.90%

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Sequence No.: 58 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/22/2011 8:42:11 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4863801.3						17567.06	0.36%
YRADIAL	302826.1						3478.33	1.15%
Ga 417.206	1148057.8						14088.17	1.23%
GaRADIAL	57590.8						410.77	0.71%
Ag 328.068†	80372.0	0.401	mg/L	0.0074	0.401	mg/L	0.0074	1.85%
QC value within limits for Ag 328.068 Recovery = 100.21%								
Al 396.153†	51561.9	9.93	mg/L	0.029	9.93	mg/L	0.029	0.29%
QC value within limits for Al 396.153 Recovery = 99.31%								
As 188.979†	442.1	0.399	mg/L	0.0051	0.399	mg/L	0.0051	1.28%
QC value within limits for As 188.979 Recovery = 99.63%								
Ba 233.527†	58636.5	0.993	mg/L	0.0071	0.993	mg/L	0.0071	0.71%
QC value within limits for Ba 233.527 Recovery = 99.29%								
Be 234.861†	29097.3	0.0507	mg/L	0.00103	0.0507	mg/L	0.00103	2.04%
QC value within limits for Be 234.861 Recovery = 101.42%								
B 249.677†	26224.0	0.499	mg/L	0.0087	0.499	mg/L	0.0087	1.74%
QC value within limits for B 249.677 Recovery = 99.90%								
Ca 227.546†	1045.0	10.1	mg/L	0.13	10.1	mg/L	0.13	1.32%
QC value within limits for Ca 227.546 Recovery = 101.21%								
Cd 228.802†	884.3	0.0493	mg/L	0.00034	0.0493	mg/L	0.00034	0.70%
QC value within limits for Cd 228.802 Recovery = 98.61%								
Co 228.616†	3870.8	0.196	mg/L	0.0002	0.196	mg/L	0.0002	0.09%
QC value within limits for Co 228.616 Recovery = 97.87%								
Cr 267.716†	56923.4	0.493	mg/L	0.0043	0.493	mg/L	0.0043	0.86%
QC value within limits for Cr 267.716 Recovery = 98.55%								
Cu 327.393†	72552.2	0.494	mg/L	0.0093	0.494	mg/L	0.0093	1.88%
QC value within limits for Cu 327.393 Recovery = 98.72%								
Fe 239.562†	1777.8	3.86	mg/L	0.012	3.86	mg/L	0.012	0.32%

Approved: February 23, 2011

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QC value within limits for Fe 239.562 Recovery = 96.55%
Mg 279.077† 8075.4 9.64 mg/L 0.030 9.64 mg/L 0.030 0.31%
QC value within limits for Mg 279.077 Recovery = 96.42%
Mn 257.610† 223608.0 0.499 mg/L 0.0038 0.499 mg/L 0.0038 0.76%
QC value within limits for Mn 257.610 Recovery = 99.90%
Mo 202.031† 13370.2 0.991 mg/L 0.0078 0.991 mg/L 0.0078 0.79%
QC value within limits for Mo 202.031 Recovery = 99.13%
Ni 231.604† 16971.9 0.491 mg/L 0.0056 0.491 mg/L 0.0056 1.14%
QC value within limits for Ni 231.604 Recovery = 98.25%
Pb 220.353† 2965.4 0.517 mg/L 0.0006 0.517 mg/L 0.0006 0.11%
QC value within limits for Pb 220.353 Recovery = 103.40%
Sb 206.836† 1923.7 1.21 mg/L 0.011 1.21 mg/L 0.011 0.91%
QC value within limits for Sb 206.836 Recovery = 101.10%
Se 196.026† 557.5 0.390 mg/L 0.0035 0.390 mg/L 0.0035 0.91%
QC value within limits for Se 196.026 Recovery = 97.44%
Si 251.611† 170757.0 4.95 mg/L 0.081 4.95 mg/L 0.081 1.64%
QC value within limits for Si 251.611 Recovery = 99.01%
Sn 189.927† 5834.7 0.993 mg/L 0.0031 0.993 mg/L 0.0031 0.31%
QC value within limits for Sn 189.927 Recovery = 99.26%
Ti 334.940† 732062.2 1.00 mg/L 0.006 1.00 mg/L 0.006 0.59%
QC value within limits for Ti 334.940 Recovery = 100.04%
Tl 190.801† 856.6 0.514 mg/L 0.0037 0.514 mg/L 0.0037 0.72%
QC value within limits for Tl 190.801 Recovery = 102.77%
V 290.880† 147700.9 0.976 mg/L 0.0076 0.976 mg/L 0.0076 0.78%
QC value within limits for V 290.880 Recovery = 97.62%
Zn 206.200† 31371.4 0.930 mg/L 0.0065 0.930 mg/L 0.0065 0.70%
QC value within limits for Zn 206.200 Recovery = 93.03%
K 766.490† 132653.6 49.4 mg/L 0.45 49.4 mg/L 0.45 0.91%
QC value within limits for K 766.490 Recovery = 98.87%
Na 589.592† 689388.7 49.5 mg/L 0.11 49.5 mg/L 0.11 0.22%
QC value within limits for Na 589.592 Recovery = 98.94%
Sr 407.771† 950824.4 0.910 mg/L 0.0799 0.910 mg/L 0.0799 8.78%
QC value within limits for Sr 407.771 Recovery = 91.03%
Li 670.784† 82715.5 0.987 mg/L 0.0086 0.987 mg/L 0.0086 0.87%
QC value within limits for Li 670.784 Recovery = 98.66%
All analyte(s) passed QC.

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Sequence No.: 59 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/22/2011 8:48:51 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5170237.1						40659.15	0.79%
YRADIAL	305521.8						3769.40	1.23%
Ga 417.206	1200342.4						8594.69	0.72%
GaRADIAL	57655.8						276.88	0.48%
Ag 328.068†	505.5	0.00182	mg/L	0.000709	0.00182	mg/L	0.000709	38.99%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-42.5	-0.00565	mg/L	0.021061	-0.00565	mg/L	0.021061	372.91%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.9	0.00107	mg/L	0.002540	0.00107	mg/L	0.002540	236.32%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	4.4	-0.00034	mg/L	0.000043	-0.00034	mg/L	0.000043	12.76%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-44.1	-0.00007	mg/L	0.000016	-0.00007	mg/L	0.000016	22.93%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	452.9	0.00899	mg/L	0.000231	0.00899	mg/L	0.000231	2.57%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	9.5	0.0883	mg/L	0.02769	0.0883	mg/L	0.02769	31.36%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	2.0	0.00005	mg/L	0.000113	0.00005	mg/L	0.000113	238.79%
QC value within limits for Cd 228.802 Recovery = Not calculated								

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Co 228.616†	11.2	0.00046 mg/L	0.000353	0.00046 mg/L	0.000353	77.03%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-17.7	-0.00058 mg/L	0.000027	-0.00058 mg/L	0.000027	4.74%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 327.393†	131.3	0.00068 mg/L	0.000621	0.00068 mg/L	0.000621	91.05%	
QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe 239.562†	0.5	0.00225 mg/L	0.004045	0.00225 mg/L	0.004045	179.40%	
QC value within limits for Fe 239.562 Recovery = Not calculated							
Mg 279.077†	3.0	0.00155 mg/L	0.002698	0.00155 mg/L	0.002698	174.56%	
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	-5.3	-0.00044 mg/L	0.000023	-0.00044 mg/L	0.000023	5.32%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	11.2	0.00038 mg/L	0.000405	0.00038 mg/L	0.000405	105.27%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	-2.2	-0.00030 mg/L	0.000250	-0.00030 mg/L	0.000250	83.88%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	-15.5	-0.00485 mg/L	0.000260	-0.00485 mg/L	0.000260	5.37%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	-0.8	-0.00195 mg/L	0.000492	-0.00195 mg/L	0.000492	25.17%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	0.6	-0.00025 mg/L	0.003307	-0.00025 mg/L	0.003307	>999.9%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	112.4	-0.0111 mg/L	0.00030	-0.0111 mg/L	0.00030	2.67%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	2.1	-0.00165 mg/L	0.001111	-0.00165 mg/L	0.001111	67.26%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	226.8	0.00005 mg/L	0.000141	0.00005 mg/L	0.000141	272.02%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-1.0	-0.00035 mg/L	0.000895	-0.00035 mg/L	0.000895	256.24%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	-124.5	-0.00056 mg/L	0.000221	-0.00056 mg/L	0.000221	39.32%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-1518.8	-0.0523 mg/L	0.00021	-0.0523 mg/L	0.00021	0.39%	
QC value less than the lower limit for Zn 206.200 Recovery = Not calculated							
K 766.490†	160.8	0.0600 mg/L	0.01444	0.0600 mg/L	0.01444	24.07%	
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	672.2	0.0387 mg/L	0.01976	0.0387 mg/L	0.01976	51.12%	
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	-14.4	-0.00038 mg/L	0.000169	-0.00038 mg/L	0.000169	44.01%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	-11.6	-0.00205 mg/L	0.000270	-0.00205 mg/L	0.000270	13.19%	
QC value within limits for Li 670.784 Recovery = Not calculated							

QC Failed. Continue with analysis.

Sequence No.: 60 **Autosampler Location: 106**
Sample ID: L1102051307S WG357152-04 **Date Collected: 2/22/2011 8:55:32 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051307S WG357152-04

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102051307S WG357152-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4912384.4						18233.89	0.37%
YRADIAL	300537.3						1371.19	0.46%
Ga 417.206	1210981.0						7805.59	0.64%
GaRADIAL	58246.4						964.33	1.66%
Ag 328.068†	39130.3	0.195	mg/L	0.0006	0.195	mg/L	0.0006	0.30%
Al 396.153†	24620.4	4.74	mg/L	0.028	4.74	mg/L	0.028	0.59%
As 188.979†	213.8	0.191	mg/L	0.0030	0.191	mg/L	0.0030	1.55%
Ba 233.527†	33736.2	0.571	mg/L	0.0058	0.571	mg/L	0.0058	1.02%
Be 234.861†	14090.4	0.0245	mg/L	0.00010	0.0245	mg/L	0.00010	0.40%
B 249.677†	53014.2	1.00	mg/L	0.007	1.00	mg/L	0.007	0.65%
Ca 227.546†	6756.7	63.5	mg/L	0.32	63.5	mg/L	0.32	0.50%
Cd 228.802†	411.3	0.0229	mg/L	0.00011	0.0229	mg/L	0.00011	0.48%
Co 228.616†	1858.9	0.0939	mg/L	0.00030	0.0939	mg/L	0.00030	0.32%

Approved: February 23, 2011

Pierce Morris

Cr 267.716†	28084.1	0.243 mg/L	0.0026	0.243 mg/L	0.0026	1.05%
Cu 327.393†	34295.4	0.233 mg/L	0.0014	0.233 mg/L	0.0014	0.62%
Fe 239.562†	1005.3	2.18 mg/L	0.034	2.18 mg/L	0.034	1.58%
Mg 279.077†	22723.1	27.1 mg/L	0.21	27.1 mg/L	0.21	0.76%
Mn 257.610†	140309.8	0.314 mg/L	0.0029	0.314 mg/L	0.0029	0.92%
Mo 202.031†	6836.9	0.507 mg/L	0.0020	0.507 mg/L	0.0020	0.40%
Ni 231.604†	8291.7	0.240 mg/L	0.0008	0.240 mg/L	0.0008	0.33%
Pb 220.353†	1409.8	0.248 mg/L	0.0006	0.248 mg/L	0.0006	0.23%
Sb 206.836†	923.1	0.582 mg/L	0.0037	0.582 mg/L	0.0037	0.64%
Se 196.026†	239.1	0.182 mg/L	0.0030	0.182 mg/L	0.0030	1.64%
Si 251.611†	243988.0	7.09 mg/L	0.030	7.09 mg/L	0.030	0.43%
Sn 189.927†	2980.0	0.506 mg/L	0.0001	0.506 mg/L	0.0001	0.02%
Ti 334.940†	360436.4	0.493 mg/L	0.0034	0.493 mg/L	0.0034	0.69%
Tl 190.801†	504.3	0.296 mg/L	0.0009	0.296 mg/L	0.0009	0.31%
V 290.880†	72717.5	0.481 mg/L	0.0055	0.481 mg/L	0.0055	1.15%
Zn 206.200†	14135.1	0.415 mg/L	0.0024	0.415 mg/L	0.0024	0.57%
K 766.490†	73720.6	27.3 mg/L	0.20	27.3 mg/L	0.20	0.73%
Na 589.592†	952346.3	69.3 mg/L	1.08	69.3 mg/L	1.08	1.56%
Sr 407.771†	1271501.7	1.22 mg/L	0.088	1.22 mg/L	0.088	7.21%
Li 670.784†	41453.1	0.493 mg/L	0.0029	0.493 mg/L	0.0029	0.60%

Sequence No.: 61 **Autosampler Location: 107**
Sample ID: L1102051308SD WG357152-05 **Date Collected: 2/22/2011 9:02:21 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051308SD WG357152-05

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102051308SD WG357152-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4942525.5						5342.91	0.11%
YRADIAL	298653.2						5313.58	1.78%
Ga 417.206	1205105.4						10326.90	0.86%
GaRADIAL	57965.1						291.87	0.50%
Ag 328.068†	39292.0	0.195	mg/L	0.0041	0.195	mg/L	0.0041	2.08%
Al 396.153†	24981.2	4.81	mg/L	0.018	4.81	mg/L	0.018	0.37%
As 188.979†	214.4	0.192	mg/L	0.0040	0.192	mg/L	0.0040	2.10%
Ba 233.527†	33377.7	0.565	mg/L	0.0031	0.565	mg/L	0.0031	0.54%
Be 234.861†	14156.1	0.0247	mg/L	0.00047	0.0247	mg/L	0.00047	1.89%
B 249.677†	53328.2	1.01	mg/L	0.018	1.01	mg/L	0.018	1.74%
Ca 227.546†	6657.7	62.5	mg/L	0.46	62.5	mg/L	0.46	0.74%
Cd 228.802†	416.5	0.0232	mg/L	0.00028	0.0232	mg/L	0.00028	1.22%
Co 228.616†	1857.9	0.0938	mg/L	0.00024	0.0938	mg/L	0.00024	0.26%
Cr 267.716†	27810.3	0.240	mg/L	0.0016	0.240	mg/L	0.0016	0.68%
Cu 327.393†	34231.1	0.233	mg/L	0.0052	0.233	mg/L	0.0052	2.21%
Fe 239.562†	1011.3	2.20	mg/L	0.011	2.20	mg/L	0.011	0.49%
Mg 279.077†	22654.1	27.0	mg/L	0.10	27.0	mg/L	0.10	0.36%
Mn 257.610†	138751.9	0.311	mg/L	0.0018	0.311	mg/L	0.0018	0.59%
Mo 202.031†	6836.3	0.507	mg/L	0.0010	0.507	mg/L	0.0010	0.20%
Ni 231.604†	8278.5	0.239	mg/L	0.0001	0.239	mg/L	0.0001	0.05%
Pb 220.353†	1405.2	0.247	mg/L	0.0015	0.247	mg/L	0.0015	0.62%
Sb 206.836†	934.0	0.588	mg/L	0.0043	0.588	mg/L	0.0043	0.73%
Se 196.026†	248.1	0.188	mg/L	0.0046	0.188	mg/L	0.0046	2.47%
Si 251.611†	240637.4	7.00	mg/L	0.125	7.00	mg/L	0.125	1.79%
Sn 189.927†	2974.6	0.505	mg/L	0.0009	0.505	mg/L	0.0009	0.17%
Ti 334.940†	363772.7	0.498	mg/L	0.0021	0.498	mg/L	0.0021	0.42%
Tl 190.801†	510.8	0.300	mg/L	0.0021	0.300	mg/L	0.0021	0.68%
V 290.880†	71892.3	0.475	mg/L	0.0040	0.475	mg/L	0.0040	0.85%
Zn 206.200†	14174.8	0.417	mg/L	0.0024	0.417	mg/L	0.0024	0.57%
K 766.490†	74320.1	27.5	mg/L	0.16	27.5	mg/L	0.16	0.59%
Na 589.592†	941182.3	68.4	mg/L	0.58	68.4	mg/L	0.58	0.85%
Sr 407.771†	1246157.1	1.19	mg/L	0.094	1.19	mg/L	0.094	7.89%
Li 670.784†	42013.5	0.500	mg/L	0.0023	0.500	mg/L	0.0023	0.47%

Sequence No.: 62 **Autosampler Location: 108**

Approved: February 23, 2011

Pierre Morris

Sample ID: L1102051701 **Date Collected: 2/22/2011 9:09:05 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051701

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102051701

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4770251.7						52835.73	1.11%
YRADIAL	304652.0						5529.91	1.82%
Ga 417.206	1115762.8						22084.20	1.98%
GaRADIAL	56797.9						576.29	1.01%
Ag 328.068†	1369.4	-0.00149	mg/L	0.001260	-0.00149	mg/L	0.001260	84.52%
Al 396.153†	345855.7	66.7	mg/L	0.12	66.7	mg/L	0.12	0.17%
As 188.979†	69.6	0.0767	mg/L	0.00799	0.0767	mg/L	0.00799	10.42%
Ba 233.527†	1191300.6	20.1	mg/L	0.09	20.1	mg/L	0.09	0.42%
Be 234.861†	21520.9	0.00792	mg/L	0.000593	0.00792	mg/L	0.000593	7.48%
B 249.677†	-10090.9	0.415	mg/L	0.0127	0.415	mg/L	0.0127	3.05%
Ca 227.546†	12051.7	114	mg/L	1.7	114	mg/L	1.7	1.49%
Cd 228.802†	78.1	0.00453	mg/L	0.000190	0.00453	mg/L	0.000190	4.19%
Co 228.616†	1348.9	0.0561	mg/L	0.00162	0.0561	mg/L	0.00162	2.88%
Cr 267.716†	15844.2	0.134	mg/L	0.0017	0.134	mg/L	0.0017	1.28%
Cu 327.393†	149524.5	1.03	mg/L	0.009	1.03	mg/L	0.009	0.89%
Fe 239.562†	67130.9	146	mg/L	2.7	146	mg/L	2.7	1.85%
Mg 279.077†	11163.7	13.2	mg/L	0.29	13.2	mg/L	0.29	2.22%
Mn 257.610†	1273142.2	2.85	mg/L	0.011	2.85	mg/L	0.011	0.38%
Mo 202.031†	411.3	0.0379	mg/L	0.00087	0.0379	mg/L	0.00087	2.29%
Ni 231.604†	6266.5	0.181	mg/L	0.0014	0.181	mg/L	0.0014	0.77%
Pb 220.353†	4921.4	0.851	mg/L	0.0093	0.851	mg/L	0.0093	1.09%
Sb 206.836†	27.6	0.0153	mg/L	0.00064	0.0153	mg/L	0.00064	4.20%
Se 196.026†	-109.1	-0.00285	mg/L	0.005490	-0.00285	mg/L	0.005490	192.79%
Si 251.611†	2387191.1	69.6	mg/L	0.69	69.6	mg/L	0.69	1.00%
Sn 189.927†	80.8	0.0118	mg/L	0.00176	0.0118	mg/L	0.00176	14.96%
Ti 334.940†	757092.1	1.04	mg/L	0.008	1.04	mg/L	0.008	0.79%
Tl 190.801†	103.5	0.0674	mg/L	0.00883	0.0674	mg/L	0.00883	13.11%
V 290.880†	21627.2	0.154	mg/L	0.0024	0.154	mg/L	0.0024	1.56%
Zn 206.200†	29044.5	0.856	mg/L	0.0083	0.856	mg/L	0.0083	0.97%
K 766.490†	58833.6	21.7	mg/L	0.27	21.7	mg/L	0.27	1.24%
Na 589.592†	1179865.9	86.8	mg/L	0.25	86.8	mg/L	0.25	0.29%
Sr 407.771†	768423.9	0.718	mg/L	0.0069	0.718	mg/L	0.0069	0.96%
Li 670.784†	8157.0	0.0956	mg/L	0.00154	0.0956	mg/L	0.00154	1.62%

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Sequence No.: 63 **Autosampler Location: 109**
Sample ID: L1102053301 **Date Collected: 2/22/2011 9:14:52 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053301

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102053301

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4738124.2						30027.94	0.63%
YRADIAL	299013.4						1751.27	0.59%
Ga 417.206	1141209.2						9136.32	0.80%
GaRADIAL	57224.3						935.55	1.63%
Ag 328.068†	546.3	0.00188	mg/L	0.000949	0.00188	mg/L	0.000949	50.33%
Al 396.153†	-164.7	-0.0292	mg/L	0.00442	-0.0292	mg/L	0.00442	15.13%
As 188.979†	4.8	0.00334	mg/L	0.003035	0.00334	mg/L	0.003035	90.99%
Ba 233.527†	4684.1	0.0787	mg/L	0.00043	0.0787	mg/L	0.00043	0.55%
Be 234.861†	-20.3	-0.00008	mg/L	0.000016	-0.00008	mg/L	0.000016	20.19%

Approved: February 23, 2011

Pierre Morris

B 249.677†	4727.4	0.0906	mg/L	0.00085	0.0906	mg/L	0.00085 0.93%
Ca 227.546†	2215.8	20.7	mg/L	0.14	20.7	mg/L	0.14 0.69%
Cd 228.802†	1.3	-0.00001	mg/L	0.000180	-0.00001	mg/L	0.000180 >999.9%
Co 228.616†	6.5	0.00018	mg/L	0.000227	0.00018	mg/L	0.000227 123.03%
Cr 267.716†	217.5	0.00145	mg/L	0.000090	0.00145	mg/L	0.000090 6.22%
Cu 327.393†	-14.5	-0.00029	mg/L	0.000339	-0.00029	mg/L	0.000339 118.73%
Fe 239.562†	121.7	0.265	mg/L	0.0055	0.265	mg/L	0.0055 2.07%
Mg 279.077†	25030.1	29.9	mg/L	0.21	29.9	mg/L	0.21 0.70%
Mn 257.610†	4246.9	0.0185	mg/L	0.00009	0.0185	mg/L	0.00009 0.49%
Mo 202.031†	16.2	0.00077	mg/L	0.000545	0.00077	mg/L	0.000545 70.47%
Ni 231.604†	53.0	0.00129	mg/L	0.000513	0.00129	mg/L	0.000513 39.94%
Pb 220.353†	-12.4	-0.00333	mg/L	0.001835	-0.00333	mg/L	0.001835 55.19%
Sb 206.836†	7.2	0.00308	mg/L	0.001509	0.00308	mg/L	0.001509 49.07%
Se 196.026†	-9.3	-0.00191	mg/L	0.003719	-0.00191	mg/L	0.003719 194.97%
Si 251.611†	440492.0	12.8	mg/L	0.09	12.8	mg/L	0.09 0.73%
Sn 189.927†	3.5	-0.00142	mg/L	0.000371	-0.00142	mg/L	0.000371 26.17%
Ti 334.940†	-111.5	-0.00020	mg/L	0.000174	-0.00020	mg/L	0.000174 85.01%
Tl 190.801†	46.9	0.0259	mg/L	0.00014	0.0259	mg/L	0.00014 0.52%
V 290.880†	-896.8	-0.00565	mg/L	0.001094	-0.00565	mg/L	0.001094 19.35%
Zn 206.200†	-1359.8	-0.0476	mg/L	0.00017	-0.0476	mg/L	0.00017 0.35%
K 766.490†	6210.9	1.52	mg/L	0.070	1.52	mg/L	0.070 4.60%
Na 589.592†	5739016.8	773	mg/L	0.0	773	mg/L	0.0 0.00%
Sr 407.771†	592581.2	0.567	mg/L	0.0437	0.567	mg/L	0.0437 7.70%
Li 670.784†	3078.9	0.0349	mg/L	0.00203	0.0349	mg/L	0.00203 5.81%

Sequence No.: 64 **Autosampler Location: 110**
Sample ID: L1102053302 **Date Collected: 2/22/2011 9:21:43 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053302

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102053302

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4655443.2						52850.00	1.14%
YRADIAL	289654.8						1371.72	0.47%
Ga 417.206	1124209.6						14892.81	1.32%
GaRADIAL	55771.1						798.05	1.43%
Ag 328.068†	426.3	0.00128	mg/L	0.000966	0.00128	mg/L	0.000966	75.32%
Al 396.153†	-119.7	-0.0205	mg/L	0.00234	-0.0205	mg/L	0.00234	11.39%
As 188.979†	3.0	0.00174	mg/L	0.002718	0.00174	mg/L	0.002718	155.82%
Ba 233.527†	4963.0	0.0834	mg/L	0.00091	0.0834	mg/L	0.00091	1.09%
Be 234.861†	-23.2	-0.00009	mg/L	0.000024	-0.00009	mg/L	0.000024	25.52%
B 249.677†	4542.7	0.0874	mg/L	0.00223	0.0874	mg/L	0.00223	2.55%
Ca 227.546†	2308.7	21.6	mg/L	0.29	21.6	mg/L	0.29	1.34%
Cd 228.802†	1.0	-0.00001	mg/L	0.000091	-0.00001	mg/L	0.000091	796.67%
Co 228.616†	12.0	0.00046	mg/L	0.000180	0.00046	mg/L	0.000180	38.85%
Cr 267.716†	286.5	0.00205	mg/L	0.000070	0.00205	mg/L	0.000070	3.41%
Cu 327.393†	-88.5	-0.00078	mg/L	0.000128	-0.00078	mg/L	0.000128	16.43%
Fe 239.562†	143.8	0.313	mg/L	0.0042	0.313	mg/L	0.0042	1.34%
Mg 279.077†	26239.0	31.3	mg/L	0.64	31.3	mg/L	0.64	2.05%
Mn 257.610†	4651.7	0.0194	mg/L	0.00016	0.0194	mg/L	0.00016	0.84%
Mo 202.031†	13.1	0.00055	mg/L	0.000160	0.00055	mg/L	0.000160	29.31%
Ni 231.604†	66.5	0.00168	mg/L	0.000270	0.00168	mg/L	0.000270	16.11%
Pb 220.353†	-22.8	-0.00508	mg/L	0.001006	-0.00508	mg/L	0.001006	19.82%
Sb 206.836†	5.7	0.00212	mg/L	0.001507	0.00212	mg/L	0.001507	70.96%
Se 196.026†	-9.9	-0.00210	mg/L	0.001046	-0.00210	mg/L	0.001046	49.71%
Si 251.611†	446007.6	13.0	mg/L	0.23	13.0	mg/L	0.23	1.73%
Sn 189.927†	-3.1	-0.00253	mg/L	0.000192	-0.00253	mg/L	0.000192	7.57%
Ti 334.940†	-95.0	-0.00017	mg/L	0.000068	-0.00017	mg/L	0.000068	39.31%
Tl 190.801†	44.7	0.0245	mg/L	0.00264	0.0245	mg/L	0.00264	10.79%
V 290.880†	-784.5	-0.00491	mg/L	0.000628	-0.00491	mg/L	0.000628	12.81%
Zn 206.200†	-1302.2	-0.0459	mg/L	0.00054	-0.0459	mg/L	0.00054	1.17%
K 766.490†	6680.1	1.70	mg/L	0.072	1.70	mg/L	0.072	4.27%
Na 589.592†	5821583.4	773	mg/L	0.0	773	mg/L	0.0	0.00%
Sr 407.771†	604294.2	0.579	mg/L	0.0457	0.579	mg/L	0.0457	7.90%

Approved: February 23, 2011

Pierre Morris

Li 670.784†	3181.1	0.0361 mg/L	0.00115	0.0361 mg/L	0.00115	3.18%

Sequence No.: 65 **Autosampler Location: 111**
Sample ID: L1102053701 **Date Collected: 2/22/2011 9:28:39 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053701

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102053701

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5189040.0						79763.42	1.54%
YRADIAL	318164.5						5677.18	1.78%
Ga 417.206	1250570.5						18286.36	1.46%
GaRADIAL	60305.5						457.49	0.76%
Ag 328.068†	457.6	0.00157	mg/L	0.000444	0.00157	mg/L	0.000444	28.23%
Al 396.153†	748.8	0.147	mg/L	0.0243	0.147	mg/L	0.0243	16.56%
As 188.979†	0.7	-0.00004	mg/L	0.001021	-0.00004	mg/L	0.001021	>999.9%
Ba 233.527†	100.5	0.00128	mg/L	0.000096	0.00128	mg/L	0.000096	7.45%
Be 234.861†	0.9	-0.00002	mg/L	0.000030	-0.00002	mg/L	0.000030	179.06%
B 249.677†	2765.0	0.0529	mg/L	0.00094	0.0529	mg/L	0.00094	1.79%
Ca 227.546†	112.4	1.05	mg/L	0.020	1.05	mg/L	0.020	1.92%
Cd 228.802†	-1.6	-0.00015	mg/L	0.000045	-0.00015	mg/L	0.000045	30.72%
Co 228.616†	7.8	0.00028	mg/L	0.000096	0.00028	mg/L	0.000096	34.99%
Cr 267.716†	51.1	0.00001	mg/L	0.000098	0.00001	mg/L	0.000098	789.98%
Cu 327.393†	879.7	0.00577	mg/L	0.000242	0.00577	mg/L	0.000242	4.19%
Fe 239.562†	57.0	0.125	mg/L	0.0044	0.125	mg/L	0.0044	3.54%
Mg 279.077†	64.9	0.0754	mg/L	0.00602	0.0754	mg/L	0.00602	7.98%
Mn 257.610†	4166.2	0.00888	mg/L	0.000219	0.00888	mg/L	0.000219	2.47%
Mo 202.031†	5.5	-0.00003	mg/L	0.000436	-0.00003	mg/L	0.000436	>999.9%
Ni 231.604†	7.7	-0.00001	mg/L	0.000264	-0.00001	mg/L	0.000264	>999.9%
Pb 220.353†	-6.4	-0.00322	mg/L	0.001296	-0.00322	mg/L	0.001296	40.27%
Sb 206.836†	-0.1	-0.00153	mg/L	0.001722	-0.00153	mg/L	0.001722	112.32%
Se 196.026†	2.4	0.00122	mg/L	0.006241	0.00122	mg/L	0.006241	512.00%
Si 251.611†	10868.0	0.303	mg/L	0.0268	0.303	mg/L	0.0268	8.86%
Sn 189.927†	-5.6	-0.00297	mg/L	0.000109	-0.00297	mg/L	0.000109	3.66%
Ti 334.940†	2653.1	0.00338	mg/L	0.000256	0.00338	mg/L	0.000256	7.58%
Tl 190.801†	3.8	0.00245	mg/L	0.002875	0.00245	mg/L	0.002875	117.30%
V 290.880†	-102.3	-0.00041	mg/L	0.000589	-0.00041	mg/L	0.000589	144.90%
Zn 206.200†	-1427.3	-0.0496	mg/L	0.00026	-0.0496	mg/L	0.00026	0.53%
K 766.490†	596.0	0.220	mg/L	0.0240	0.220	mg/L	0.0240	10.89%
Na 589.592†	8987.5	0.617	mg/L	0.0058	0.617	mg/L	0.0058	0.94%
Sr 407.771†	973.2	0.00055	mg/L	0.000076	0.00055	mg/L	0.000076	13.80%
Li 670.784†	200.8	0.00049	mg/L	0.000516	0.00049	mg/L	0.000516	105.72%

Sequence No.: 66 **Autosampler Location: 112**
Sample ID: L1102053702 **Date Collected: 2/22/2011 9:35:18 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053702

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102053702

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5172980.9						34697.48	0.67%
YRADIAL	316408.7						4530.81	1.43%
Ga 417.206	1235098.8						16892.75	1.37%
GaRADIAL	59902.9						1180.63	1.97%
Ag 328.068†	430.8	0.00144	mg/L	0.000025	0.00144	mg/L	0.000025	1.76%

Approved: February 23, 2011

Pierre Morris

Al 396.153†	432.7	0.0860 mg/L	0.00458	0.0860 mg/L	0.00458	5.33%
As 188.979†	1.3	0.00050 mg/L	0.001107	0.00050 mg/L	0.001107	219.34%
Ba 233.527†	105.2	0.00136 mg/L	0.000067	0.00136 mg/L	0.000067	4.89%
Be 234.861†	-4.1	-0.00002 mg/L	0.000020	-0.00002 mg/L	0.000020	116.55%
B 249.677†	2651.9	0.0506 mg/L	0.00086	0.0506 mg/L	0.00086	1.70%
Ca 227.546†	42.6	0.400 mg/L	0.0310	0.400 mg/L	0.0310	7.75%
Cd 228.802†	1.6	0.00002 mg/L	0.000097	0.00002 mg/L	0.000097	398.39%
Co 228.616†	3.4	0.00005 mg/L	0.000241	0.00005 mg/L	0.000241	465.23%
Cr 267.716†	27.1	-0.00019 mg/L	0.000029	-0.00019 mg/L	0.000029	14.78%
Cu 327.393†	1765.4	0.0118 mg/L	0.00028	0.0118 mg/L	0.00028	2.37%
Fe 239.562†	38.4	0.0845 mg/L	0.00349	0.0845 mg/L	0.00349	4.13%
Mg 279.077†	24.7	0.0274 mg/L	0.01115	0.0274 mg/L	0.01115	40.68%
Mn 257.610†	2521.5	0.00521 mg/L	0.000032	0.00521 mg/L	0.000032	0.62%
Mo 202.031†	6.9	0.00007 mg/L	0.000132	0.00007 mg/L	0.000132	185.20%
Ni 231.604†	21.5	0.00039 mg/L	0.000268	0.00039 mg/L	0.000268	69.21%
Pb 220.353†	-11.5	-0.00415 mg/L	0.000237	-0.00415 mg/L	0.000237	5.71%
Sb 206.836†	-3.0	-0.00331 mg/L	0.001413	-0.00331 mg/L	0.001413	42.62%
Se 196.026†	2.3	0.00101 mg/L	0.000585	0.00101 mg/L	0.000585	57.87%
Si 251.611†	6026.4	0.161 mg/L	0.0057	0.161 mg/L	0.0057	3.50%
Sn 189.927†	-6.5	-0.00313 mg/L	0.000636	-0.00313 mg/L	0.000636	20.35%
Ti 334.940†	963.9	0.00106 mg/L	0.000155	0.00106 mg/L	0.000155	14.62%
Tl 190.801†	5.3	0.00336 mg/L	0.000751	0.00336 mg/L	0.000751	22.35%
V 290.880†	-203.5	-0.00108 mg/L	0.000827	-0.00108 mg/L	0.000827	76.66%
Zn 206.200†	-1414.9	-0.0492 mg/L	0.00021	-0.0492 mg/L	0.00021	0.43%
K 766.490†	280.0	0.104 mg/L	0.0133	0.104 mg/L	0.0133	12.89%
Na 589.592†	6831.9	0.467 mg/L	0.0193	0.467 mg/L	0.0193	4.14%
Sr 407.771†	381.1	-0.00001 mg/L	0.000212	-0.00001 mg/L	0.000212	>999.9%
Li 670.784†	193.3	0.00040 mg/L	0.001621	0.00040 mg/L	0.001621	406.16%

Sequence No.: 67 **Autosampler Location: 113**
Sample ID: L1102053703 **Date Collected: 2/22/2011 9:42:01 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053703

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102053703

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5210281.6						33554.03	0.64%
YRADIAL	304301.3						5714.44	1.88%
Ga 417.206	1236764.8						7364.72	0.60%
GaRADIAL	58068.3						810.40	1.40%
Ag 328.068†	456.2	0.00157	mg/L	0.000400	0.00157	mg/L	0.000400	25.42%
Al 396.153†	-33.7	-0.00394	mg/L	0.005944	-0.00394	mg/L	0.005944	150.93%
As 188.979†	0.9	0.00016	mg/L	0.002228	0.00016	mg/L	0.002228	>999.9%
Ba 233.527†	9.5	-0.00025	mg/L	0.000084	-0.00025	mg/L	0.000084	33.22%
Be 234.861†	-30.7	-0.00005	mg/L	0.000006	-0.00005	mg/L	0.000006	12.56%
B 249.677†	2945.2	0.0559	mg/L	0.00177	0.0559	mg/L	0.00177	3.17%
Ca 227.546†	10.1	0.0942	mg/L	0.03082	0.0942	mg/L	0.03082	32.71%
Cd 228.802†	-0.8	-0.00010	mg/L	0.000098	-0.00010	mg/L	0.000098	95.53%
Co 228.616†	7.0	0.00024	mg/L	0.000196	0.00024	mg/L	0.000196	80.67%
Cr 267.716†	-1.3	-0.00043	mg/L	0.000157	-0.00043	mg/L	0.000157	36.12%
Cu 327.393†	246.3	0.00146	mg/L	0.000638	0.00146	mg/L	0.000638	43.64%
Fe 239.562†	1.9	0.00525	mg/L	0.003994	0.00525	mg/L	0.003994	76.06%
Mg 279.077†	1.0	-0.00083	mg/L	0.003115	-0.00083	mg/L	0.003115	377.00%
Mn 257.610†	65.2	-0.00026	mg/L	0.000014	-0.00026	mg/L	0.000014	5.59%
Mo 202.031†	6.8	0.00006	mg/L	0.000237	0.00006	mg/L	0.000237	406.85%
Ni 231.604†	8.4	0.00001	mg/L	0.000156	0.00001	mg/L	0.000156	>999.9%
Pb 220.353†	-19.7	-0.00558	mg/L	0.001328	-0.00558	mg/L	0.001328	23.82%
Sb 206.836†	-1.9	-0.00262	mg/L	0.001618	-0.00262	mg/L	0.001618	61.82%
Se 196.026†	-1.7	-0.00189	mg/L	0.001080	-0.00189	mg/L	0.001080	57.08%
Si 251.611†	2205.6	0.0500	mg/L	0.00019	0.0500	mg/L	0.00019	0.39%
Sn 189.927†	-7.3	-0.00326	mg/L	0.000874	-0.00326	mg/L	0.000874	26.81%
Ti 334.940†	260.4	0.00010	mg/L	0.000053	0.00010	mg/L	0.000053	54.39%
Tl 190.801†	-1.6	-0.00068	mg/L	0.003862	-0.00068	mg/L	0.003862	564.97%
V 290.880†	-145.8	-0.00070	mg/L	0.000459	-0.00070	mg/L	0.000459	65.24%

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Zn 206.200†	-1508.6	-0.0520	mg/L	0.00016	-0.0520	mg/L	0.00016 0.30%
K 766.490†	126.0	0.0464	mg/L	0.02404	0.0464	mg/L	0.02404 51.84%
Na 589.592†	11362.5	0.782	mg/L	0.0105	0.782	mg/L	0.0105 1.34%
Sr 407.771†	21.2	-0.00035	mg/L	0.000113	-0.00035	mg/L	0.000113 32.19%
Li 670.784†	146.9	-0.00016	mg/L	0.001144	-0.00016	mg/L	0.001144 731.70%

Sequence No.: 68 **Autosampler Location: 114**
Sample ID: L1102053704 **Date Collected: 2/22/2011 9:48:43 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053704

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102053704

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5298019.4						15181.98	0.29%
YRADIAL	311996.2						6031.50	1.93%
Ga 417.206	1251007.4						6229.41	0.50%
GaRADIAL	59397.9						1743.19	2.93%
Ag 328.068†	472.6	0.00165	mg/L	0.000583	0.00165	mg/L	0.000583	35.27%
Al 396.153†	-46.4	-0.00639	mg/L	0.014969	-0.00639	mg/L	0.014969	234.37%
As 188.979†	3.0	0.00206	mg/L	0.001408	0.00206	mg/L	0.001408	68.27%
Ba 233.527†	7.5	-0.00029	mg/L	0.000053	-0.00029	mg/L	0.000053	18.61%
Be 234.861†	-22.2	-0.00003	mg/L	0.000034	-0.00003	mg/L	0.000034	103.07%
B 249.677†	2487.1	0.0473	mg/L	0.00167	0.0473	mg/L	0.00167	3.53%
Ca 227.546†	5.2	0.0482	mg/L	0.05953	0.0482	mg/L	0.05953	123.52%
Cd 228.802†	0.6	-0.00003	mg/L	0.000099	-0.00003	mg/L	0.000099	302.85%
Co 228.616†	12.5	0.00053	mg/L	0.000133	0.00053	mg/L	0.000133	25.15%
Cr 267.716†	18.2	-0.00027	mg/L	0.000058	-0.00027	mg/L	0.000058	22.00%
Cu 327.393†	122.9	0.00062	mg/L	0.000296	0.00062	mg/L	0.000296	47.51%
Fe 239.562†	1.1	0.00361	mg/L	0.002474	0.00361	mg/L	0.002474	68.54%
Mg 279.077†	3.6	0.00229	mg/L	0.007423	0.00229	mg/L	0.007423	323.92%
Mn 257.610†	-78.3	-0.00058	mg/L	0.000007	-0.00058	mg/L	0.000007	1.26%
Mo 202.031†	10.8	0.00036	mg/L	0.000125	0.00036	mg/L	0.000125	34.82%
Ni 231.604†	3.7	-0.00013	mg/L	0.000252	-0.00013	mg/L	0.000252	198.61%
Pb 220.353†	-16.6	-0.00504	mg/L	0.000321	-0.00504	mg/L	0.000321	6.36%
Sb 206.836†	-2.3	-0.00292	mg/L	0.002628	-0.00292	mg/L	0.002628	89.96%
Se 196.026†	2.2	0.00085	mg/L	0.004131	0.00085	mg/L	0.004131	485.14%
Si 251.611†	1947.2	0.0424	mg/L	0.00008	0.0424	mg/L	0.00008	0.20%
Sn 189.927†	-6.0	-0.00303	mg/L	0.000594	-0.00303	mg/L	0.000594	19.59%
Ti 334.940†	322.2	0.00018	mg/L	0.000039	0.00018	mg/L	0.000039	21.65%
Tl 190.801†	-1.1	-0.00038	mg/L	0.002296	-0.00038	mg/L	0.002296	608.62%
V 290.880†	-212.3	-0.00114	mg/L	0.000123	-0.00114	mg/L	0.000123	10.77%
Zn 206.200†	-1561.8	-0.0536	mg/L	0.00011	-0.0536	mg/L	0.00011	0.21%
K 766.490†	83.9	0.0313	mg/L	0.01624	0.0313	mg/L	0.01624	51.91%
Na 589.592†	5145.9	0.350	mg/L	0.0005	0.350	mg/L	0.0005	0.15%
Sr 407.771†	-77.3	-0.00044	mg/L	0.000115	-0.00044	mg/L	0.000115	25.89%
Li 670.784†	129.9	-0.00036	mg/L	0.001041	-0.00036	mg/L	0.001041	290.34%

Sequence No.: 69 **Autosampler Location: 115**
Sample ID: L1102053705 **Date Collected: 2/22/2011 9:56:17 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053705

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102053705

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5243361.6						57066.99	1.09%

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YRADIAL	310016.5				1474.65	0.48%
Ga 417.206	1258650.4				17074.04	1.36%
GaRADIAL	58905.5				1001.55	1.70%
Ag 328.068†	504.6	0.00181 mg/L	0.000700	0.00181 mg/L	0.000700	38.62%
Al 396.153†	-91.2	-0.0150 mg/L	0.00978	-0.0150 mg/L	0.00978	65.11%
As 188.979†	-1.4	-0.00188 mg/L	0.001779	-0.00188 mg/L	0.001779	94.47%
Ba 233.527†	0.5	-0.00040 mg/L	0.000123	-0.00040 mg/L	0.000123	30.37%
Be 234.861†	-18.7	-0.00003 mg/L	0.000023	-0.00003 mg/L	0.000023	86.21%
B 249.677†	2405.6	0.0457 mg/L	0.00094	0.0457 mg/L	0.00094	2.05%
Ca 227.546†	14.3	0.133 mg/L	0.0057	0.133 mg/L	0.0057	4.30%
Cd 228.802†	-0.7	-0.00008 mg/L	0.000117	-0.00008 mg/L	0.000117	141.81%
Co 228.616†	8.5	0.00032 mg/L	0.000134	0.00032 mg/L	0.000134	42.20%
Cr 267.716†	-6.5	-0.00048 mg/L	0.000150	-0.00048 mg/L	0.000150	31.31%
Cu 327.393†	290.0	0.00176 mg/L	0.001092	0.00176 mg/L	0.001092	62.15%
Fe 239.562†	1.1	0.00361 mg/L	0.005792	0.00361 mg/L	0.005792	160.26%
Mg 279.077†	7.5	0.00697 mg/L	0.012651	0.00697 mg/L	0.012651	181.58%
Mn 257.610†	-45.5	-0.00051 mg/L	0.000015	-0.00051 mg/L	0.000015	2.89%
Mo 202.031†	4.6	-0.00010 mg/L	0.000185	-0.00010 mg/L	0.000185	179.50%
Ni 231.604†	3.2	-0.00014 mg/L	0.000101	-0.00014 mg/L	0.000101	71.55%
Pb 220.353†	-18.5	-0.00535 mg/L	0.000652	-0.00535 mg/L	0.000652	12.17%
Sb 206.836†	-1.4	-0.00231 mg/L	0.000650	-0.00231 mg/L	0.000650	28.16%
Se 196.026†	-1.1	-0.00147 mg/L	0.000652	-0.00147 mg/L	0.000652	44.39%
Si 251.611†	2005.1	0.0441 mg/L	0.00072	0.0441 mg/L	0.00072	1.64%
Sn 189.927†	-6.6	-0.00314 mg/L	0.000878	-0.00314 mg/L	0.000878	27.98%
Ti 334.940†	233.0	0.00006 mg/L	0.000063	0.00006 mg/L	0.000063	104.59%
Tl 190.801†	-0.6	-0.00007 mg/L	0.003057	-0.00007 mg/L	0.003057	>999.9%
V 290.880†	-215.6	-0.00116 mg/L	0.001169	-0.00116 mg/L	0.001169	100.45%
Zn 206.200†	-1522.8	-0.0524 mg/L	0.00011	-0.0524 mg/L	0.00011	0.20%
K 766.490†	183.3	0.0680 mg/L	0.00531	0.0680 mg/L	0.00531	7.82%
Na 589.592†	5373.3	0.365 mg/L	0.0111	0.365 mg/L	0.0111	3.03%
Sr 407.771†	126.5	-0.00025 mg/L	0.000172	-0.00025 mg/L	0.000172	69.11%
Li 670.784†	53.6	-0.00127 mg/L	0.000959	-0.00127 mg/L	0.000959	75.41%

Sequence No.: 70 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/22/2011 10:03:02 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4925976.6						60659.89	1.23%
YRADIAL	295123.9						6449.72	2.19%
Ga 417.206	1153994.2						14384.17	1.25%
GaRADIAL	56421.3						352.48	0.62%
Ag 328.068†	82052.3	0.409	mg/L	0.0081	0.409	mg/L	0.0081	1.97%
QC value within limits for Ag 328.068 Recovery = 102.31%								
Al 396.153†	51516.8	9.92	mg/L	0.049	9.92	mg/L	0.049	0.49%
QC value within limits for Al 396.153 Recovery = 99.22%								
As 188.979†	443.0	0.399	mg/L	0.0050	0.399	mg/L	0.0050	1.24%
QC value within limits for As 188.979 Recovery = 99.81%								
Ba 233.527†	59358.4	1.01	mg/L	0.019	1.01	mg/L	0.019	1.94%
QC value within limits for Ba 233.527 Recovery = 100.52%								
Be 234.861†	29822.9	0.0520	mg/L	0.00145	0.0520	mg/L	0.00145	2.79%
QC value within limits for Be 234.861 Recovery = 103.91%								
B 249.677†	26915.8	0.513	mg/L	0.0117	0.513	mg/L	0.0117	2.27%
QC value within limits for B 249.677 Recovery = 102.62%								
Ca 227.546†	1051.4	10.2	mg/L	0.13	10.2	mg/L	0.13	1.24%
QC value within limits for Ca 227.546 Recovery = 101.89%								
Cd 228.802†	882.5	0.0492	mg/L	0.00066	0.0492	mg/L	0.00066	1.35%
QC value within limits for Cd 228.802 Recovery = 98.39%								
Co 228.616†	3853.0	0.195	mg/L	0.0025	0.195	mg/L	0.0025	1.30%
QC value within limits for Co 228.616 Recovery = 97.41%								
Cr 267.716†	57512.5	0.498	mg/L	0.0092	0.498	mg/L	0.0092	1.86%
QC value within limits for Cr 267.716 Recovery = 99.57%								

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Cu 327.393†	74265.7	0.505 mg/L	0.0123	0.505 mg/L	0.0123	2.43%
QC value within limits for Cu 327.393 Recovery = 101.05%						
Fe 239.562†	1832.8	3.98 mg/L	0.047	3.98 mg/L	0.047	1.19%
QC value within limits for Fe 239.562 Recovery = 99.54%						
Mg 279.077†	8359.9	9.98 mg/L	0.136	9.98 mg/L	0.136	1.37%
QC value within limits for Mg 279.077 Recovery = 99.82%						
Mn 257.610†	226472.6	0.506 mg/L	0.0098	0.506 mg/L	0.0098	1.94%
QC value within limits for Mn 257.610 Recovery = 101.17%						
Mo 202.031†	13560.6	1.01 mg/L	0.025	1.01 mg/L	0.025	2.50%
QC value within limits for Mo 202.031 Recovery = 100.55%						
Ni 231.604†	17269.3	0.500 mg/L	0.0096	0.500 mg/L	0.0096	1.91%
QC value within limits for Ni 231.604 Recovery = 99.97%						
Pb 220.353†	2958.9	0.516 mg/L	0.0095	0.516 mg/L	0.0095	1.84%
QC value within limits for Pb 220.353 Recovery = 103.18%						
Sb 206.836†	1934.6	1.22 mg/L	0.016	1.22 mg/L	0.016	1.33%
QC value within limits for Sb 206.836 Recovery = 101.68%						
Se 196.026†	561.8	0.393 mg/L	0.0027	0.393 mg/L	0.0027	0.70%
QC value within limits for Se 196.026 Recovery = 98.20%						
Si 251.611†	174475.1	5.06 mg/L	0.111	5.06 mg/L	0.111	2.19%
QC value within limits for Si 251.611 Recovery = 101.17%						
Sn 189.927†	5819.0	0.990 mg/L	0.0106	0.990 mg/L	0.0106	1.07%
QC value within limits for Sn 189.927 Recovery = 98.99%						
Ti 334.940†	733091.7	1.00 mg/L	0.006	1.00 mg/L	0.006	0.56%
QC value within limits for Ti 334.940 Recovery = 100.18%						
Tl 190.801†	855.1	0.513 mg/L	0.0095	0.513 mg/L	0.0095	1.84%
QC value within limits for Tl 190.801 Recovery = 102.60%						
V 290.880†	149657.2	0.989 mg/L	0.0210	0.989 mg/L	0.0210	2.13%
QC value within limits for V 290.880 Recovery = 98.92%						
Zn 206.200†	31562.6	0.936 mg/L	0.0196	0.936 mg/L	0.0196	2.09%
QC value within limits for Zn 206.200 Recovery = 93.60%						
K 766.490†	131806.8	49.1 mg/L	0.54	49.1 mg/L	0.54	1.10%
QC value within limits for K 766.490 Recovery = 98.23%						
Na 589.592†	687569.3	49.3 mg/L	0.41	49.3 mg/L	0.41	0.82%
QC value within limits for Na 589.592 Recovery = 98.67%						
Sr 407.771†	949008.4	0.909 mg/L	0.0548	0.909 mg/L	0.0548	6.04%
QC value within limits for Sr 407.771 Recovery = 90.85%						
Li 670.784†	81985.9	0.978 mg/L	0.0026	0.978 mg/L	0.0026	0.27%
QC value within limits for Li 670.784 Recovery = 97.79%						

All analyte(s) passed QC.

Sequence No.: 71 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/22/2011 10:09:46 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5134194.5						41150.62	0.80%
YRADIAL	308645.5						3440.87	1.11%
Ga 417.206	1187048.2						32180.10	2.71%
GaRADIAL	58337.5						1005.57	1.72%
Ag 328.068†	418.1	0.00138	mg/L	0.000736	0.00138	mg/L	0.000736	53.24%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-116.5	-0.0199	mg/L	0.02007	-0.0199	mg/L	0.02007	100.79%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.9	-0.00142	mg/L	0.004289	-0.00142	mg/L	0.004289	302.46%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.0	-0.00036	mg/L	0.000104	-0.00036	mg/L	0.000104	28.73%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-39.7	-0.00006	mg/L	0.000036	-0.00006	mg/L	0.000036	57.22%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	367.2	0.00742	mg/L	0.000639	0.00742	mg/L	0.000639	8.61%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	5.3	0.0492	mg/L	0.07871	0.0492	mg/L	0.07871	160.12%

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QC value within limits for Ca 227.546 Recovery = Not calculated

Cd 228.802†	3.2	0.00013 mg/L	0.000093	0.00013 mg/L	0.000093	69.85%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	9.3	0.00036 mg/L	0.000066	0.00036 mg/L	0.000066	18.23%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-21.4	-0.00061 mg/L	0.000052	-0.00061 mg/L	0.000052	8.61%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	56.7	0.00018 mg/L	0.000956	0.00018 mg/L	0.000956	542.17%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	2.7	0.00717 mg/L	0.000484	0.00717 mg/L	0.000484	6.76%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-5.3	-0.00837 mg/L	0.005246	-0.00837 mg/L	0.005246	62.71%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-14.6	-0.00046 mg/L	0.000032	-0.00046 mg/L	0.000032	7.05%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	11.0	0.00037 mg/L	0.000548	0.00037 mg/L	0.000548	147.00%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-7.5	-0.00045 mg/L	0.000186	-0.00045 mg/L	0.000186	41.17%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-15.8	-0.00490 mg/L	0.000973	-0.00490 mg/L	0.000973	19.85%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.6	-0.00184 mg/L	0.000847	-0.00184 mg/L	0.000847	45.91%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.6	-0.00026 mg/L	0.000819	-0.00026 mg/L	0.000819	320.51%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	50.6	-0.0129 mg/L	0.00005	-0.0129 mg/L	0.00005	0.35%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	2.4	-0.00161 mg/L	0.000861	-0.00161 mg/L	0.000861	53.48%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	175.8	-0.00002 mg/L	0.000105	-0.00002 mg/L	0.000105	570.22%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.8	0.00131 mg/L	0.000384	0.00131 mg/L	0.000384	29.25%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-83.8	-0.00029 mg/L	0.000611	-0.00029 mg/L	0.000611	208.85%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-1630.4	-0.0556 mg/L	0.00015	-0.0556 mg/L	0.00015	0.26%
QC value less than the lower limit for Zn 206.200 Recovery = Not calculated								
K 766.490†	98.6	0.0370 mg/L	0.02251	0.0370 mg/L	0.02251	60.86%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	874.7	0.0527 mg/L	0.00540	0.0527 mg/L	0.00540	10.23%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	-41.8	-0.00041 mg/L	0.000184	-0.00041 mg/L	0.000184	44.87%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	107.8	-0.00062 mg/L	0.001176	-0.00062 mg/L	0.001176	188.83%
QC value within limits for Li 670.784 Recovery = Not calculated								

QC Failed. Continue with analysis.

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Sequence No.: 72 **Autosampler Location: 116**
Sample ID: L1102053706 **Date Collected: 2/22/2011 10:16:23 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053706

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102053706

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5153476.1						47569.07	0.92%
YRADIAL	310991.9						7016.14	2.26%
Ga 417.206	1240511.4						19893.18	1.60%
GaRADIAL	59185.3						412.29	0.70%
Ag 328.068†	500.1	0.00179	mg/L	0.000671	0.00179	mg/L	0.000671	37.53%
Al 396.153†	77.9	0.0176	mg/L	0.00607	0.0176	mg/L	0.00607	34.52%
As 188.979†	-0.0	-0.00068	mg/L	0.001333	-0.00068	mg/L	0.001333	195.57%
Ba 233.527†	33.3	0.00015	mg/L	0.000110	0.00015	mg/L	0.000110	73.09%
Be 234.861†	-19.8	-0.00003	mg/L	0.000040	-0.00003	mg/L	0.000040	119.74%
B 249.677†	2444.4	0.0465	mg/L	0.00052	0.0465	mg/L	0.00052	1.11%

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Ca 227.546†	20.0	0.187	mg/L	0.0509	0.187	mg/L	0.0509 27.27%
Cd 228.802†	3.0	0.00012	mg/L	0.000040	0.00012	mg/L	0.000040 34.41%
Co 228.616†	9.2	0.00035	mg/L	0.000123	0.00035	mg/L	0.000123 34.67%
Cr 267.716†	58.0	0.00008	mg/L	0.000057	0.00008	mg/L	0.000057 72.16%
Cu 327.393†	1503.9	0.00999	mg/L	0.000859	0.00999	mg/L	0.000859 8.60%
Fe 239.562†	12.6	0.0286	mg/L	0.00146	0.0286	mg/L	0.00146 5.10%
Mg 279.077†	17.7	0.0190	mg/L	0.00559	0.0190	mg/L	0.00559 29.37%
Mn 257.610†	694.4	0.00114	mg/L	0.000017	0.00114	mg/L	0.000017 1.48%
Mo 202.031†	6.3	0.00003	mg/L	0.000444	0.00003	mg/L	0.000444 >999.9%
Ni 231.604†	4.6	-0.00010	mg/L	0.000158	-0.00010	mg/L	0.000158 156.53%
Pb 220.353†	-11.5	-0.00414	mg/L	0.000614	-0.00414	mg/L	0.000614 14.82%
Sb 206.836†	-0.3	-0.00167	mg/L	0.000908	-0.00167	mg/L	0.000908 54.38%
Se 196.026†	2.9	0.00135	mg/L	0.001480	0.00135	mg/L	0.001480 109.71%
Si 251.611†	3546.1	0.0891	mg/L	0.00237	0.0891	mg/L	0.00237 2.66%
Sn 189.927†	-5.3	-0.00291	mg/L	0.000842	-0.00291	mg/L	0.000842 28.93%
Ti 334.940†	695.4	0.00069	mg/L	0.000154	0.00069	mg/L	0.000154 22.22%
Tl 190.801†	-1.1	-0.00036	mg/L	0.000271	-0.00036	mg/L	0.000271 75.03%
V 290.880†	-119.2	-0.00052	mg/L	0.001298	-0.00052	mg/L	0.001298 247.34%
Zn 206.200†	-1471.1	-0.0509	mg/L	0.00018	-0.0509	mg/L	0.00018 0.35%
K 766.490†	305.9	0.113	mg/L	0.0197	0.113	mg/L	0.0197 17.38%
Na 589.592†	5648.1	0.384	mg/L	0.0036	0.384	mg/L	0.0036 0.94%
Sr 407.771†	153.9	-0.00023	mg/L	0.000178	-0.00023	mg/L	0.000178 79.01%
Li 670.784†	112.8	-0.00056	mg/L	0.001891	-0.00056	mg/L	0.001891 335.54%

Sequence No.: 73 **Autosampler Location: 117**
Sample ID: L1102053707 **Date Collected: 2/22/2011 10:23:09 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053707

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102053707

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5201274.7						32463.75	0.62%
YRADIAL	313735.5						2226.16	0.71%
Ga 417.206	1255057.0						17748.51	1.41%
GaRADIAL	59533.4						1143.78	1.92%
Ag 328.068†	521.7	0.00190	mg/L	0.000515	0.00190	mg/L	0.000515	27.11%
Al 396.153†	-27.2	-0.00269	mg/L	0.005423	-0.00269	mg/L	0.005423	201.40%
As 188.979†	3.0	0.00207	mg/L	0.000986	0.00207	mg/L	0.000986	47.66%
Ba 233.527†	-0.5	-0.00042	mg/L	0.000128	-0.00042	mg/L	0.000128	30.29%
Be 234.861†	-9.5	-0.00001	mg/L	0.000020	-0.00001	mg/L	0.000020	184.87%
B 249.677†	2754.7	0.0523	mg/L	0.00211	0.0523	mg/L	0.00211	4.04%
Ca 227.546†	5.5	0.0505	mg/L	0.05409	0.0505	mg/L	0.05409	107.02%
Cd 228.802†	-0.1	-0.00008	mg/L	0.000128	-0.00008	mg/L	0.000128	167.84%
Co 228.616†	5.4	0.00016	mg/L	0.000111	0.00016	mg/L	0.000111	69.17%
Cr 267.716†	-1.6	-0.00044	mg/L	0.000062	-0.00044	mg/L	0.000062	14.31%
Cu 327.393†	76.2	0.00031	mg/L	0.000895	0.00031	mg/L	0.000895	291.21%
Fe 239.562†	-0.0	0.00119	mg/L	0.002078	0.00119	mg/L	0.002078	174.53%
Mg 279.077†	4.2	0.00295	mg/L	0.003415	0.00295	mg/L	0.003415	115.62%
Mn 257.610†	-97.1	-0.00062	mg/L	0.000015	-0.00062	mg/L	0.000015	2.41%
Mo 202.031†	7.7	0.00013	mg/L	0.000199	0.00013	mg/L	0.000199	153.81%
Ni 231.604†	-1.7	-0.00028	mg/L	0.000170	-0.00028	mg/L	0.000170	60.05%
Pb 220.353†	-13.7	-0.00453	mg/L	0.000913	-0.00453	mg/L	0.000913	20.13%
Sb 206.836†	-3.1	-0.00341	mg/L	0.001735	-0.00341	mg/L	0.001735	50.86%
Se 196.026†	0.4	-0.00041	mg/L	0.001192	-0.00041	mg/L	0.001192	288.07%
Si 251.611†	2053.3	0.0455	mg/L	0.00102	0.0455	mg/L	0.00102	2.24%
Sn 189.927†	-1.8	-0.00231	mg/L	0.000671	-0.00231	mg/L	0.000671	28.97%
Ti 334.940†	201.9	0.00002	mg/L	0.000110	0.00002	mg/L	0.000110	640.30%
Tl 190.801†	-1.7	-0.00072	mg/L	0.002243	-0.00072	mg/L	0.002243	309.72%
V 290.880†	-187.8	-0.00098	mg/L	0.000694	-0.00098	mg/L	0.000694	70.74%
Zn 206.200†	-1565.5	-0.0537	mg/L	0.00025	-0.0537	mg/L	0.00025	0.47%
K 766.490†	74.3	0.0274	mg/L	0.02328	0.0274	mg/L	0.02328	84.91%
Na 589.592†	9756.3	0.670	mg/L	0.0052	0.670	mg/L	0.0052	0.78%
Sr 407.771†	52.6	-0.00032	mg/L	0.000193	-0.00032	mg/L	0.000193	60.52%
Li 670.784†	109.0	-0.00061	mg/L	0.001667	-0.00061	mg/L	0.001667	273.80%

Approved: February 23, 2011

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Sequence No.: 74 **Autosampler Location: 118**
Sample ID: L1102053708 **Date Collected: 2/22/2011 10:29:51 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053708

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: L1102053708

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5238883.3						55862.43	1.07%
YRADIAL	312723.0						6692.11	2.14%
Ga 417.206	1256016.7						20590.80	1.64%
GaRADIAL	59698.1						1939.04	3.25%
Ag 328.068†	470.3	0.00164	mg/L	0.000080	0.00164	mg/L	0.000080	4.90%
Al 396.153†	554.0	0.109	mg/L	0.0091	0.109	mg/L	0.0091	8.32%
As 188.979†	-0.9	-0.00148	mg/L	0.000748	-0.00148	mg/L	0.000748	50.42%
Ba 233.527†	188.9	0.00278	mg/L	0.000133	0.00278	mg/L	0.000133	4.79%
Be 234.861†	1.8	-0.00001	mg/L	0.000019	-0.00001	mg/L	0.000019	210.52%
B 249.677†	2354.6	0.0451	mg/L	0.00156	0.0451	mg/L	0.00156	3.46%
Ca 227.546†	13.8	0.129	mg/L	0.0550	0.129	mg/L	0.0550	42.63%
Cd 228.802†	0.1	-0.00004	mg/L	0.000113	-0.00004	mg/L	0.000113	290.65%
Co 228.616†	10.4	0.00041	mg/L	0.000182	0.00041	mg/L	0.000182	44.10%
Cr 267.716†	138.5	0.00077	mg/L	0.000156	0.00077	mg/L	0.000156	20.22%
Cu 327.393†	2146.3	0.0144	mg/L	0.00057	0.0144	mg/L	0.00057	3.98%
Fe 239.562†	43.7	0.0961	mg/L	0.00206	0.0961	mg/L	0.00206	2.15%
Mg 279.077†	15.0	0.0159	mg/L	0.00374	0.0159	mg/L	0.00374	23.59%
Mn 257.610†	4094.8	0.00870	mg/L	0.000180	0.00870	mg/L	0.000180	2.07%
Mo 202.031†	7.8	0.00014	mg/L	0.000258	0.00014	mg/L	0.000258	183.63%
Ni 231.604†	23.0	0.00043	mg/L	0.000082	0.00043	mg/L	0.000082	19.10%
Pb 220.353†	60.4	0.00830	mg/L	0.001429	0.00830	mg/L	0.001429	17.21%
Sb 206.836†	-0.4	-0.00169	mg/L	0.002378	-0.00169	mg/L	0.002378	140.70%
Se 196.026†	2.5	0.00109	mg/L	0.001926	0.00109	mg/L	0.001926	176.45%
Si 251.611†	7200.5	0.196	mg/L	0.0046	0.196	mg/L	0.0046	2.35%
Sn 189.927†	-5.8	-0.00300	mg/L	0.000303	-0.00300	mg/L	0.000303	10.09%
Ti 334.940†	1193.9	0.00137	mg/L	0.000145	0.00137	mg/L	0.000145	10.54%
Tl 190.801†	-2.4	-0.00113	mg/L	0.002410	-0.00113	mg/L	0.002410	212.74%
V 290.880†	-67.7	-0.00018	mg/L	0.000616	-0.00018	mg/L	0.000616	342.91%
Zn 206.200†	-1360.5	-0.0476	mg/L	0.00012	-0.0476	mg/L	0.00012	0.25%
K 766.490†	386.7	0.143	mg/L	0.0236	0.143	mg/L	0.0236	16.53%
Na 589.592†	7404.4	0.507	mg/L	0.0038	0.507	mg/L	0.0038	0.75%
Sr 407.771†	105.7	-0.00028	mg/L	0.000059	-0.00028	mg/L	0.000059	20.99%
Li 670.784†	88.5	-0.00085	mg/L	0.001544	-0.00085	mg/L	0.001544	180.87%

Sequence No.: 75 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 2/22/2011 10:36:30 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4562427.7						25286.10	0.55%
YRADIAL	284141.2						3452.14	1.21%
Ga 417.206	1085811.8						27109.12	2.50%
GaRADIAL	54987.7						924.91	1.68%
Ag 328.068†	1343.3	0.00098	mg/L	0.001109	0.00098	mg/L	0.001109	113.57%

QC value within limits for Ag 328.068 Recovery = Not calculated

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Al 396.153†	1307942.6	252 mg/L	4.3	252 mg/L	4.3	1.70%			
QC value within limits for Al 396.153 Recovery = 100.88%									
As 188.979†	11.3	0.00021 mg/L	0.002832	0.00021 mg/L	0.002832	>999.9%			
QC value within limits for As 188.979 Recovery = Not calculated									
Ba 233.527†	121.3	-0.00072 mg/L	0.000043	-0.00072 mg/L	0.000043	5.97%			
QC value within limits for Ba 233.527 Recovery = Not calculated									
Be 234.861†	12283.3	0.00080 mg/L	0.000309	0.00080 mg/L	0.000309	38.71%			
QC value greater than the upper limit for Be 234.861 Recovery = Not calculated									
B 249.677†	-10260.2	-0.00659 mg/L	0.010382	-0.00659 mg/L	0.010382	157.59%			
QC value within limits for B 249.677 Recovery = Not calculated									
Ca 227.546†	30965.8	291 mg/L	3.6	291 mg/L	3.6	1.23%			
QC value within limits for Ca 227.546 Recovery = 116.24%									
Cd 228.802†	4.1	-0.00001 mg/L	0.000341	-0.00001 mg/L	0.000341	>999.9%			
QC value within limits for Cd 228.802 Recovery = Not calculated									
Co 228.616†	33.5	-0.00102 mg/L	0.000231	-0.00102 mg/L	0.000231	22.54%			
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	609.5	-0.00137 mg/L	0.000077	-0.00137 mg/L	0.000077	5.61%			
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 327.393†	-1475.3	0.00134 mg/L	0.000429	0.00134 mg/L	0.000429	32.05%			
QC value within limits for Cu 327.393 Recovery = Not calculated									
Fe 239.562†	46265.7	100 mg/L	0.3	100 mg/L	0.3	0.33%			
QC value within limits for Fe 239.562 Recovery = 100.50%									
Mg 279.077†	215433.7	257 mg/L	1.1	257 mg/L	1.1	0.42%			
QC value within limits for Mg 279.077 Recovery = 102.86%									
Mn 257.610†	-321.7	-0.00035 mg/L	0.000255	-0.00035 mg/L	0.000255	73.62%			
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	1.7	0.00465 mg/L	0.001148	0.00465 mg/L	0.001148	24.72%			
QC value within limits for Mo 202.031 Recovery = Not calculated									
Ni 231.604†	-60.7	-0.00205 mg/L	0.000170	-0.00205 mg/L	0.000170	8.29%			
QC value within limits for Ni 231.604 Recovery = Not calculated									
Pb 220.353†	-130.6	-0.00693 mg/L	0.001797	-0.00693 mg/L	0.001797	25.92%			
QC value less than the lower limit for Pb 220.353 Recovery = Not calculated									
Sb 206.836†	16.0	0.00858 mg/L	0.001240	0.00858 mg/L	0.001240	14.44%			
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†	-115.0	0.00097 mg/L	0.010386	0.00097 mg/L	0.010386	>999.9%			
QC value within limits for Se 196.026 Recovery = Not calculated									
Si 251.611†	803.7	0.00911 mg/L	0.001368	0.00911 mg/L	0.001368	15.02%			
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	-32.6	-0.00756 mg/L	0.001143	-0.00756 mg/L	0.001143	15.11%			
QC value within limits for Sn 189.927 Recovery = Not calculated									
Ti 334.940†	-2257.2	-0.00044 mg/L	0.000255	-0.00044 mg/L	0.000255	57.44%			
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	157.8	0.0666 mg/L	0.00328	0.0666 mg/L	0.00328	4.93%			
QC value within limits for Tl 190.801 Recovery = Not calculated									
V 290.880†	-800.4	0.00269 mg/L	0.001980	0.00269 mg/L	0.001980	73.70%			
QC value within limits for V 290.880 Recovery = Not calculated									
Zn 206.200†	-1315.4	-0.0485 mg/L	0.00013	-0.0485 mg/L	0.00013	0.27%			
QC value less than the lower limit for Zn 206.200 Recovery = Not calculated									
K 766.490†	30.4	0.0118 mg/L	0.01760	0.0118 mg/L	0.01760	149.33%			
QC value within limits for K 766.490 Recovery = Not calculated									
Na 589.592†	1125.3	0.0701 mg/L	0.01514	0.0701 mg/L	0.01514	21.58%			
QC value within limits for Na 589.592 Recovery = Not calculated									
Sr 407.771†	12417.1	-0.00053 mg/L	0.000509	-0.00053 mg/L	0.000509	95.77%			
QC value within limits for Sr 407.771 Recovery = Not calculated									
Li 670.784†	223.8	0.00076 mg/L	0.000094	0.00076 mg/L	0.000094	12.29%			
QC value within limits for Li 670.784 Recovery = Not calculated									

QC Failed. Continue with analysis.

Sequence No.: 76 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 2/22/2011 10:42:09 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: ICSAB

	Mean Corrected	Calib.	Sample

Approved: February 23, 2011

Pierre Morris

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 371.029	4592875.2				45707.63	1.00%
YRADIAL	296749.9				2942.28	0.99%
Ga 417.206	1094167.1				16181.80	1.48%
GaRADIAL	57448.4				391.19	0.68%
Ag 328.068†	108479.4	0.535 mg/L	0.0068	0.535 mg/L	0.0068	1.27%
QC value within limits for Ag 328.068 Recovery = 107.08%						
Al 396.153†	1242098.8	239 mg/L	1.9	239 mg/L	1.9	0.79%
QC value within limits for Al 396.153 Recovery = 95.80%						
As 188.979†	294.1	0.260 mg/L	0.0097	0.260 mg/L	0.0097	3.75%
QC value within limits for As 188.979 Recovery = 103.90%						
Ba 233.527†	15203.4	0.255 mg/L	0.0026	0.255 mg/L	0.0026	1.04%
QC value within limits for Ba 233.527 Recovery = 101.91%						
Be 234.861†	167678.9	0.268 mg/L	0.0061	0.268 mg/L	0.0061	2.26%
QC value within limits for Be 234.861 Recovery = 107.25%						
B 249.677†	-9539.7	-0.0101 mg/L	0.00386	-0.0101 mg/L	0.00386	38.19%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	30009.4	282 mg/L	4.5	282 mg/L	4.5	1.60%
QC value within limits for Ca 227.546 Recovery = 112.78%						
Cd 228.802†	8174.1	0.461 mg/L	0.0140	0.461 mg/L	0.0140	3.03%
QC value within limits for Cd 228.802 Recovery = 92.23%						
Co 228.616†	4654.6	0.236 mg/L	0.0029	0.236 mg/L	0.0029	1.23%
QC value within limits for Co 228.616 Recovery = 94.30%						
Cr 267.716†	29683.0	0.251 mg/L	0.0028	0.251 mg/L	0.0028	1.10%
QC value within limits for Cr 267.716 Recovery = 100.32%						
Cu 327.393†	37087.7	0.262 mg/L	0.0041	0.262 mg/L	0.0041	1.56%
QC value within limits for Cu 327.393 Recovery = 104.90%						
Fe 239.562†	44444.8	96.5 mg/L	0.36	96.5 mg/L	0.36	0.38%
QC value within limits for Fe 239.562 Recovery = 96.54%						
Mg 279.077†	206768.8	247 mg/L	0.8	247 mg/L	0.8	0.34%
QC value within limits for Mg 279.077 Recovery = 98.72%						
Mn 257.610†	113181.9	0.252 mg/L	0.0018	0.252 mg/L	0.0018	0.70%
QC value within limits for Mn 257.610 Recovery = 100.88%						
Mo 202.031†	-0.1	0.00439 mg/L	0.000932	0.00439 mg/L	0.000932	21.26%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	16501.2	0.478 mg/L	0.0054	0.478 mg/L	0.0054	1.13%
QC value within limits for Ni 231.604 Recovery = 95.51%						
Pb 220.353†	2870.0	0.512 mg/L	0.0047	0.512 mg/L	0.0047	0.91%
QC value within limits for Pb 220.353 Recovery = 102.45%						
Sb 206.836†	858.8	0.537 mg/L	0.0073	0.537 mg/L	0.0073	1.36%
QC value within limits for Sb 206.836 Recovery = 107.45%						
Se 196.026†	255.4	0.256 mg/L	0.0075	0.256 mg/L	0.0075	2.92%
QC value within limits for Se 196.026 Recovery = 102.57%						
Si 251.611†	320.2	-0.00499 mg/L	0.000466	-0.00499 mg/L	0.000466	9.33%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-28.2	-0.00682 mg/L	0.000734	-0.00682 mg/L	0.000734	10.77%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-1876.1	-0.00009 mg/L	0.000108	-0.00009 mg/L	0.000108	122.59%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1014.8	0.570 mg/L	0.0056	0.570 mg/L	0.0056	0.99%
QC value within limits for Tl 190.801 Recovery = 113.97%						
V 290.880†	36824.8	0.251 mg/L	0.0012	0.251 mg/L	0.0012	0.48%
QC value within limits for V 290.880 Recovery = 100.42%						
Zn 206.200†	14227.9	0.416 mg/L	0.0043	0.416 mg/L	0.0043	1.05%
QC value within limits for Zn 206.200 Recovery = 83.23%						
K 766.490†	13963.9	5.16 mg/L	0.058	5.16 mg/L	0.058	1.12%
QC value within limits for K 766.490 Recovery = 103.18%						
Na 589.592†	72431.0	5.04 mg/L	0.025	5.04 mg/L	0.025	0.51%
QC value within limits for Na 589.592 Recovery = 100.81%						
Sr 407.771†	11760.3	-0.00069 mg/L	0.000267	-0.00069 mg/L	0.000267	38.89%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	100.1	-0.00072 mg/L	0.000574	-0.00072 mg/L	0.000574	80.23%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 77 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/22/2011 10:47:50 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 23, 2011

Pierre Morris

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4971039.7						62073.54	1.25%
YRADIAL	299717.5						3408.48	1.14%
Ga 417.206	1173465.8						16740.60	1.43%
GaRADIAL	56777.8						669.06	1.18%
Ag 328.068†	80282.6	0.400	mg/L	0.0122	0.400	mg/L	0.0122	3.06%
QC value within limits for Ag 328.068 Recovery = 100.10%								
Al 396.153†	51477.2	9.91	mg/L	0.019	9.91	mg/L	0.019	0.19%
QC value within limits for Al 396.153 Recovery = 99.15%								
As 188.979†	434.6	0.392	mg/L	0.0084	0.392	mg/L	0.0084	2.15%
QC value within limits for As 188.979 Recovery = 97.94%								
Ba 233.527†	58457.7	0.990	mg/L	0.0251	0.990	mg/L	0.0251	2.53%
QC value within limits for Ba 233.527 Recovery = 98.99%								
Be 234.861†	29224.3	0.0509	mg/L	0.00148	0.0509	mg/L	0.00148	2.91%
QC value within limits for Be 234.861 Recovery = 101.78%								
B 249.677†	26192.5	0.499	mg/L	0.0180	0.499	mg/L	0.0180	3.60%
QC value within limits for B 249.677 Recovery = 99.90%								
Ca 227.546†	1024.5	9.93	mg/L	0.120	9.93	mg/L	0.120	1.21%
QC value within limits for Ca 227.546 Recovery = 99.31%								
Cd 228.802†	864.4	0.0482	mg/L	0.00077	0.0482	mg/L	0.00077	1.61%
QC value within limits for Cd 228.802 Recovery = 96.41%								
Co 228.616†	3813.3	0.193	mg/L	0.0028	0.193	mg/L	0.0028	1.44%
QC value within limits for Co 228.616 Recovery = 96.39%								
Cr 267.716†	56612.9	0.490	mg/L	0.0133	0.490	mg/L	0.0133	2.71%
QC value within limits for Cr 267.716 Recovery = 98.01%								
Cu 327.393†	72872.5	0.496	mg/L	0.0176	0.496	mg/L	0.0176	3.55%
QC value within limits for Cu 327.393 Recovery = 99.16%								
Fe 239.562†	1831.2	3.98	mg/L	0.041	3.98	mg/L	0.041	1.03%
QC value within limits for Fe 239.562 Recovery = 99.45%								
Mg 279.077†	8316.5	9.93	mg/L	0.061	9.93	mg/L	0.061	0.61%
QC value within limits for Mg 279.077 Recovery = 99.30%								
Mn 257.610†	222916.5	0.498	mg/L	0.0133	0.498	mg/L	0.0133	2.67%
QC value within limits for Mn 257.610 Recovery = 99.58%								
Mo 202.031†	13239.0	0.982	mg/L	0.0255	0.982	mg/L	0.0255	2.60%
QC value within limits for Mo 202.031 Recovery = 98.16%								
Ni 231.604†	17004.9	0.492	mg/L	0.0114	0.492	mg/L	0.0114	2.31%
QC value within limits for Ni 231.604 Recovery = 98.44%								
Pb 220.353†	2919.4	0.509	mg/L	0.0065	0.509	mg/L	0.0065	1.29%
QC value within limits for Pb 220.353 Recovery = 101.79%								
Sb 206.836†	1889.7	1.19	mg/L	0.016	1.19	mg/L	0.016	1.35%
QC value within limits for Sb 206.836 Recovery = 99.31%								
Se 196.026†	552.6	0.386	mg/L	0.0087	0.386	mg/L	0.0087	2.25%
QC value within limits for Se 196.026 Recovery = 96.59%								
Si 251.611†	170734.7	4.95	mg/L	0.154	4.95	mg/L	0.154	3.12%
QC value within limits for Si 251.611 Recovery = 99.00%								
Sn 189.927†	5731.6	0.975	mg/L	0.0148	0.975	mg/L	0.0148	1.52%
QC value within limits for Sn 189.927 Recovery = 97.50%								
Ti 334.940†	736290.3	1.01	mg/L	0.001	1.01	mg/L	0.001	0.11%
QC value within limits for Ti 334.940 Recovery = 100.61%								
Tl 190.801†	849.9	0.510	mg/L	0.0070	0.510	mg/L	0.0070	1.36%
QC value within limits for Tl 190.801 Recovery = 102.01%								
V 290.880†	147267.9	0.973	mg/L	0.0287	0.973	mg/L	0.0287	2.95%
QC value within limits for V 290.880 Recovery = 97.34%								
Zn 206.200†	31121.6	0.923	mg/L	0.0195	0.923	mg/L	0.0195	2.12%
QC value within limits for Zn 206.200 Recovery = 92.28%								
K 766.490†	131500.6	49.0	mg/L	0.25	49.0	mg/L	0.25	0.51%
QC value within limits for K 766.490 Recovery = 98.00%								
Na 589.592†	686631.1	49.3	mg/L	0.49	49.3	mg/L	0.49	1.00%
QC value within limits for Na 589.592 Recovery = 98.53%								
Sr 407.771†	913356.4	0.874	mg/L	0.0817	0.874	mg/L	0.0817	9.34%
QC value less than the lower limit for Sr 407.771 Recovery = 87.44%								
Li 670.784†	81808.0	0.976	mg/L	0.0041	0.976	mg/L	0.0041	0.42%
QC value within limits for Li 670.784 Recovery = 97.57%								

QC Failed. Continue with analysis.

Approved: February 23, 2011

Pierre Morris

Sequence No.: 78 Autosampler Location: 1
Sample ID: CCB Date Collected: 2/22/2011 10:54:27 PM
Analyst: Data Type: Original
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5155621.4						78663.25	1.53%
YRADIAL	306640.6						6450.00	2.10%
Ga 417.206	1202741.9						18792.02	1.56%
GaRADIAL	57701.8						621.67	1.08%
Ag 328.068†	383.4	0.00121	mg/L	0.000296	0.00121	mg/L	0.000296	24.48%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-78.2	-0.0125	mg/L	0.01662	-0.0125	mg/L	0.01662	132.71%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.1	-0.00169	mg/L	0.003928	-0.00169	mg/L	0.003928	232.86%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	8.3	-0.00027	mg/L	0.000094	-0.00027	mg/L	0.000094	34.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-39.6	-0.00006	mg/L	0.000030	-0.00006	mg/L	0.000030	48.85%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	295.4	0.00604	mg/L	0.000604	0.00604	mg/L	0.000604	10.00%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	5.7	0.0529	mg/L	0.04226	0.0529	mg/L	0.04226	79.88%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	2.2	0.00008	mg/L	0.000046	0.00008	mg/L	0.000046	57.25%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	12.3	0.00051	mg/L	0.000255	0.00051	mg/L	0.000255	49.67%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-24.2	-0.00063	mg/L	0.000081	-0.00063	mg/L	0.000081	12.83%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	101.1	0.00048	mg/L	0.000742	0.00048	mg/L	0.000742	155.89%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.5	0.00234	mg/L	0.002984	0.00234	mg/L	0.002984	127.78%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	1.6	-0.00008	mg/L	0.003461	-0.00008	mg/L	0.003461	>999.9%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-22.7	-0.00048	mg/L	0.000011	-0.00048	mg/L	0.000011	2.30%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.6	0.00019	mg/L	0.000312	0.00019	mg/L	0.000312	161.44%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-3.2	-0.00033	mg/L	0.000200	-0.00033	mg/L	0.000200	61.17%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-15.6	-0.00486	mg/L	0.001381	-0.00486	mg/L	0.001381	28.43%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.0	-0.00080	mg/L	0.002170	-0.00080	mg/L	0.002170	272.79%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.1	-0.00063	mg/L	0.004119	-0.00063	mg/L	0.004119	658.49%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	29.9	-0.0135	mg/L	0.00011	-0.0135	mg/L	0.00011	0.84%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	2.9	-0.00151	mg/L	0.000775	-0.00151	mg/L	0.000775	51.27%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	264.4	0.00010	mg/L	0.000094	0.00010	mg/L	0.000094	91.26%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.6	0.00060	mg/L	0.002789	0.00060	mg/L	0.002789	467.36%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-187.7	-0.00098	mg/L	0.001087	-0.00098	mg/L	0.001087	110.89%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-1577.3	-0.0541	mg/L	0.00000	-0.0541	mg/L	0.00000	0.00%
QC value less than the lower limit for Zn 206.200 Recovery = Not calculated								
K 766.490†	139.5	0.0521	mg/L	0.01776	0.0521	mg/L	0.01776	34.06%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	454.6	0.0235	mg/L	0.01272	0.0235	mg/L	0.01272	54.02%
QC value within limits for Na 589.592 Recovery = Not calculated								

Approved: February 23, 2011

Pierre Morris

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Sr 407.771†              -72.3    -0.00044 mg/L      0.000224    -0.00044 mg/L      0.000224  50.94%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              170.8     0.00013 mg/L      0.001130     0.00013 mg/L      0.001130 869.87%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

Approved: February 23, 2011

Pierce Morris

Reprocessing Begun
Logged In Analyst: peicp2 Technique: ICP Continuous

Results Data Set (original): 022311H2
Results Library (original): C:\pe\peicp2\Results\Results.mdb
Results Data Set (reprocessed): 022311HR
Results Library (reprocessed): C:\pe\peicp2\Results\Results.mdb

Sequence No.: 1 Autosampler Location: 1
Sample ID: S0 Date Collected: 2/23/2011 9:17:44 AM
Analyst: Data Type: Reprocessed on 2/23/2011 2:45:43 PM
Logged In Analyst (Original) : peicp2
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: S0

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	4915315.7	54071.43	1.10%		
YRADIAL	283340.1	3177.33	1.12%		
Ga 417.206	1275429.3	9655.61	0.76%		
GaRADIAL	60879.6	751.31	1.23%		
Ag 328.068†	-1458.5	208.35	14.29%	[0.00]	mg/L
Al 396.153†	-201.2	32.00	15.91%	[0.00]	mg/L
As 188.979†	2.8	3.63	127.64%	[0.00]	mg/L
Ba 233.527†	-40.5	4.36	10.76%	[0.00]	mg/L
Be 234.861†	-580.0	19.07	3.29%	[0.00]	mg/L
B 249.677†	949.8	44.26	4.66%	[0.00]	mg/L
Ca 227.546†	-44.3	5.10	11.53%	[0.00]	mg/L
Cd 228.802†	24.3	2.68	11.00%	[0.00]	mg/L
Co 228.616†	-20.3	1.27	6.28%	[0.00]	mg/L
Cr 267.716†	-34.9	10.43	29.88%	[0.00]	mg/L
Cu 327.393†	-1271.2	52.20	4.11%	[0.00]	mg/L
Fe 239.562†	1.3	3.79	283.47%	[0.00]	mg/L
Mg 279.077†	2.4	9.14	377.13%	[0.00]	mg/L
Mn 257.610†	215.5	13.56	6.29%	[0.00]	mg/L
Mo 202.031†	-34.1	7.58	22.25%	[0.00]	mg/L
Ni 231.604†	-0.3	13.22	>999.9%	[0.00]	mg/L
Pb 220.353†	37.4	4.70	12.58%	[0.00]	mg/L
Sb 206.836†	17.1	1.10	6.45%	[0.00]	mg/L
Se 196.026†	9.5	3.91	41.11%	[0.00]	mg/L
Si 251.611†	316.5	6.49	2.05%	[0.00]	mg/L
Sn 189.927†	115.9	3.50	3.02%	[0.00]	mg/L
Ti 334.940†	-491.9	91.19	18.54%	[0.00]	mg/L
Tl 190.801†	-34.0	1.76	5.17%	[0.00]	mg/L
V 290.880†	4152.8	121.39	2.92%	[0.00]	mg/L
Zn 206.200†	330.2	12.24	3.71%	[0.00]	mg/L
K 766.490†	225.3	117.79	52.28%	[0.00]	mg/L
Na 589.592†	887.0	63.26	7.13%	[0.00]	mg/L
Sr 407.771†	-686.7	93.59	13.63%	[0.00]	mg/L
Li 670.784†	167.9	51.40	30.62%	[0.00]	mg/L

Sequence No.: 2 Autosampler Location: 2
Sample ID: S1 Date Collected: 2/23/2011 9:24:21 AM
Analyst: Data Type: Reprocessed on 2/23/2011 2:45:45 PM
Logged In Analyst (Original) : peicp2
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: S1

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Approved: February 24, 2011
Pierre Morris

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4871784.0	79988.54	1.64%		
YRADIAL	287497.3	3746.04	1.30%		
Ga 417.206	1275556.0	32097.65	2.52%		
GaRADIAL	61454.2	388.93	0.63%		
Ag 328.068†	953.8	96.56	10.12%	[0.0040]	mg/L
Al 396.153†	525.9	51.22	9.74%	[0.10]	mg/L
Ba 233.527†	622.6	9.51	1.53%	[0.010]	mg/L
Be 234.861†	286.8	11.26	3.93%	[0.0005]	mg/L
Cd 228.802†	7.9	3.23	41.15%	[0.00050]	mg/L
Co 228.616†	29.8	2.28	7.63%	[0.0020]	mg/L
Cr 267.716†	602.0	17.85	2.96%	[0.0050]	mg/L
Cu 327.393†	710.1	22.34	3.15%	[0.0050]	mg/L
Fe 239.562†	17.7	1.06	5.96%	[0.040]	mg/L
Mg 279.077†	84.0	4.13	4.92%	[0.10]	mg/L
Mn 257.610†	2414.2	33.56	1.39%	[0.0050]	mg/L
Mo 202.031†	147.3	4.33	2.94%	[0.010]	mg/L
Ni 231.604†	178.2	14.63	8.21%	[0.0050]	mg/L
Pb 220.353†	33.8	9.02	26.66%	[0.0050]	mg/L
Sb 206.836†	19.4	1.00	5.14%	[0.012]	mg/L
Si 251.611†	1794.8	45.21	2.52%	[0.050]	mg/L
Sn 189.927†	50.7	5.70	11.25%	[0.010]	mg/L
Ti 334.940†	7407.2	225.30	3.04%	[0.010]	mg/L
V 290.880†	1717.7	122.96	7.16%	[0.010]	mg/L
Zn 206.200†	355.5	7.77	2.19%	[0.010]	mg/L
K 766.490†	1191.1	43.85	3.68%	[0.50]	mg/L
Na 589.592†	6711.4	279.30	4.16%	[0.50]	mg/L
Sr 407.771†	10822.6	440.20	4.07%	[0.010]	mg/L
Li 670.784†	864.4	77.73	8.99%	[0.010]	mg/L

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S2 **Date Collected: 2/23/2011 9:31:03 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:45:46 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S2

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4950675.7	45426.71	0.92%		
YRADIAL	289632.4	2632.81	0.91%		
Ga 417.206	1275238.8	6339.96	0.50%		
GaRADIAL	61957.2	1093.11	1.76%		
Ag 328.068†	1640.4	86.98	5.30%	[0.0080]	mg/L
Al 396.153†	990.4	75.00	7.57%	[0.20]	mg/L
As 188.979†	8.4	1.35	16.17%	[0.0080]	mg/L
Ba 233.527†	1205.9	15.69	1.30%	[0.020]	mg/L
Be 234.861†	575.7	6.52	1.13%	[0.0010]	mg/L
B 249.677†	344.1	32.26	9.37%	[0.010]	mg/L
Ca 227.546†	24.6	9.93	40.33%	[0.20]	mg/L
Cd 228.802†	16.1	2.81	17.43%	[0.0010]	mg/L
Co 228.616†	76.9	1.34	1.74%	[0.0040]	mg/L
Cr 267.716†	1200.5	11.85	0.99%	[0.010]	mg/L
Cu 327.393†	1502.7	71.95	4.79%	[0.010]	mg/L
Fe 239.562†	34.9	2.16	6.20%	[0.080]	mg/L
Mg 279.077†	158.9	5.48	3.45%	[0.20]	mg/L
Mn 257.610†	4594.4	75.29	1.64%	[0.010]	mg/L
Mo 202.031†	275.5	1.26	0.46%	[0.020]	mg/L
Ni 231.604†	351.7	9.79	2.78%	[0.010]	mg/L
Pb 220.353†	65.9	4.24	6.43%	[0.010]	mg/L
Sb 206.836†	39.1	2.71	6.92%	[0.024]	mg/L

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Se 196.026†	5.4	7.28	133.86%	[0.0080]	mg/L
Si 251.611†	3405.3	36.37	1.07%	[0.10]	mg/L
Sn 189.927†	99.6	5.10	5.12%	[0.020]	mg/L
Ti 334.940†	14485.0	149.29	1.03%	[0.020]	mg/L
Tl 190.801†	22.3	3.56	16.01%	[0.010]	mg/L
V 290.880†	3094.7	115.86	3.74%	[0.020]	mg/L
Zn 206.200†	650.2	3.39	0.52%	[0.020]	mg/L
K 766.490†	2416.0	93.70	3.88%	[1.00]	mg/L
Na 589.592†	13127.2	298.59	2.27%	[1.00]	mg/L
Sr 407.771†	20667.4	1214.05	5.87%	[0.020]	mg/L
Li 670.784†	1684.5	78.74	4.67%	[0.020]	mg/L

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S3 **Date Collected: 2/23/2011 9:37:43 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:45:47 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S3

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	4773762.1	27518.08	0.58%		
YRADIAL	279606.5	2307.80	0.83%		
Ga 417.206	1243004.4	25668.82	2.07%		
GaRADIAL	60038.6	1160.04	1.93%		
Ag 328.068†	79837.5	2289.08	2.87%	[0.40]	mg/L
Al 396.153†	47629.4	702.44	1.47%	[10.00]	mg/L
As 188.979†	434.0	4.87	1.12%	[0.40]	mg/L
Ba 233.527†	58932.7	557.14	0.95%	[1.00]	mg/L
Be 234.861†	28754.9	725.38	2.52%	[0.05]	mg/L
B 249.677†	25900.0	698.64	2.70%	[0.50]	mg/L
Ca 227.546†	1046.3	20.12	1.92%	[10.00]	mg/L
Cd 228.802†	887.5	11.17	1.26%	[0.05]	mg/L
Co 228.616†	3872.5	17.16	0.44%	[0.20]	mg/L
Cr 267.716†	57518.1	602.02	1.05%	[0.50]	mg/L
Cu 327.393†	71808.6	2018.42	2.81%	[0.50]	mg/L
Fe 239.562†	1675.7	32.28	1.93%	[4.00]	mg/L
Mg 279.077†	7769.2	124.77	1.61%	[10.00]	mg/L
Mn 257.610†	224850.8	2592.82	1.15%	[0.50]	mg/L
Mo 202.031†	13513.2	145.04	1.07%	[1.00]	mg/L
Ni 231.604†	17267.6	223.92	1.30%	[0.50]	mg/L
Pb 220.353†	2990.6	14.56	0.49%	[0.50]	mg/L
Sb 206.836†	1916.0	33.45	1.75%	[1.20]	mg/L
Se 196.026†	567.4	12.89	2.27%	[0.40]	mg/L
Si 251.611†	171433.7	4586.58	2.68%	[5.00]	mg/L
Sn 189.927†	5904.8	3.10	0.05%	[1.00]	mg/L
Ti 334.940†	723404.1	3292.98	0.46%	[1.00]	mg/L
Tl 190.801†	861.5	6.52	0.76%	[0.50]	mg/L
V 290.880†	148754.6	1930.39	1.30%	[1.00]	mg/L
Zn 206.200†	33687.8	265.98	0.79%	[1.00]	mg/L
K 766.490†	124020.8	1474.17	1.19%	[50.00]	mg/L
Na 589.592†	646151.5	13486.28	2.09%	[50.00]	mg/L
Sr 407.771†	1007330.0	49797.17	4.94%	[1.00]	mg/L
Li 670.784†	76262.1	1075.76	1.41%	[1.00]	mg/L

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S4 **Date Collected: 2/23/2011 9:44:23 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:45:49 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S4

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Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4657480.1	28772.89	0.62%		
YRADIAL	275821.0	6134.56	2.22%		
Ga 417.206	1229054.9	10848.91	0.88%		
GaRADIAL	60926.0	1783.62	2.93%		
Ag 328.068†	162084.7	2247.45	1.39%	[0.80]	mg/L
Al 396.153†	92876.9	288.20	0.31%	[20.00]	mg/L
As 188.979†	883.4	8.36	0.95%	[0.80]	mg/L
Ba 233.527†	118890.8	697.38	0.59%	[2.00]	mg/L
Be 234.861†	58111.5	615.04	1.06%	[0.10]	mg/L
B 249.677†	53324.4	629.86	1.18%	[1.00]	mg/L
Ca 227.546†	2146.9	24.17	1.13%	[20.00]	mg/L
Cd 228.802†	1789.8	24.14	1.35%	[0.10]	mg/L
Co 228.616†	7853.7	51.07	0.65%	[0.40]	mg/L
Cr 267.716†	116227.8	876.79	0.75%	[1.00]	mg/L
Cu 327.393†	146752.4	2210.54	1.51%	[1.00]	mg/L
Fe 239.562†	3406.4	77.28	2.27%	[8.00]	mg/L
Mg 279.077†	15752.5	314.37	2.00%	[20.00]	mg/L
Mn 257.610†	451800.6	651.58	0.14%	[1.00]	mg/L
Mo 202.031†	27458.2	176.75	0.64%	[2.00]	mg/L
Ni 231.604†	34726.1	185.55	0.53%	[1.00]	mg/L
Pb 220.353†	6045.4	46.33	0.77%	[1.00]	mg/L
Sb 206.836†	3868.4	45.84	1.18%	[2.40]	mg/L
Se 196.026†	1142.9	15.81	1.38%	[0.80]	mg/L
Si 251.611†	350668.3	3853.00	1.10%	[10.00]	mg/L
Sn 189.927†	11986.8	88.04	0.73%	[2.00]	mg/L
Ti 334.940†	1461801.7	4478.73	0.31%	[2.00]	mg/L
Tl 190.801†	1728.0	8.96	0.52%	[1.00]	mg/L
V 290.880†	306009.1	2920.40	0.95%	[2.00]	mg/L
Zn 206.200†	67501.6	259.60	0.38%	[2.00]	mg/L
K 766.490†	245699.7	1096.29	0.45%	[100.00]	mg/L
Na 589.592†	1259257.9	44747.87	3.55%	[100.00]	mg/L
Sr 407.771†	2048296.5	163228.55	7.97%	[2.00]	mg/L
Li 670.784†	149196.5	1768.82	1.19%	[2.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Wt. Lin	140.1	198200	0.00000	0.999059	
Al 396.153	4	Wt. Lin	55.6	4694	0.00000	0.999923	
As 188.979	3	Wt. Lin	-0.4	1095	0.00000	0.999963	
Ba 233.527	4	Wt. Lin	30.2	59090	0.00000	0.999982	
Be 234.861	4	Wt. Lin	-2.3	578100	0.00000	0.999988	
B 249.677	3	Wt. Lin	-184.3	52840	0.00000	0.999917	
Ca 227.546	3	Wt. Lin	3.5	105.7	0.00000	0.999904	
Cd 228.802	4	Wt. Lin	-1.1	17720	0.00000	0.999773	
Co 228.616	4	Wt. Lin	-8.5	19900	0.00000	0.998293	
Cr 267.716	4	Wt. Lin	25.9	116000	0.00000	0.999935	
Cu 327.393	4	Wt. Lin	-10.1	146400	0.00000	0.999600	
Fe 239.562	4	Wt. Lin	0.9	422.7	0.00000	0.999961	
Mg 279.077	4	Wt. Lin	5.6	778.9	0.00000	0.999902	
Mn 257.610	4	Wt. Lin	155.1	449200	0.00000	0.999953	
Mo 202.031	4	Wt. Lin	10.5	13540	0.00000	0.999825	
Ni 231.604	4	Wt. Lin	5.1	34630	0.00000	0.999996	
Pb 220.353	4	Wt. Lin	4.0	6045	0.00000	0.999794	
Sb 206.836	4	Wt. Lin	0.2	1607	0.00000	0.999968	
Se 196.026	3	Wt. Lin	-6.0	1435	0.00000	1.000000	
Si 251.611	4	Wt. Lin	50.3	34440	0.00000	0.999726	
Sn 189.927	4	Wt. Lin	-9.8	5859	0.00000	0.998589	
Ti 334.940	4	Wt. Lin	119.2	725300	0.00000	0.999958	
Tl 190.801	3	Wt. Lin	5.1	1718	0.00000	0.999995	
V 290.880	4	Wt. Lin	198.6	149500	0.00000	0.999583	
Zn 206.200	4	Wt. Lin	14.6	33320	0.00000	0.999322	
K 766.490	4	Non Lin, Calc Int	-49.6	2505	-0.47748	1.000000	
Na 589.592	4	Non Lin, Calc Int	-10.6	13250	-6.61005	1.000000	
Sr 407.771	4	Wt. Lin	642.0	1012000	0.00000	0.999928	

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Li 670.784 4 Wt. Lin 117.0 75950 0.00000 0.999626

Sequence No.: 6 **Autosampler Location: 9**
Sample ID: ICV 2nd Vendor **Date Collected: 2/23/2011 9:51:11 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:45:50 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICV 2nd Vendor

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: ICV 2nd Vendor

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4783407.8						40196.24	0.84%
YRADIAL	288269.1						5052.65	1.75%
Ga 417.206	1254978.7						11947.26	0.95%
GaRADIAL	61906.5						324.92	0.52%
Ag 328.068†	79760.7	0.403	mg/L	0.0078	0.403	mg/L	0.0078	1.93%
QC value within limits for Ag 328.068 Recovery = 100.71%								
Al 396.153†	47322.8	10.1	mg/L	0.04	10.1	mg/L	0.04	0.38%
QC value within limits for Al 396.153 Recovery = 100.57%								
As 188.979†	429.1	0.389	mg/L	0.0081	0.389	mg/L	0.0081	2.08%
QC value within limits for As 188.979 Recovery = 97.17%								
Ba 233.527†	59428.3	1.01	mg/L	0.015	1.01	mg/L	0.015	1.47%
QC value within limits for Ba 233.527 Recovery = 100.79%								
Be 234.861†	28209.3	0.0495	mg/L	0.00110	0.0495	mg/L	0.00110	2.22%
QC value within limits for Be 234.861 Recovery = 99.08%								
B 249.677†	26175.9	0.505	mg/L	0.0109	0.505	mg/L	0.0109	2.16%
QC value within limits for B 249.677 Recovery = 100.99%								
Ca 227.546†	1055.1	10.3	mg/L	0.15	10.3	mg/L	0.15	1.50%
QC value within limits for Ca 227.546 Recovery = 102.87%								
Cd 228.802†	878.7	0.0492	mg/L	0.00101	0.0492	mg/L	0.00101	2.05%
QC value within limits for Cd 228.802 Recovery = 98.47%								
Co 228.616†	3866.7	0.192	mg/L	0.0029	0.192	mg/L	0.0029	1.49%
QC value within limits for Co 228.616 Recovery = 96.14%								
Cr 267.716†	57783.7	0.498	mg/L	0.0091	0.498	mg/L	0.0091	1.83%
QC value within limits for Cr 267.716 Recovery = 99.63%								
Cu 327.393†	72368.0	0.496	mg/L	0.0091	0.496	mg/L	0.0091	1.84%
QC value within limits for Cu 327.393 Recovery = 99.23%								
Fe 239.562†	1661.6	3.93	mg/L	0.027	3.93	mg/L	0.027	0.69%
QC value within limits for Fe 239.562 Recovery = 98.19%								
Mg 279.077†	7687.7	9.87	mg/L	0.070	9.87	mg/L	0.070	0.71%
QC value within limits for Mg 279.077 Recovery = 98.66%								
Mn 257.610†	229851.0	0.516	mg/L	0.0068	0.516	mg/L	0.0068	1.33%
QC value within limits for Mn 257.610 Recovery = 103.21%								
Mo 202.031†	13284.4	0.981	mg/L	0.0180	0.981	mg/L	0.0180	1.83%
QC value within limits for Mo 202.031 Recovery = 98.08%								
Ni 231.604†	17475.0	0.504	mg/L	0.0077	0.504	mg/L	0.0077	1.52%
QC value within limits for Ni 231.604 Recovery = 100.87%								
Pb 220.353†	2999.7	0.501	mg/L	0.0040	0.501	mg/L	0.0040	0.79%
QC value within limits for Pb 220.353 Recovery = 100.13%								
Sb 206.836†	1945.7	1.21	mg/L	0.024	1.21	mg/L	0.024	1.97%
QC value within limits for Sb 206.836 Recovery = 101.24%								
Se 196.026†	553.8	0.393	mg/L	0.0102	0.393	mg/L	0.0102	2.61%
QC value within limits for Se 196.026 Recovery = 98.26%								
Si 251.611†	176264.5	5.10	mg/L	0.100	5.10	mg/L	0.100	1.97%
QC value within limits for Si 251.611 Recovery = 102.02%								
Sn 189.927†	5985.8	1.02	mg/L	0.015	1.02	mg/L	0.015	1.44%
QC value within limits for Sn 189.927 Recovery = 102.33%								
Ti 334.940†	730420.5	1.01	mg/L	0.001	1.01	mg/L	0.001	0.09%
QC value within limits for Ti 334.940 Recovery = 100.68%								
Tl 190.801†	861.4	0.510	mg/L	0.0057	0.510	mg/L	0.0057	1.12%
QC value within limits for Tl 190.801 Recovery = 101.99%								
V 290.880†	147358.6	0.984	mg/L	0.0143	0.984	mg/L	0.0143	1.45%
QC value within limits for V 290.880 Recovery = 98.37%								
Zn 206.200†	33255.1	1.000	mg/L	0.0136	1.000	mg/L	0.0136	1.36%
QC value within limits for Zn 206.200 Recovery = 99.99%								

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K 766.490† 122554.8 49.4 mg/L 0.46 49.4 mg/L 0.46 0.93%
QC value within limits for K 766.490 Recovery = 98.71%
Na 589.592† 622838.6 48.2 mg/L 0.46 48.2 mg/L 0.46 0.96%
QC value within limits for Na 589.592 Recovery = 96.30%
Sr 407.771† 1017791.9 1.00 mg/L 0.069 1.00 mg/L 0.069 6.84%
QC value within limits for Sr 407.771 Recovery = 100.42%
Li 670.784† 75706.6 0.995 mg/L 0.0024 0.995 mg/L 0.0024 0.24%
QC value within limits for Li 670.784 Recovery = 99.52%
All analyte(s) passed QC.

Sequence No.: 7 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 2/23/2011 9:57:52 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:45:51 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4986851.7						4616.73	0.09%
YRADIAL	282815.9						553.14	0.20%
Ga 417.206	1294362.8						13687.85	1.06%
GaRADIAL	60704.4						1042.38	1.72%
Ag 328.068†	35.0	-0.00053	mg/L	0.000301	-0.00053	mg/L	0.000301	56.60%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-39.1	-0.0202	mg/L	0.00980	-0.0202	mg/L	0.00980	48.62%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.0	0.00035	mg/L	0.000382	0.00035	mg/L	0.000382	109.22%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	4.5	-0.00044	mg/L	0.000135	-0.00044	mg/L	0.000135	30.97%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	8.4	0.00002	mg/L	0.000012	0.00002	mg/L	0.000012	72.07%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	423.8	0.0116	mg/L	0.00145	0.0116	mg/L	0.00145	12.52%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	2.0	-0.0134	mg/L	0.06602	-0.0134	mg/L	0.06602	494.31%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	0.4	0.00009	mg/L	0.000075	0.00009	mg/L	0.000075	85.70%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-1.0	0.00038	mg/L	0.000226	0.00038	mg/L	0.000226	59.72%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-11.2	-0.00032	mg/L	0.000078	-0.00032	mg/L	0.000078	24.32%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	47.2	0.00039	mg/L	0.001149	0.00039	mg/L	0.001149	294.34%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	3.1	0.00526	mg/L	0.001007	0.00526	mg/L	0.001007	19.12%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	2.8	-0.00351	mg/L	0.005383	-0.00351	mg/L	0.005383	153.23%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	7.6	-0.00033	mg/L	0.000027	-0.00033	mg/L	0.000027	8.24%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.3	-0.00031	mg/L	0.000102	-0.00031	mg/L	0.000102	33.19%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	10.6	0.00016	mg/L	0.000172	0.00016	mg/L	0.000172	107.70%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	3.3	-0.00012	mg/L	0.000884	-0.00012	mg/L	0.000884	759.31%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.1	-0.00006	mg/L	0.001424	-0.00006	mg/L	0.001424	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-3.4	0.00185	mg/L	0.001810	0.00185	mg/L	0.001810	97.99%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	0.4	-0.00144	mg/L	0.000470	-0.00144	mg/L	0.000470	32.54%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-14.0	-0.00071	mg/L	0.000211	-0.00071	mg/L	0.000211	29.55%
QC value within limits for Sn 189.927 Recovery = Not calculated								

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Ti 334.940†              1.3    -0.00016 mg/L      0.000098    -0.00016 mg/L      0.000098  60.46%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              0.5    -0.00270 mg/L      0.003309    -0.00270 mg/L      0.003309 122.74%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              98.4    -0.00067 mg/L      0.000554    -0.00067 mg/L      0.000554  82.64%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†            -37.3    -0.00156 mg/L      0.000207    -0.00156 mg/L      0.000207  13.29%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              89.3     0.0555 mg/L       0.02919      0.0555 mg/L       0.02919  52.63%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             94.2     0.00791 mg/L      0.006668     0.00791 mg/L      0.006668  84.29%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†            209.1    -0.00043 mg/L      0.000182    -0.00043 mg/L      0.000182  42.43%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†             71.5    -0.00060 mg/L      0.000615    -0.00060 mg/L      0.000615 102.77%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.

================================================================================================================
Sequence No.: 8                                    Autosampler Location: 7
Sample ID: ICSA                                    Date Collected: 2/23/2011 10:04:29 AM
Analyst:                                           Data Type: Reprocessed on 2/23/2011 2:46:00 PM
Logged In Analyst (Original) : peicp2
Initial Sample Wt:                                 Initial Sample Vol:
Dilution:                                          Sample Prep Vol:

----------------------------------------------------------------------------------------------------------------
Nebulizer Parameters: ICSA
Analyte                Back Pressure    Flow
All                    167.0 kPa        0.50 L/min

----------------------------------------------------------------------------------------------------------------
Mean Data: ICSA
                  Mean Corrected          Calib.                              Sample
Analyte              Intensity      Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029          4568221.8                                                    37012.18   0.81%
YRADIAL             285987.4                                                    10410.69   3.64%
Ga 417.206         1212792.6                                                     7278.69   0.60%
GaRADIAL             63065.9                                                     1879.19   2.98%
Ag 328.068†            804.3    -0.00133 mg/L      0.000796    -0.00133 mg/L      0.000796  59.80%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†        1103961.6         235 mg/L          11.7         235 mg/L          11.7   4.99%
   QC value within limits for Al 396.153  Recovery = 94.07%
As 188.979†             14.0     0.00421 mg/L      0.002478     0.00421 mg/L      0.002478  58.85%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†            119.2    -0.00070 mg/L      0.000222    -0.00070 mg/L      0.000222  31.89%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†           11573.4     0.00000 mg/L      0.001067     0.00000 mg/L      0.001067 >999.9%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†            -9932.5     -0.0108 mg/L       0.01436     -0.0108 mg/L       0.01436 132.88%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†           29261.9         277 mg/L           1.5         277 mg/L           1.5   0.53%
   QC value within limits for Ca 227.546  Recovery = 110.84%
Cd 228.802†              -0.8    -0.00017 mg/L      0.000152    -0.00017 mg/L      0.000152  87.59%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†              22.1    -0.00091 mg/L      0.000342    -0.00091 mg/L      0.000342  37.72%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             615.8    -0.00072 mg/L      0.000485    -0.00072 mg/L      0.000485  67.41%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†           -1472.8     0.00079 mg/L      0.001049     0.00079 mg/L      0.001049 132.92%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†           39648.6        93.8 mg/L          5.20        93.8 mg/L          5.20   5.54%
   QC value within limits for Fe 239.562  Recovery = 93.79%
Mg 279.077†         187333.9         240 mg/L          13.0         240 mg/L          13.0   5.42%
   QC value within limits for Mg 279.077  Recovery = 96.19%
Mn 257.610†            -193.7    -0.00004 mg/L      0.000051    -0.00004 mg/L      0.000051 137.51%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -1.9     0.00372 mg/L      0.001002     0.00372 mg/L      0.001002  26.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†             -66.6    -0.00212 mg/L      0.000206    -0.00212 mg/L      0.000206   9.73%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†             -91.4     0.00117 mg/L      0.001975     0.00117 mg/L      0.001975 168.54%
   QC value within limits for Pb 220.353  Recovery = Not calculated
```

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Sb 206.836†	25.1	0.0155 mg/L	0.00226	0.0155 mg/L	0.00226	14.58%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-111.3	0.00434 mg/L	0.005866	0.00434 mg/L	0.005866	135.02%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	1100.9	0.0305 mg/L	0.00115	0.0305 mg/L	0.00115	3.78%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-58.0	-0.00823 mg/L	0.000908	-0.00823 mg/L	0.000908	11.04%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-2373.6	-0.00067 mg/L	0.000588	-0.00067 mg/L	0.000588	87.60%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	147.7	0.0581 mg/L	0.00155	0.0581 mg/L	0.00155	2.68%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	-587.9	0.00194 mg/L	0.001186	0.00194 mg/L	0.001186	61.06%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	122.4	0.00110 mg/L	0.000463	0.00110 mg/L	0.000463	42.25%	
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	80.2	0.0518 mg/L	0.01856	0.0518 mg/L	0.01856	35.86%	
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	573.2	0.0441 mg/L	0.00822	0.0441 mg/L	0.00822	18.65%	
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	13482.7	0.00143 mg/L	0.000305	0.00143 mg/L	0.000305	21.38%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	239.4	0.00161 mg/L	0.002199	0.00161 mg/L	0.002199	136.49%	
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 2/23/2011 10:10:11 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:46:01 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4384773.5						31033.96	0.71%
YRADIAL	266581.1						6006.99	2.25%
Ga 417.206	1184108.7						23816.43	2.01%
GaRADIAL	58890.0						1139.01	1.93%
Ag 328.068†	104121.9	0.520	mg/L	0.0123	0.520	mg/L	0.0123	2.36%
QC value within limits for Ag 328.068 Recovery = 104.04%								
Al 396.153†	1165722.5	248	mg/L	6.1	248	mg/L	6.1	2.44%
QC value within limits for Al 396.153 Recovery = 99.33%								
As 188.979†	283.5	0.251	mg/L	0.0039	0.251	mg/L	0.0039	1.54%
QC value within limits for As 188.979 Recovery = 100.54%								
Ba 233.527†	15143.3	0.254	mg/L	0.0022	0.254	mg/L	0.0022	0.85%
QC value within limits for Ba 233.527 Recovery = 101.60%								
Be 234.861†	160639.8	0.257	mg/L	0.0079	0.257	mg/L	0.0079	3.06%
QC value within limits for Be 234.861 Recovery = 102.83%								
B 249.677†	-9921.5	-0.0201	mg/L	0.01355	-0.0201	mg/L	0.01355	67.40%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	29201.0	277	mg/L	4.3	277	mg/L	4.3	1.56%
QC value within limits for Ca 227.546 Recovery = 110.76%								
Cd 228.802†	8307.2	0.470	mg/L	0.0069	0.470	mg/L	0.0069	1.46%
QC value within limits for Cd 228.802 Recovery = 93.92%								
Co 228.616†	4681.2	0.233	mg/L	0.0020	0.233	mg/L	0.0020	0.87%
QC value within limits for Co 228.616 Recovery = 93.22%								
Cr 267.716†	29763.1	0.250	mg/L	0.0013	0.250	mg/L	0.0013	0.53%
QC value within limits for Cr 267.716 Recovery = 100.14%								
Cu 327.393†	35195.3	0.252	mg/L	0.0057	0.252	mg/L	0.0057	2.25%
QC value within limits for Cu 327.393 Recovery = 100.62%								
Fe 239.562†	41306.6	97.7	mg/L	0.28	97.7	mg/L	0.28	0.28%
QC value within limits for Fe 239.562 Recovery = 97.71%								
Mg 279.077†	195384.8	251	mg/L	0.7	251	mg/L	0.7	0.28%
QC value within limits for Mg 279.077 Recovery = 100.32%								

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Mn 257.610† 113331.4 0.254 mg/L 0.0044 0.254 mg/L 0.0044 1.73%
QC value within limits for Mn 257.610 Recovery = 101.55%
Mo 202.031† 3.1 0.00435 mg/L 0.000511 0.00435 mg/L 0.000511 11.76%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† 16558.5 0.478 mg/L 0.0029 0.478 mg/L 0.0029 0.60%
QC value within limits for Ni 231.604 Recovery = 95.56%
Pb 220.353† 2888.0 0.494 mg/L 0.0042 0.494 mg/L 0.0042 0.85%
QC value within limits for Pb 220.353 Recovery = 98.80%
Sb 206.836† 843.5 0.523 mg/L 0.0098 0.523 mg/L 0.0098 1.87%
QC value within limits for Sb 206.836 Recovery = 104.63%
Se 196.026† 241.5 0.250 mg/L 0.0082 0.250 mg/L 0.0082 3.27%
QC value within limits for Se 196.026 Recovery = 100.10%
Si 251.611† 264.1 0.00621 mg/L 0.001246 0.00621 mg/L 0.001246 20.05%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -60.2 -0.00860 mg/L 0.000506 -0.00860 mg/L 0.000506 5.88%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -2323.1 -0.00068 mg/L 0.000116 -0.00068 mg/L 0.000116 17.00%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 1016.5 0.564 mg/L 0.0012 0.564 mg/L 0.0012 0.22%
QC value within limits for Tl 190.801 Recovery = 112.75%
V 290.880† 36945.1 0.253 mg/L 0.0043 0.253 mg/L 0.0043 1.70%
QC value within limits for V 290.880 Recovery = 101.27%
Zn 206.200† 15927.5 0.477 mg/L 0.0045 0.477 mg/L 0.0045 0.95%
QC value within limits for Zn 206.200 Recovery = 95.33%
K 766.490† 12995.4 5.21 mg/L 0.027 5.21 mg/L 0.027 0.51%
QC value within limits for K 766.490 Recovery = 104.14%
Na 589.592† 66439.2 5.03 mg/L 0.027 5.03 mg/L 0.027 0.54%
QC value within limits for Na 589.592 Recovery = 100.53%
Sr 407.771† 13630.3 0.00110 mg/L 0.000181 0.00110 mg/L 0.000181 16.46%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 23.5 -0.00123 mg/L 0.000553 -0.00123 mg/L 0.000553 44.90%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 10 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 10:15:55 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:46:03 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4805403.4						22232.76	0.46%
YRADIAL	278370.5						4451.82	1.60%
Ga 417.206	1272602.1						13793.89	1.08%
GaRADIAL	60302.4						599.84	0.99%
Ag 328.068†	77901.1	0.393	mg/L	0.0038	0.393	mg/L	0.0038	0.97%
QC value within limits for Ag 328.068 Recovery = 98.36%								
Al 396.153†	47058.5	10.0	mg/L	0.06	10.0	mg/L	0.06	0.59%
QC value within limits for Al 396.153 Recovery = 100.00%								
As 188.979†	423.3	0.383	mg/L	0.0060	0.383	mg/L	0.0060	1.57%
QC value within limits for As 188.979 Recovery = 95.84%								
Ba 233.527†	58267.2	0.988	mg/L	0.0081	0.988	mg/L	0.0081	0.82%
QC value within limits for Ba 233.527 Recovery = 98.82%								
Be 234.861†	28098.5	0.0493	mg/L	0.00060	0.0493	mg/L	0.00060	1.22%
QC value within limits for Be 234.861 Recovery = 98.68%								
B 249.677†	25357.2	0.490	mg/L	0.0029	0.490	mg/L	0.0029	0.60%
QC value within limits for B 249.677 Recovery = 97.96%								
Ca 227.546†	1018.6	9.93	mg/L	0.118	9.93	mg/L	0.118	1.19%
QC value within limits for Ca 227.546 Recovery = 99.31%								
Cd 228.802†	860.3	0.0482	mg/L	0.00039	0.0482	mg/L	0.00039	0.81%
QC value within limits for Cd 228.802 Recovery = 96.42%								
Co 228.616†	3830.2	0.190	mg/L	0.0014	0.190	mg/L	0.0014	0.71%
QC value within limits for Co 228.616 Recovery = 95.25%								

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Cr 267.716†	56606.9	0.488 mg/L	0.0036	0.488 mg/L	0.0036	0.73%
QC value within limits for Cr 267.716 Recovery = 97.61%							
Cu 327.393†	70051.1	0.480 mg/L	0.0067	0.480 mg/L	0.0067	1.40%
QC value within limits for Cu 327.393 Recovery = 96.07%							
Fe 239.562†	1680.5	3.97 mg/L	0.041	3.97 mg/L	0.041	1.02%
QC value within limits for Fe 239.562 Recovery = 99.31%							
Mg 279.077†	7800.7	10.0 mg/L	0.11	10.0 mg/L	0.11	1.06%
QC value within limits for Mg 279.077 Recovery = 100.11%							
Mn 257.610†	221873.2	0.498 mg/L	0.0053	0.498 mg/L	0.0053	1.07%
QC value within limits for Mn 257.610 Recovery = 99.64%							
Mo 202.031†	13319.2	0.983 mg/L	0.0076	0.983 mg/L	0.0076	0.77%
QC value within limits for Mo 202.031 Recovery = 98.34%							
Ni 231.604†	16978.6	0.490 mg/L	0.0037	0.490 mg/L	0.0037	0.75%
QC value within limits for Ni 231.604 Recovery = 98.00%							
Pb 220.353†	2945.4	0.492 mg/L	0.0043	0.492 mg/L	0.0043	0.88%
QC value within limits for Pb 220.353 Recovery = 98.33%							
Sb 206.836†	1857.1	1.16 mg/L	0.015	1.16 mg/L	0.015	1.30%
QC value within limits for Sb 206.836 Recovery = 96.66%							
Se 196.026†	545.5	0.387 mg/L	0.0068	0.387 mg/L	0.0068	1.76%
QC value within limits for Se 196.026 Recovery = 96.80%							
Si 251.611†	166602.1	4.82 mg/L	0.050	4.82 mg/L	0.050	1.03%
QC value within limits for Si 251.611 Recovery = 96.41%							
Sn 189.927†	5791.8	0.990 mg/L	0.0049	0.990 mg/L	0.0049	0.49%
QC value within limits for Sn 189.927 Recovery = 99.02%							
Ti 334.940†	714703.3	0.985 mg/L	0.0117	0.985 mg/L	0.0117	1.18%
QC value within limits for Ti 334.940 Recovery = 98.52%							
Tl 190.801†	850.8	0.504 mg/L	0.0034	0.504 mg/L	0.0034	0.68%
QC value within limits for Tl 190.801 Recovery = 100.71%							
V 290.880†	147142.4	0.982 mg/L	0.0101	0.982 mg/L	0.0101	1.03%
QC value within limits for V 290.880 Recovery = 98.22%							
Zn 206.200†	33001.0	0.992 mg/L	0.0062	0.992 mg/L	0.0062	0.63%
QC value within limits for Zn 206.200 Recovery = 99.22%							
K 766.490†	122444.3	49.3 mg/L	0.22	49.3 mg/L	0.22	0.44%
QC value within limits for K 766.490 Recovery = 98.62%							
Na 589.592†	635599.6	49.2 mg/L	0.60	49.2 mg/L	0.60	1.22%
QC value within limits for Na 589.592 Recovery = 98.33%							
Sr 407.771†	1004231.9	0.991 mg/L	0.0737	0.991 mg/L	0.0737	7.44%
QC value within limits for Sr 407.771 Recovery = 99.08%							
Li 670.784†	75146.7	0.988 mg/L	0.0085	0.988 mg/L	0.0085	0.86%
QC value within limits for Li 670.784 Recovery = 98.79%							

All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 10:22:34 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:46:04 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5086218.7						114408.25	2.25%
YRADIAL	289913.4						2111.45	0.73%
Ga 417.206	1323392.9						49043.30	3.71%
GaRADIAL	61971.7						1227.06	1.98%
Ag 328.068†	50.2	-0.00046	mg/L	0.000745	-0.00046	mg/L	0.000745	163.64%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	2.6	-0.0113	mg/L	0.01811	-0.0113	mg/L	0.01811	160.64%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.5	0.00171	mg/L	0.002076	0.00171	mg/L	0.002076	121.64%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.6	-0.00045	mg/L	0.000074	-0.00045	mg/L	0.000074	16.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	17.4	0.00003	mg/L	0.000036	0.00003	mg/L	0.000036	110.38%
QC value within limits for Be 234.861 Recovery = Not calculated								

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B 249.677†	86.5	0.00515 mg/L	0.001238	0.00515 mg/L	0.001238	24.03%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	0.2	-0.0310 mg/L	0.01850	-0.0310 mg/L	0.01850	59.75%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Cd 228.802†	-2.8	-0.00010 mg/L	0.000166	-0.00010 mg/L	0.000166	161.16%
QC value within limits for Cd 228.802 Recovery = Not calculated						
Co 228.616†	-1.4	0.00036 mg/L	0.000101	0.00036 mg/L	0.000101	28.22%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-14.9	-0.00035 mg/L	0.000035	-0.00035 mg/L	0.000035	9.87%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	89.6	0.00068 mg/L	0.000434	0.00068 mg/L	0.000434	63.78%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	2.0	0.00267 mg/L	0.006111	0.00267 mg/L	0.006111	228.49%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	0.4	-0.00661 mg/L	0.008536	-0.00661 mg/L	0.008536	129.22%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-16.9	-0.00038 mg/L	0.000018	-0.00038 mg/L	0.000018	4.70%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	6.1	-0.00033 mg/L	0.000298	-0.00033 mg/L	0.000298	91.17%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	9.2	0.00012 mg/L	0.000095	0.00012 mg/L	0.000095	79.59%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	3.6	-0.00007 mg/L	0.000229	-0.00007 mg/L	0.000229	341.90%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	0.0	-0.00011 mg/L	0.000883	-0.00011 mg/L	0.000883	828.65%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-8.5	-0.00171 mg/L	0.005290	-0.00171 mg/L	0.005290	309.82%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-32.1	-0.00239 mg/L	0.000315	-0.00239 mg/L	0.000315	13.21%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-33.0	-0.00396 mg/L	0.000621	-0.00396 mg/L	0.000621	15.68%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	29.3	-0.00012 mg/L	0.000079	-0.00012 mg/L	0.000079	63.63%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	0.1	-0.00287 mg/L	0.001796	-0.00287 mg/L	0.001796	62.48%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	-0.6	-0.00133 mg/L	0.000164	-0.00133 mg/L	0.000164	12.34%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	-40.0	-0.00164 mg/L	0.000211	-0.00164 mg/L	0.000211	12.86%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	42.8	0.0369 mg/L	0.01591	0.0369 mg/L	0.01591	43.12%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	113.2	0.00934 mg/L	0.013294	0.00934 mg/L	0.013294	142.31%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	294.7	-0.00034 mg/L	0.000215	-0.00034 mg/L	0.000215	62.70%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	21.4	-0.00126 mg/L	0.001039	-0.00126 mg/L	0.001039	82.55%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 38**
Sample ID: PBW 2A WG357153-02 **Date Collected: 2/23/2011 10:29:15 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:10 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 2A WG357153-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: PBW 2A WG357153-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4986755.8						63492.58	1.27%
YRADIAL	294248.1						3535.88	1.20%
Ga 417.206	1315835.1						23496.90	1.79%
GaRADIAL	63519.7						1051.84	1.66%
Ag 328.068†	119.3	-0.00010	mg/L	0.000402	-0.00010	mg/L	0.000402	383.07%
Al 396.153†	14.1	-0.00883	mg/L	0.012812	-0.00883	mg/L	0.012812	145.17%

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As 188.979†	-0.1	0.00028 mg/L	0.001567	0.00028 mg/L	0.001567	563.74%
Ba 233.527†	-0.7	-0.00052 mg/L	0.000022	-0.00052 mg/L	0.000022	4.31%
Be 234.861†	14.9	0.00003 mg/L	0.000056	0.00003 mg/L	0.000056	202.68%
B 249.677†	-58.3	0.00242 mg/L	0.000402	0.00242 mg/L	0.000402	16.62%
Ca 227.546†	2.3	-0.0112 mg/L	0.04427	-0.0112 mg/L	0.04427	396.09%
Cd 228.802†	-1.2	0.00000 mg/L	0.000127	0.00000 mg/L	0.000127	>999.9%
Co 228.616†	-3.3	0.00026 mg/L	0.000240	0.00026 mg/L	0.000240	91.25%
Cr 267.716†	-2.9	-0.00025 mg/L	0.000176	-0.00025 mg/L	0.000176	71.36%
Cu 327.393†	52.4	0.00043 mg/L	0.001034	0.00043 mg/L	0.001034	242.23%
Fe 239.562†	3.4	0.00598 mg/L	0.004393	0.00598 mg/L	0.004393	73.49%
Mg 279.077†	2.0	-0.00460 mg/L	0.006860	-0.00460 mg/L	0.006860	149.21%
Mn 257.610†	-43.8	-0.00044 mg/L	0.000044	-0.00044 mg/L	0.000044	9.90%
Mo 202.031†	5.5	-0.00036 mg/L	0.000288	-0.00036 mg/L	0.000288	78.92%
Ni 231.604†	10.5	0.00016 mg/L	0.000178	0.00016 mg/L	0.000178	113.36%
Pb 220.353†	2.0	-0.00032 mg/L	0.000744	-0.00032 mg/L	0.000744	229.56%
Sb 206.836†	-1.9	-0.00129 mg/L	0.001463	-0.00129 mg/L	0.001463	113.18%
Se 196.026†	-4.6	0.00099 mg/L	0.003967	0.00099 mg/L	0.003967	400.54%
Si 251.611†	19.7	-0.00088 mg/L	0.000353	-0.00088 mg/L	0.000353	39.97%
Sn 189.927†	-42.0	-0.00550 mg/L	0.000791	-0.00550 mg/L	0.000791	14.40%
Ti 334.940†	-49.5	-0.00023 mg/L	0.000120	-0.00023 mg/L	0.000120	51.55%
Tl 190.801†	-0.4	-0.00319 mg/L	0.002869	-0.00319 mg/L	0.002869	89.82%
V 290.880†	187.1	-0.00008 mg/L	0.000475	-0.00008 mg/L	0.000475	619.70%
Zn 206.200†	-19.2	-0.00102 mg/L	0.000145	-0.00102 mg/L	0.000145	14.27%
K 766.490†	-19.1	0.0122 mg/L	0.01521	0.0122 mg/L	0.01521	124.51%
Na 589.592†	-221.1	-0.0159 mg/L	0.01964	-0.0159 mg/L	0.01964	123.67%
Sr 407.771†	126.4	-0.00051 mg/L	0.000219	-0.00051 mg/L	0.000219	42.89%
Li 670.784†	71.4	-0.00060 mg/L	0.000582	-0.00060 mg/L	0.000582	96.87%

Sequence No.: 13 **Autosampler Location: 39**
Sample ID: LCSW 2A WG357153-03 **Date Collected: 2/23/2011 10:35:55 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:14 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 2A WG357153-03

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: LCSW 2A WG357153-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4901320.2						23734.71	0.48%
YRADIAL	292375.8						4715.54	1.61%
Ga 417.206	1317412.5						38042.42	2.89%
GaRADIAL	62590.7						1332.15	2.13%
Ag 328.068†	39524.5	0.199	mg/L	0.0079	0.199	mg/L	0.0079	3.98%
Al 396.153†	23630.1	5.02	mg/L	0.028	5.02	mg/L	0.028	0.57%
As 188.979†	211.2	0.191	mg/L	0.0042	0.191	mg/L	0.0042	2.17%
Ba 233.527†	29636.3	0.502	mg/L	0.0054	0.502	mg/L	0.0054	1.07%
Be 234.861†	14063.6	0.0247	mg/L	0.00080	0.0247	mg/L	0.00080	3.25%
B 249.677†	51179.2	0.975	mg/L	0.0336	0.975	mg/L	0.0336	3.45%
Ca 227.546†	504.7	4.91	mg/L	0.102	4.91	mg/L	0.102	2.08%
Cd 228.802†	426.0	0.0239	mg/L	0.00062	0.0239	mg/L	0.00062	2.58%
Co 228.616†	1930.5	0.0962	mg/L	0.00022	0.0962	mg/L	0.00022	0.23%
Cr 267.716†	28625.4	0.247	mg/L	0.0024	0.247	mg/L	0.0024	0.97%
Cu 327.393†	35403.2	0.243	mg/L	0.0107	0.243	mg/L	0.0107	4.42%
Fe 239.562†	815.7	1.93	mg/L	0.036	1.93	mg/L	0.036	1.87%
Mg 279.077†	3849.3	4.94	mg/L	0.084	4.94	mg/L	0.084	1.71%
Mn 257.610†	114393.1	0.257	mg/L	0.0033	0.257	mg/L	0.0033	1.29%
Mo 202.031†	6771.3	0.500	mg/L	0.0094	0.500	mg/L	0.0094	1.88%
Ni 231.604†	8685.7	0.251	mg/L	0.0047	0.251	mg/L	0.0047	1.86%
Pb 220.353†	1484.9	0.248	mg/L	0.0010	0.248	mg/L	0.0010	0.42%
Sb 206.836†	916.8	0.573	mg/L	0.0130	0.573	mg/L	0.0130	2.27%
Se 196.026†	270.0	0.194	mg/L	0.0040	0.194	mg/L	0.0040	2.07%
Si 251.611†	86559.1	2.50	mg/L	0.098	2.50	mg/L	0.098	3.93%
Sn 189.927†	-38.8	-0.00495	mg/L	0.000441	-0.00495	mg/L	0.000441	8.91%
Ti 334.940†	354033.9	0.488	mg/L	0.0020	0.488	mg/L	0.0020	0.41%
Tl 190.801†	429.6	0.253	mg/L	0.0023	0.253	mg/L	0.0023	0.92%
V 290.880†	74651.7	0.498	mg/L	0.0067	0.498	mg/L	0.0067	1.35%

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Zn 206.200†	16488.6	0.496 mg/L	0.0028	0.496 mg/L	0.0028	0.57%
K 766.490†	60809.6	24.4 mg/L	0.09	24.4 mg/L	0.09	0.37%
Na 589.592†	320790.8	24.5 mg/L	0.32	24.5 mg/L	0.32	1.29%
Sr 407.771†	502496.0	0.495 mg/L	0.0375	0.495 mg/L	0.0375	7.56%
Li 670.784†	37808.3	0.496 mg/L	0.0029	0.496 mg/L	0.0029	0.58%

Sequence No.: 14 **Autosampler Location: 40**
Sample ID: L1102050401 WG357153-01 **Date Collected: 2/23/2011 10:42:39 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:15 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102050401 WG357153-01

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102050401 WG357153-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4613824.8						54636.80	1.18%
YRADIAL	288336.8						5401.01	1.87%
Ga 417.206	1230392.6						32384.36	2.63%
GaRADIAL	62362.9						1158.23	1.86%
Ag 328.068†	1408.3	0.00508	mg/L	0.001089	0.00508	mg/L	0.001089	21.44%
Al 396.153†	919.2	0.185	mg/L	0.0089	0.185	mg/L	0.0089	4.83%
As 188.979†	20.2	0.0158	mg/L	0.00132	0.0158	mg/L	0.00132	8.34%
Ba 233.527†	17851.2	0.302	mg/L	0.0031	0.302	mg/L	0.0031	1.03%
Be 234.861†	2034.4	0.00029	mg/L	0.000237	0.00029	mg/L	0.000237	82.53%
B 249.677†	67901.2	1.36	mg/L	0.031	1.36	mg/L	0.031	2.28%
Ca 227.546†	27553.4	261	mg/L	5.5	261	mg/L	5.5	2.10%
Cd 228.802†	2.0	0.00008	mg/L	0.000135	0.00008	mg/L	0.000135	171.82%
Co 228.616†	75.8	0.00372	mg/L	0.000658	0.00372	mg/L	0.000658	17.68%
Cr 267.716†	211.1	0.00112	mg/L	0.000023	0.00112	mg/L	0.000023	2.02%
Cu 327.393†	8455.3	0.0596	mg/L	0.00223	0.0596	mg/L	0.00223	3.74%
Fe 239.562†	6696.6	15.8	mg/L	0.41	15.8	mg/L	0.41	2.58%
Mg 279.077†	30267.4	38.8	mg/L	0.85	38.8	mg/L	0.85	2.18%
Mn 257.610†	494426.1	1.11	mg/L	0.009	1.11	mg/L	0.009	0.83%
Mo 202.031†	31.9	0.00259	mg/L	0.000301	0.00259	mg/L	0.000301	11.60%
Ni 231.604†	260.8	0.00733	mg/L	0.000321	0.00733	mg/L	0.000321	4.38%
Pb 220.353†	92.3	0.0263	mg/L	0.00156	0.0263	mg/L	0.00156	5.93%
Sb 206.836†	19.1	0.0118	mg/L	0.00034	0.0118	mg/L	0.00034	2.92%
Se 196.026†	-59.3	0.0333	mg/L	0.00204	0.0333	mg/L	0.00204	6.11%
Si 251.611†	534646.4	15.5	mg/L	0.33	15.5	mg/L	0.33	2.10%
Sn 189.927†	-52.7	-0.00732	mg/L	0.001754	-0.00732	mg/L	0.001754	23.98%
Ti 334.940†	-682.7	0.00150	mg/L	0.000110	0.00150	mg/L	0.000110	7.31%
Tl 190.801†	158.2	0.0673	mg/L	0.00263	0.0673	mg/L	0.00263	3.91%
V 290.880†	-888.3	-0.00607	mg/L	0.001546	-0.00607	mg/L	0.001546	25.47%
Zn 206.200†	220.5	0.00584	mg/L	0.000321	0.00584	mg/L	0.000321	5.50%
K 766.490†	41969.1	16.7	mg/L	0.13	16.7	mg/L	0.13	0.78%
Na 589.592†	1267104.7	101	mg/L	0.2	101	mg/L	0.2	0.17%
Sr 407.771†	1885101.1	1.86	mg/L	0.025	1.86	mg/L	0.025	1.32%
Li 670.784†	2647.2	0.0333	mg/L	0.00154	0.0333	mg/L	0.00154	4.63%

Sequence No.: 15 **Autosampler Location: 41**
Sample ID: L1102050401D WG357153-04 **Date Collected: 2/23/2011 10:48:22 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:16 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102050401D WG357153-04

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102050401D WG357153-04

Analyte	Mean Corrected	Calib.			Sample			

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Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	4567392.0						88651.04	1.94%
YRADIAL	286180.0						3149.12	1.10%
Ga 417.206	1218034.7						26715.12	2.19%
GaRADIAL	62036.5						484.31	0.78%
Ag 328.068†	1431.2	0.00513	mg/L	0.001352	0.00513	mg/L	0.001352	26.37%
Al 396.153†	890.0	0.179	mg/L	0.0045	0.179	mg/L	0.0045	2.50%
As 188.979†	24.3	0.0193	mg/L	0.00155	0.0193	mg/L	0.00155	8.03%
Ba 233.527†	18832.2	0.318	mg/L	0.0049	0.318	mg/L	0.0049	1.56%
Be 234.861†	2121.2	0.00022	mg/L	0.000115	0.00022	mg/L	0.000115	53.19%
B 249.677†	71935.9	1.44	mg/L	0.028	1.44	mg/L	0.028	1.91%
Ca 227.546†	29088.5	275	mg/L	5.3	275	mg/L	5.3	1.94%
Cd 228.802†	2.2	0.00007	mg/L	0.000151	0.00007	mg/L	0.000151	228.95%
Co 228.616†	82.7	0.00403	mg/L	0.000279	0.00403	mg/L	0.000279	6.92%
Cr 267.716†	171.3	0.00076	mg/L	0.000073	0.00076	mg/L	0.000073	9.61%
Cu 327.393†	8663.9	0.0612	mg/L	0.00108	0.0612	mg/L	0.00108	1.76%
Fe 239.562†	7151.5	16.9	mg/L	0.39	16.9	mg/L	0.39	2.31%
Mg 279.077†	31983.3	41.0	mg/L	0.85	41.0	mg/L	0.85	2.07%
Mn 257.610†	522330.4	1.17	mg/L	0.030	1.17	mg/L	0.030	2.54%
Mo 202.031†	42.4	0.00343	mg/L	0.000911	0.00343	mg/L	0.000911	26.53%
Ni 231.604†	276.1	0.00777	mg/L	0.000298	0.00777	mg/L	0.000298	3.83%
Pb 220.353†	107.4	0.0294	mg/L	0.00292	0.0294	mg/L	0.00292	9.93%
Sb 206.836†	19.2	0.0119	mg/L	0.00240	0.0119	mg/L	0.00240	20.24%
Se 196.026†	-54.6	0.0406	mg/L	0.00425	0.0406	mg/L	0.00425	10.45%
Si 251.611†	566061.9	16.4	mg/L	0.49	16.4	mg/L	0.49	2.98%
Sn 189.927†	-41.1	-0.00535	mg/L	0.001152	-0.00535	mg/L	0.001152	21.52%
Ti 334.940†	-661.2	0.00167	mg/L	0.000039	0.00167	mg/L	0.000039	2.36%
Tl 190.801†	170.0	0.0730	mg/L	0.00185	0.0730	mg/L	0.00185	2.54%
V 290.880†	-790.3	-0.00533	mg/L	0.000143	-0.00533	mg/L	0.000143	2.67%
Zn 206.200†	234.7	0.00624	mg/L	0.000435	0.00624	mg/L	0.000435	6.98%
K 766.490†	43792.9	17.5	mg/L	0.01	17.5	mg/L	0.01	0.07%
Na 589.592†	1312039.9	104	mg/L	0.7	104	mg/L	0.7	0.66%
Sr 407.771†	1929154.1	1.90	mg/L	0.030	1.90	mg/L	0.030	1.59%
Li 670.784†	2811.0	0.0355	mg/L	0.00103	0.0355	mg/L	0.00103	2.90%

Sequence No.: 16 **Autosampler Location: 42**
Sample ID: L1102050401S WG357153-05 **Date Collected: 2/23/2011 10:54:09 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:17 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102050401S WG357153-05

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102050401S WG357153-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4572478.1						52959.58	1.16%
YRADIAL	285115.4						6431.90	2.26%
Ga 417.206	1229842.2						9447.50	0.77%
GaRADIAL	62156.7						914.86	1.47%
Ag 328.068†	41666.1	0.209	mg/L	0.0031	0.209	mg/L	0.0031	1.48%
Al 396.153†	23308.2	4.95	mg/L	0.158	4.95	mg/L	0.158	3.19%
As 188.979†	236.4	0.211	mg/L	0.0020	0.211	mg/L	0.0020	0.94%
Ba 233.527†	47059.2	0.797	mg/L	0.0082	0.797	mg/L	0.0082	1.02%
Be 234.861†	16885.2	0.0264	mg/L	0.00063	0.0264	mg/L	0.00063	2.38%
B 249.677†	121674.4	2.38	mg/L	0.049	2.38	mg/L	0.049	2.04%
Ca 227.546†	28009.7	265	mg/L	7.0	265	mg/L	7.0	2.64%
Cd 228.802†	429.9	0.0240	mg/L	0.00074	0.0240	mg/L	0.00074	3.08%
Co 228.616†	1958.3	0.0971	mg/L	0.00152	0.0971	mg/L	0.00152	1.57%
Cr 267.716†	28776.0	0.248	mg/L	0.0031	0.248	mg/L	0.0031	1.24%
Cu 327.393†	44157.5	0.304	mg/L	0.0065	0.304	mg/L	0.0065	2.13%
Fe 239.562†	7587.8	17.9	mg/L	0.51	17.9	mg/L	0.51	2.85%
Mg 279.077†	34273.7	44.0	mg/L	0.96	44.0	mg/L	0.96	2.19%
Mn 257.610†	610541.7	1.37	mg/L	0.002	1.37	mg/L	0.002	0.14%
Mo 202.031†	6985.4	0.516	mg/L	0.0075	0.516	mg/L	0.0075	1.45%
Ni 231.604†	8667.2	0.250	mg/L	0.0043	0.250	mg/L	0.0043	1.70%
Pb 220.353†	1551.4	0.270	mg/L	0.0038	0.270	mg/L	0.0038	1.40%

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Sb 206.836†	983.4	0.614	mg/L	0.0082	0.614	mg/L	0.0082 1.34%
Se 196.026†	227.6	0.235	mg/L	0.0118	0.235	mg/L	0.0118 5.04%
Si 251.611†	623741.9	18.1	mg/L	0.24	18.1	mg/L	0.24 1.31%
Sn 189.927†	-39.7	-0.00510	mg/L	0.001541	-0.00510	mg/L	0.001541 30.20%
Ti 334.940†	371862.5	0.515	mg/L	0.0051	0.515	mg/L	0.0051 0.98%
Tl 190.801†	566.2	0.311	mg/L	0.0031	0.311	mg/L	0.0031 0.99%
V 290.880†	75097.1	0.502	mg/L	0.0072	0.502	mg/L	0.0072 1.44%
Zn 206.200†	16233.9	0.488	mg/L	0.0058	0.488	mg/L	0.0058 1.18%
K 766.490†	103808.1	41.7	mg/L	0.08	41.7	mg/L	0.08 0.18%
Na 589.592†	1582060.9	127	mg/L	0.7	127	mg/L	0.7 0.53%
Sr 407.771†	2364614.9	2.33	mg/L	0.072	2.33	mg/L	0.072 3.10%
Li 670.784†	39064.0	0.513	mg/L	0.0178	0.513	mg/L	0.0178 3.48%

Sequence No.: 17 **Autosampler Location: 43**
Sample ID: L1102052201 **Date Collected: 2/23/2011 10:59:55 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:18 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102052201

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052201

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4857123.2						10916.76	0.22%
YRADIAL	293306.4						6077.08	2.07%
Ga 417.206	1331308.0						27099.70	2.04%
GaRADIAL	62297.5						437.88	0.70%
Ag 328.068†	3460.7	0.0181	mg/L	0.00055	0.0181	mg/L	0.00055	3.02%
Al 396.153†	1543.4	0.317	mg/L	0.0054	0.317	mg/L	0.0054	1.70%
As 188.979†	21.3	0.0202	mg/L	0.00245	0.0202	mg/L	0.00245	12.13%
Ba 233.527†	6338.1	0.109	mg/L	0.0017	0.109	mg/L	0.0017	1.55%
Be 234.861†	696.3	0.00009	mg/L	0.000078	0.00009	mg/L	0.000078	87.05%
B 249.677†	61750.4	1.20	mg/L	0.021	1.20	mg/L	0.021	1.77%
Ca 227.546†	1041.9	9.82	mg/L	0.170	9.82	mg/L	0.170	1.73%
Cd 228.802†	-1.8	-0.00022	mg/L	0.000081	-0.00022	mg/L	0.000081	36.83%
Co 228.616†	22.5	0.00137	mg/L	0.000308	0.00137	mg/L	0.000308	22.39%
Cr 267.716†	239.5	0.00236	mg/L	0.000373	0.00236	mg/L	0.000373	15.80%
Cu 327.393†	30725.3	0.211	mg/L	0.0015	0.211	mg/L	0.0015	0.69%
Fe 239.562†	2256.9	5.34	mg/L	0.027	5.34	mg/L	0.027	0.51%
Mg 279.077†	742.3	0.943	mg/L	0.0053	0.943	mg/L	0.0053	0.56%
Mn 257.610†	34998.7	0.0795	mg/L	0.00111	0.0795	mg/L	0.00111	1.40%
Mo 202.031†	105.7	0.00759	mg/L	0.000248	0.00759	mg/L	0.000248	3.28%
Ni 231.604†	1483.3	0.0427	mg/L	0.00034	0.0427	mg/L	0.00034	0.80%
Pb 220.353†	-2.7	-0.00105	mg/L	0.000599	-0.00105	mg/L	0.000599	57.19%
Sb 206.836†	18.3	0.0113	mg/L	0.00058	0.0113	mg/L	0.00058	5.14%
Se 196.026†	-8.7	0.00259	mg/L	0.003508	0.00259	mg/L	0.003508	135.24%
Si 251.611†	144918.2	4.21	mg/L	0.038	4.21	mg/L	0.038	0.89%
Sn 189.927†	-14.3	-0.00077	mg/L	0.000979	-0.00077	mg/L	0.000979	126.39%
Ti 334.940†	1919.9	0.00258	mg/L	0.000049	0.00258	mg/L	0.000049	1.90%
Tl 190.801†	19.9	0.00923	mg/L	0.003173	0.00923	mg/L	0.003173	34.37%
V 290.880†	146103.5	0.976	mg/L	0.0159	0.976	mg/L	0.0159	1.63%
Zn 206.200†	4704.2	0.141	mg/L	0.0004	0.141	mg/L	0.0004	0.28%
K 766.490†	7200.3	2.82	mg/L	0.043	2.82	mg/L	0.043	1.52%
Na 589.592†	903117.1	70.6	mg/L	0.78	70.6	mg/L	0.78	1.10%
Sr 407.771†	13722.1	0.0123	mg/L	0.00112	0.0123	mg/L	0.00112	9.09%
Li 670.784†	339.6	0.00293	mg/L	0.001391	0.00293	mg/L	0.001391	47.45%

Sequence No.: 18 **Autosampler Location: 44**
Sample ID: L1102052203 **Date Collected: 2/23/2011 11:06:33 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:24 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

Nebulizer Parameters: L1102052203

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102052203

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4794795.8						37940.48	0.79%
YRADIAL	291084.2						6350.98	2.18%
Ga 417.206	1321514.3						23912.96	1.81%
GaRADIAL	62848.4						128.47	0.20%
Ag 328.068†	118.3	-0.00015	mg/L	0.000697	-0.00015	mg/L	0.000697	474.02%
Al 396.153†	15534.6	3.30	mg/L	0.014	3.30	mg/L	0.014	0.41%
As 188.979†	1.0	0.00111	mg/L	0.002290	0.00111	mg/L	0.002290	205.98%
Ba 233.527†	9.1	-0.00037	mg/L	0.000054	-0.00037	mg/L	0.000054	14.61%
Be 234.861†	65.1	-0.00003	mg/L	0.000047	-0.00003	mg/L	0.000047	164.40%
B 249.677†	39204.3	0.745	mg/L	0.0245	0.745	mg/L	0.0245	3.29%
Ca 227.546†	72.1	0.662	mg/L	0.0448	0.662	mg/L	0.0448	6.76%
Cd 228.802†	27.3	0.00162	mg/L	0.000169	0.00162	mg/L	0.000169	10.41%
Co 228.616†	26.2	0.00172	mg/L	0.000223	0.00172	mg/L	0.000223	12.97%
Cr 267.716†	188.6	0.00132	mg/L	0.000053	0.00132	mg/L	0.000053	4.02%
Cu 327.393†	1178.4	0.00821	mg/L	0.000359	0.00821	mg/L	0.000359	4.37%
Fe 239.562†	333.9	0.788	mg/L	0.0116	0.788	mg/L	0.0116	1.47%
Mg 279.077†	311.5	0.392	mg/L	0.0058	0.392	mg/L	0.0058	1.48%
Mn 257.610†	3770.0	0.00988	mg/L	0.000074	0.00988	mg/L	0.000074	0.74%
Mo 202.031†	205.3	0.0144	mg/L	0.00019	0.0144	mg/L	0.00019	1.35%
Ni 231.604†	647.4	0.0186	mg/L	0.00023	0.0186	mg/L	0.00023	1.25%
Pb 220.353†	43.0	0.00663	mg/L	0.001114	0.00663	mg/L	0.001114	16.81%
Sb 206.836†	7.9	0.00489	mg/L	0.001352	0.00489	mg/L	0.001352	27.66%
Se 196.026†	-0.9	0.00365	mg/L	0.003222	0.00365	mg/L	0.003222	88.32%
Si 251.611†	79204.0	2.30	mg/L	0.070	2.30	mg/L	0.070	3.06%
Sn 189.927†	-44.3	-0.00589	mg/L	0.000742	-0.00589	mg/L	0.000742	12.61%
Ti 334.940†	629.6	0.00071	mg/L	0.000825	0.00071	mg/L	0.000825	116.23%
Tl 190.801†	-4.3	-0.00552	mg/L	0.002193	-0.00552	mg/L	0.002193	39.73%
V 290.880†	628.3	0.00293	mg/L	0.000256	0.00293	mg/L	0.000256	8.75%
Zn 206.200†	1379.2	0.0409	mg/L	0.00032	0.0409	mg/L	0.00032	0.78%
K 766.490†	3460.9	1.26	mg/L	0.028	1.26	mg/L	0.028	2.20%
Na 589.592†	1713914.1	139	mg/L	1.4	139	mg/L	1.4	0.98%
Sr 407.771†	526.2	-0.00021	mg/L	0.000244	-0.00021	mg/L	0.000244	117.03%
Li 670.784†	170.6	0.00071	mg/L	0.001076	0.00071	mg/L	0.001076	152.27%

Sequence No.: 19 **Autosampler Location: 45**
Sample ID: L1102052203PS WG357234-01 **Date Collected: 2/23/2011 11:13:29 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:29 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102052203PS WG357234-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052203PS WG357234-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4823652.3						18877.69	0.39%
YRADIAL	288438.8						5593.78	1.94%
Ga 417.206	1306220.8						19705.30	1.51%
GaRADIAL	62413.5						105.38	0.17%
Ag 328.068†	39108.8	0.197	mg/L	0.0021	0.197	mg/L	0.0021	1.08%
Al 396.153†	36972.8	7.86	mg/L	0.013	7.86	mg/L	0.013	0.17%
As 188.979†	207.0	0.187	mg/L	0.0067	0.187	mg/L	0.0067	3.58%
Ba 233.527†	29397.3	0.498	mg/L	0.0011	0.498	mg/L	0.0011	0.22%
Be 234.861†	14229.3	0.0249	mg/L	0.00039	0.0249	mg/L	0.00039	1.55%
B 249.677†	87161.6	1.66	mg/L	0.014	1.66	mg/L	0.014	0.86%
Ca 227.546†	568.1	5.52	mg/L	0.071	5.52	mg/L	0.071	1.29%
Cd 228.802†	444.4	0.0250	mg/L	0.00042	0.0250	mg/L	0.00042	1.68%
Co 228.616†	1967.7	0.0981	mg/L	0.00040	0.0981	mg/L	0.00040	0.40%
Cr 267.716†	28733.3	0.248	mg/L	0.0007	0.248	mg/L	0.0007	0.27%

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Cu 327.393†	36373.1	0.249	mg/L	0.0022	0.249	mg/L	0.0022	0.89%
Fe 239.562†	1126.9	2.66	mg/L	0.009	2.66	mg/L	0.009	0.33%
Mg 279.077†	4148.2	5.32	mg/L	0.036	5.32	mg/L	0.036	0.68%
Mn 257.610†	117994.2	0.266	mg/L	0.0011	0.266	mg/L	0.0011	0.42%
Mo 202.031†	6865.5	0.507	mg/L	0.0044	0.507	mg/L	0.0044	0.86%
Ni 231.604†	9256.7	0.267	mg/L	0.0015	0.267	mg/L	0.0015	0.55%
Pb 220.353†	1504.6	0.251	mg/L	0.0013	0.251	mg/L	0.0013	0.50%
Sb 206.836†	914.1	0.571	mg/L	0.0076	0.571	mg/L	0.0076	1.33%
Se 196.026†	266.1	0.191	mg/L	0.0025	0.191	mg/L	0.0025	1.31%
Si 251.611†	155054.4	4.49	mg/L	0.058	4.49	mg/L	0.058	1.28%
Sn 189.927†	-56.1	-0.00790	mg/L	0.000439	-0.00790	mg/L	0.000439	5.56%
Ti 334.940†	358872.7	0.495	mg/L	0.0024	0.495	mg/L	0.0024	0.48%
Tl 190.801†	427.4	0.251	mg/L	0.0055	0.251	mg/L	0.0055	2.18%
V 290.880†	74993.1	0.500	mg/L	0.0022	0.500	mg/L	0.0022	0.44%
Zn 206.200†	17980.0	0.540	mg/L	0.0023	0.540	mg/L	0.0023	0.43%
K 766.490†	63962.1	25.5	mg/L	0.23	25.5	mg/L	0.23	0.90%
Na 589.592†	1826043.6	149	mg/L	2.5	149	mg/L	2.5	1.69%
Sr 407.771†	505778.5	0.499	mg/L	0.0461	0.499	mg/L	0.0461	9.25%
Li 670.784†	38672.2	0.508	mg/L	0.0050	0.508	mg/L	0.0050	0.98%

Sequence No.: 20 **Autosampler Location: 46**
Sample ID: L1102052203DL WG357234-02 **Date Collected: 2/23/2011 11:20:14 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:30 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102052203DL WG357234-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052203DL WG357234-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5040551.0						86376.43	1.71%
YRADIAL	294804.0						7592.97	2.58%
Ga 417.206	1365858.9						39989.75	2.93%
GaRADIAL	63539.0						2342.00	3.69%
Ag 328.068†	247.9	0.00054	mg/L	0.000331	0.00054	mg/L	0.000331	61.89%
Al 396.153†	3188.2	0.667	mg/L	0.0085	0.667	mg/L	0.0085	1.27%
As 188.979†	2.1	0.00228	mg/L	0.002890	0.00228	mg/L	0.002890	126.60%
Ba 233.527†	1.2	-0.00050	mg/L	0.000078	-0.00050	mg/L	0.000078	15.69%
Be 234.861†	63.3	0.00008	mg/L	0.000037	0.00008	mg/L	0.000037	44.67%
B 249.677†	8910.8	0.172	mg/L	0.0059	0.172	mg/L	0.0059	3.44%
Ca 227.546†	22.7	0.184	mg/L	0.0179	0.184	mg/L	0.0179	9.71%
Cd 228.802†	3.9	0.00028	mg/L	0.000062	0.00028	mg/L	0.000062	22.30%
Co 228.616†	3.0	0.00058	mg/L	0.000168	0.00058	mg/L	0.000168	29.13%
Cr 267.716†	29.6	0.00002	mg/L	0.000064	0.00002	mg/L	0.000064	415.06%
Cu 327.393†	358.4	0.00253	mg/L	0.001036	0.00253	mg/L	0.001036	40.90%
Fe 239.562†	67.8	0.158	mg/L	0.0069	0.158	mg/L	0.0069	4.36%
Mg 279.077†	61.0	0.0711	mg/L	0.00108	0.0711	mg/L	0.00108	1.52%
Mn 257.610†	757.9	0.00169	mg/L	0.000035	0.00169	mg/L	0.000035	2.07%
Mo 202.031†	46.7	0.00268	mg/L	0.000432	0.00268	mg/L	0.000432	16.12%
Ni 231.604†	127.0	0.00352	mg/L	0.000150	0.00352	mg/L	0.000150	4.26%
Pb 220.353†	13.6	0.00163	mg/L	0.000660	0.00163	mg/L	0.000660	40.49%
Sb 206.836†	0.6	0.00029	mg/L	0.001550	0.00029	mg/L	0.001550	532.39%
Se 196.026†	0.8	0.00479	mg/L	0.005273	0.00479	mg/L	0.005273	110.13%
Si 251.611†	15469.9	0.448	mg/L	0.0157	0.448	mg/L	0.0157	3.51%
Sn 189.927†	-54.4	-0.00762	mg/L	0.000744	-0.00762	mg/L	0.000744	9.77%
Ti 334.940†	-1.8	-0.00017	mg/L	0.000063	-0.00017	mg/L	0.000063	38.11%
Tl 190.801†	0.2	-0.00285	mg/L	0.000833	-0.00285	mg/L	0.000833	29.19%
V 290.880†	204.0	0.00005	mg/L	0.000849	0.00005	mg/L	0.000849	>999.9%
Zn 206.200†	243.4	0.00686	mg/L	0.000431	0.00686	mg/L	0.000431	6.29%
K 766.490†	656.0	0.256	mg/L	0.0080	0.256	mg/L	0.0080	3.13%
Na 589.592†	342158.3	26.2	mg/L	0.36	26.2	mg/L	0.36	1.36%
Sr 407.771†	164.9	-0.00049	mg/L	0.000160	-0.00049	mg/L	0.000160	32.66%
Li 670.784†	266.1	0.00196	mg/L	0.000584	0.00196	mg/L	0.000584	29.74%

Sequence No.: 21 **Autosampler Location: 47**

Approved: February 24, 2011

Pierre Morris

Sample ID: L1102052311 Date Collected: 2/23/2011 11:26:56 AM
Analyst: PDM Data Type: Reprocessed on 2/23/2011 2:46:31 PM
Logged In Analyst (Original) : peicp2
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: L1102052311

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052311

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4590256.6						47698.43	1.04%
YRADIAL	275467.0						4300.81	1.56%
Ga 417.206	1238689.4						30260.80	2.44%
GaRADIAL	60814.9						731.54	1.20%
Ag 328.068†	299.9	-0.00033	mg/L	0.000141	-0.00033	mg/L	0.000141	42.87%
Al 396.153†	662.7	0.131	mg/L	0.0027	0.131	mg/L	0.0027	2.03%
As 188.979†	0.5	0.00374	mg/L	0.003504	0.00374	mg/L	0.003504	93.81%
Ba 233.527†	3997.3	0.0672	mg/L	0.00069	0.0672	mg/L	0.00069	1.03%
Be 234.861†	2517.2	-0.00020	mg/L	0.000151	-0.00020	mg/L	0.000151	76.07%
B 249.677†	6818.4	0.233	mg/L	0.0023	0.233	mg/L	0.0023	0.97%
Ca 227.546†	801.9	7.69	mg/L	0.221	7.69	mg/L	0.221	2.87%
Cd 228.802†	-0.3	0.00008	mg/L	0.000104	0.00008	mg/L	0.000104	126.07%
Co 228.616†	20.8	0.00086	mg/L	0.000379	0.00086	mg/L	0.000379	43.93%
Cr 267.716†	2295.9	0.0195	mg/L	0.00051	0.0195	mg/L	0.00051	2.63%
Cu 327.393†	25271.0	0.175	mg/L	0.0014	0.175	mg/L	0.0014	0.82%
Fe 239.562†	9139.5	21.6	mg/L	0.36	21.6	mg/L	0.36	1.69%
Mg 279.077†	216.5	0.259	mg/L	0.0006	0.259	mg/L	0.0006	0.25%
Mn 257.610†	155755.6	0.359	mg/L	0.0028	0.359	mg/L	0.0028	0.79%
Mo 202.031†	114.6	0.00881	mg/L	0.000251	0.00881	mg/L	0.000251	2.85%
Ni 231.604†	4492.1	0.130	mg/L	0.0015	0.130	mg/L	0.0015	1.14%
Pb 220.353†	30.9	0.00374	mg/L	0.000325	0.00374	mg/L	0.000325	8.67%
Sb 206.836†	10.0	0.00603	mg/L	0.001226	0.00603	mg/L	0.001226	20.35%
Se 196.026†	-18.9	0.00075	mg/L	0.004760	0.00075	mg/L	0.004760	630.80%
Si 251.611†	1022204.3	29.7	mg/L	0.32	29.7	mg/L	0.32	1.09%
Sn 189.927†	-39.5	-0.00508	mg/L	0.000822	-0.00508	mg/L	0.000822	16.20%
Ti 334.940†	4381.1	0.00595	mg/L	0.000125	0.00595	mg/L	0.000125	2.11%
Tl 190.801†	13.7	0.00492	mg/L	0.003706	0.00492	mg/L	0.003706	75.31%
V 290.880†	1121.7	0.00783	mg/L	0.000424	0.00783	mg/L	0.000424	5.41%
Zn 206.200†	72479.7	2.17	mg/L	0.033	2.17	mg/L	0.033	1.50%
K 766.490†	460819.8	191	mg/L	5.0	191	mg/L	5.0	2.65%
Na 589.592†	3375683.3	299	mg/L	12.9	299	mg/L	12.9	4.32%
Sr 407.771†	54159.0	0.0503	mg/L	0.00359	0.0503	mg/L	0.00359	7.14%
Li 670.784†	1691.0	0.0207	mg/L	0.00169	0.0207	mg/L	0.00169	8.18%

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Sequence No.: 22 Autosampler Location: 6
Sample ID: CCV Date Collected: 2/23/2011 11:33:46 AM
Analyst: Data Type: Reprocessed on 2/23/2011 2:46:32 PM
Logged In Analyst (Original) : peicp2
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4906306.7						64414.16	1.31%
YRADIAL	285669.2						4891.25	1.71%
Ga 417.206	1284026.5						31158.29	2.43%
GaRADIAL	61159.0						2033.40	3.32%
Ag 328.068†	77565.5	0.392	mg/L	0.0113	0.392	mg/L	0.0113	2.90%
QC value within limits for Ag 328.068 Recovery = 97.93%								
Al 396.153†	46915.7	9.97	mg/L	0.266	9.97	mg/L	0.266	2.67%

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QC value within limits for Al 396.153 Recovery = 99.70%

As 188.979†	421.1	0.381 mg/L	0.0104	0.381 mg/L	0.0104	2.73%
QC value within limits for As 188.979 Recovery = 95.34%						
Ba 233.527†	57296.8	0.972 mg/L	0.0245	0.972 mg/L	0.0245	2.52%
QC value within limits for Ba 233.527 Recovery = 97.18%						
Be 234.861†	28092.7	0.0493 mg/L	0.00135	0.0493 mg/L	0.00135	2.74%
QC value within limits for Be 234.861 Recovery = 98.65%						
B 249.677†	26449.0	0.510 mg/L	0.0156	0.510 mg/L	0.0156	3.06%
QC value within limits for B 249.677 Recovery = 102.00%						
Ca 227.546†	1012.6	9.87 mg/L	0.187	9.87 mg/L	0.187	1.90%
QC value within limits for Ca 227.546 Recovery = 98.70%						
Cd 228.802†	859.8	0.0482 mg/L	0.00108	0.0482 mg/L	0.00108	2.23%
QC value within limits for Cd 228.802 Recovery = 96.31%						
Co 228.616†	3760.9	0.187 mg/L	0.0019	0.187 mg/L	0.0019	1.00%
QC value within limits for Co 228.616 Recovery = 93.52%						
Cr 267.716†	55607.1	0.479 mg/L	0.0102	0.479 mg/L	0.0102	2.13%
QC value within limits for Cr 267.716 Recovery = 95.88%						
Cu 327.393†	69648.5	0.478 mg/L	0.0124	0.478 mg/L	0.0124	2.60%
QC value within limits for Cu 327.393 Recovery = 95.51%						
Fe 239.562†	1638.6	3.87 mg/L	0.139	3.87 mg/L	0.139	3.59%
QC value within limits for Fe 239.562 Recovery = 96.83%						
Mg 279.077†	7602.0	9.76 mg/L	0.319	9.76 mg/L	0.319	3.27%
QC value within limits for Mg 279.077 Recovery = 97.56%						
Mn 257.610†	217802.5	0.489 mg/L	0.0111	0.489 mg/L	0.0111	2.28%
QC value within limits for Mn 257.610 Recovery = 97.83%						
Mo 202.031†	13114.5	0.968 mg/L	0.0229	0.968 mg/L	0.0229	2.37%
QC value within limits for Mo 202.031 Recovery = 96.83%						
Ni 231.604†	16752.9	0.483 mg/L	0.0127	0.483 mg/L	0.0127	2.63%
QC value within limits for Ni 231.604 Recovery = 96.70%						
Pb 220.353†	2895.4	0.483 mg/L	0.0061	0.483 mg/L	0.0061	1.26%
QC value within limits for Pb 220.353 Recovery = 96.66%						
Sb 206.836†	1847.1	1.15 mg/L	0.027	1.15 mg/L	0.027	2.38%
QC value within limits for Sb 206.836 Recovery = 96.13%						
Se 196.026†	542.0	0.385 mg/L	0.0114	0.385 mg/L	0.0114	2.97%
QC value within limits for Se 196.026 Recovery = 96.17%						
Si 251.611†	165995.0	4.80 mg/L	0.140	4.80 mg/L	0.140	2.92%
QC value within limits for Si 251.611 Recovery = 96.06%						
Sn 189.927†	5651.4	0.966 mg/L	0.0100	0.966 mg/L	0.0100	1.04%
QC value within limits for Sn 189.927 Recovery = 96.63%						
Ti 334.940†	706082.2	0.973 mg/L	0.0040	0.973 mg/L	0.0040	0.42%
QC value within limits for Ti 334.940 Recovery = 97.33%						
Tl 190.801†	828.5	0.490 mg/L	0.0072	0.490 mg/L	0.0072	1.47%
QC value within limits for Tl 190.801 Recovery = 98.09%						
V 290.880†	144176.3	0.962 mg/L	0.0208	0.962 mg/L	0.0208	2.16%
QC value within limits for V 290.880 Recovery = 96.24%						
Zn 206.200†	32556.7	0.979 mg/L	0.0231	0.979 mg/L	0.0231	2.36%
QC value within limits for Zn 206.200 Recovery = 97.88%						
K 766.490†	122689.2	49.4 mg/L	0.88	49.4 mg/L	0.88	1.78%
QC value within limits for K 766.490 Recovery = 98.82%						
Na 589.592†	637621.1	49.3 mg/L	1.69	49.3 mg/L	1.69	3.42%
QC value within limits for Na 589.592 Recovery = 98.65%						
Sr 407.771†	992430.3	0.979 mg/L	0.0456	0.979 mg/L	0.0456	4.66%
QC value within limits for Sr 407.771 Recovery = 97.91%						
Li 670.784†	75230.9	0.989 mg/L	0.0237	0.989 mg/L	0.0237	2.39%
QC value within limits for Li 670.784 Recovery = 98.90%						

All analyte(s) passed QC.

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Sequence No.: 23 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 11:40:29 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:46:38 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

	Mean Corrected	Calib.	Sample

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Pierre Morris

Analyte	Intensity	Conc. Units	Std.Dev.	Conc. Units	Std.Dev.	RSD
Y 371.029	4995746.6				36544.78	0.73%
YRADIAL	295033.5				3714.68	1.26%
Ga 417.206	1291232.7				7104.85	0.55%
GaRADIAL	63176.0				1719.10	2.72%
Ag 328.068†	16.5	-0.00063 mg/L	0.000958	-0.00063 mg/L	0.000958	153.27%
QC value within limits for Ag 328.068 Recovery = Not calculated						
Al 396.153†	-6.3	-0.0132 mg/L	0.00280	-0.0132 mg/L	0.00280	21.26%
QC value within limits for Al 396.153 Recovery = Not calculated						
As 188.979†	1.5	0.00174 mg/L	0.001097	0.00174 mg/L	0.001097	63.00%
QC value within limits for As 188.979 Recovery = Not calculated						
Ba 233.527†	3.8	-0.00045 mg/L	0.000111	-0.00045 mg/L	0.000111	24.74%
QC value within limits for Ba 233.527 Recovery = Not calculated						
Be 234.861†	3.6	0.00001 mg/L	0.000019	0.00001 mg/L	0.000019	208.76%
QC value within limits for Be 234.861 Recovery = Not calculated						
B 249.677†	1186.9	0.0260 mg/L	0.00067	0.0260 mg/L	0.00067	2.58%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	6.4	0.0278 mg/L	0.05449	0.0278 mg/L	0.05449	196.33%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Cd 228.802†	-0.8	0.00001 mg/L	0.000218	0.00001 mg/L	0.000218	>999.9%
QC value within limits for Cd 228.802 Recovery = Not calculated						
Co 228.616†	0.1	0.00043 mg/L	0.000251	0.00043 mg/L	0.000251	57.90%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-1.2	-0.00023 mg/L	0.000100	-0.00023 mg/L	0.000100	42.73%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	-49.1	-0.00027 mg/L	0.001029	-0.00027 mg/L	0.001029	384.94%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	2.2	0.00309 mg/L	0.003037	0.00309 mg/L	0.003037	98.24%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	4.5	-0.00142 mg/L	0.004709	-0.00142 mg/L	0.004709	331.49%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	39.1	-0.00025 mg/L	0.000035	-0.00025 mg/L	0.000035	13.63%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	7.9	-0.00019 mg/L	0.000392	-0.00019 mg/L	0.000392	209.33%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	11.4	0.00019 mg/L	0.000092	0.00019 mg/L	0.000092	49.57%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	3.0	-0.00016 mg/L	0.000895	-0.00016 mg/L	0.000895	575.56%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	0.6	0.00022 mg/L	0.002055	0.00022 mg/L	0.002055	935.65%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-6.9	-0.00062 mg/L	0.002162	-0.00062 mg/L	0.002162	347.78%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	112.6	0.00181 mg/L	0.000637	0.00181 mg/L	0.000637	35.15%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-49.1	-0.00672 mg/L	0.000340	-0.00672 mg/L	0.000340	5.06%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-37.9	-0.00022 mg/L	0.000059	-0.00022 mg/L	0.000059	27.41%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-3.1	-0.00475 mg/L	0.004356	-0.00475 mg/L	0.004356	91.65%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	42.8	-0.00104 mg/L	0.000739	-0.00104 mg/L	0.000739	70.93%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	-57.2	-0.00215 mg/L	0.000085	-0.00215 mg/L	0.000085	3.92%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	176.7	0.0903 mg/L	0.01687	0.0903 mg/L	0.01687	18.67%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	486.4	0.0375 mg/L	0.02225	0.0375 mg/L	0.02225	59.34%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	428.6	-0.00021 mg/L	0.000475	-0.00021 mg/L	0.000475	224.85%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	148.8	0.00042 mg/L	0.000996	0.00042 mg/L	0.000996	237.47%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

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Sequence No.: 24 **Autosampler Location: 48**
Sample ID: L1102052401 **Date Collected: 2/23/2011 11:47:06 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:43 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

Pierre Morris

Nebulizer Parameters: L1102052401

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052401

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4921268.1						8547.06	0.17%
YRADIAL	295981.8						3871.60	1.31%
Ga 417.206	1336222.1						3099.40	0.23%
GaRADIAL	63344.4						998.86	1.58%
Ag 328.068†	210.3	0.00000	mg/L	0.000695	0.00000	mg/L	0.000695	>999.9%
Al 396.153†	73501.2	15.6	mg/L	0.07	15.6	mg/L	0.07	0.44%
As 188.979†	6.2	0.00569	mg/L	0.001808	0.00569	mg/L	0.001808	31.79%
Ba 233.527†	1330.8	0.0219	mg/L	0.00009	0.0219	mg/L	0.00009	0.39%
Be 234.861†	801.0	0.00015	mg/L	0.000063	0.00015	mg/L	0.000063	40.73%
B 249.677†	823.0	0.0296	mg/L	0.00148	0.0296	mg/L	0.00148	5.00%
Ca 227.546†	660.3	6.24	mg/L	0.035	6.24	mg/L	0.035	0.57%
Cd 228.802†	-1.8	-0.00007	mg/L	0.000185	-0.00007	mg/L	0.000185	259.72%
Co 228.616†	12.1	0.00087	mg/L	0.000230	0.00087	mg/L	0.000230	26.50%
Cr 267.716†	510.5	0.00364	mg/L	0.000020	0.00364	mg/L	0.000020	0.55%
Cu 327.393†	5784.5	0.0403	mg/L	0.00087	0.0403	mg/L	0.00087	2.16%
Fe 239.562†	2547.5	6.02	mg/L	0.095	6.02	mg/L	0.095	1.58%
Mg 279.077†	1071.6	1.37	mg/L	0.020	1.37	mg/L	0.020	1.45%
Mn 257.610†	166946.0	0.373	mg/L	0.0038	0.373	mg/L	0.0038	1.03%
Mo 202.031†	28.8	0.00172	mg/L	0.000106	0.00172	mg/L	0.000106	6.17%
Ni 231.604†	444.1	0.0127	mg/L	0.00026	0.0127	mg/L	0.00026	2.08%
Pb 220.353†	1.7	0.00011	mg/L	0.001592	0.00011	mg/L	0.001592	>999.9%
Sb 206.836†	2.8	0.00157	mg/L	0.000337	0.00157	mg/L	0.000337	21.46%
Se 196.026†	-13.1	-0.00303	mg/L	0.006985	-0.00303	mg/L	0.006985	230.31%
Si 251.611†	129244.7	3.75	mg/L	0.023	3.75	mg/L	0.023	0.61%
Sn 189.927†	-47.5	-0.00643	mg/L	0.000471	-0.00643	mg/L	0.000471	7.32%
Ti 334.940†	1847.1	0.00244	mg/L	0.000661	0.00244	mg/L	0.000661	27.07%
Tl 190.801†	13.0	0.00464	mg/L	0.002959	0.00464	mg/L	0.002959	63.81%
V 290.880†	450.5	0.00214	mg/L	0.001093	0.00214	mg/L	0.001093	50.97%
Zn 206.200†	3480.2	0.104	mg/L	0.0003	0.104	mg/L	0.0003	0.28%
K 766.490†	25239.2	10.1	mg/L	0.06	10.1	mg/L	0.06	0.62%
Na 589.592†	754942.2	58.7	mg/L	0.59	58.7	mg/L	0.59	1.00%
Sr 407.771†	28916.5	0.0272	mg/L	0.00263	0.0272	mg/L	0.00263	9.68%
Li 670.784†	345.4	0.00301	mg/L	0.001340	0.00301	mg/L	0.001340	44.55%

Sequence No.: 25 **Autosampler Location: 49**
Sample ID: L1102052402 **Date Collected: 2/23/2011 11:53:52 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:44 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102052402

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052402

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5044156.8						92253.57	1.83%
YRADIAL	294032.9						3815.28	1.30%
Ga 417.206	1375713.5						34305.23	2.49%
GaRADIAL	64074.8						1651.13	2.58%
Ag 328.068†	168.8	0.00013	mg/L	0.000312	0.00013	mg/L	0.000312	242.85%
Al 396.153†	98.8	0.00922	mg/L	0.012636	0.00922	mg/L	0.012636	137.05%
As 188.979†	0.8	0.00118	mg/L	0.001276	0.00118	mg/L	0.001276	108.52%
Ba 233.527†	643.5	0.0104	mg/L	0.00016	0.0104	mg/L	0.00016	1.58%
Be 234.861†	60.0	0.00008	mg/L	0.000020	0.00008	mg/L	0.000020	23.59%
B 249.677†	940.4	0.0217	mg/L	0.00173	0.0217	mg/L	0.00173	7.94%
Ca 227.546†	659.3	6.20	mg/L	0.176	6.20	mg/L	0.176	2.83%
Cd 228.802†	-2.6	0.00002	mg/L	0.000041	0.00002	mg/L	0.000041	236.42%
Co 228.616†	184.5	0.00970	mg/L	0.000161	0.00970	mg/L	0.000161	1.66%

Approved: February 24, 2011

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Cr 267.716†	2900.1	0.0248	mg/L	0.00047	0.0248	mg/L	0.00047	1.91%
Cu 327.393†	7384.7	0.0505	mg/L	0.00068	0.0505	mg/L	0.00068	1.36%
Fe 239.562†	52.5	0.122	mg/L	0.0012	0.122	mg/L	0.0012	1.01%
Mg 279.077†	1071.6	1.37	mg/L	0.036	1.37	mg/L	0.036	2.60%
Mn 257.610†	838.2	0.00242	mg/L	0.000059	0.00242	mg/L	0.000059	2.45%
Mo 202.031†	2.2	-0.00061	mg/L	0.000288	-0.00061	mg/L	0.000288	47.17%
Ni 231.604†	519.3	0.0148	mg/L	0.00033	0.0148	mg/L	0.00033	2.22%
Pb 220.353†	17.0	0.00241	mg/L	0.001005	0.00241	mg/L	0.001005	41.77%
Sb 206.836†	0.6	0.00010	mg/L	0.002288	0.00010	mg/L	0.002288	>999.9%
Se 196.026†	-6.6	0.00118	mg/L	0.009183	0.00118	mg/L	0.009183	776.18%
Si 251.611†	130645.7	3.79	mg/L	0.084	3.79	mg/L	0.084	2.23%
Sn 189.927†	-49.0	-0.00669	mg/L	0.001243	-0.00669	mg/L	0.001243	18.58%
Ti 334.940†	112.4	0.00005	mg/L	0.000061	0.00005	mg/L	0.000061	134.49%
Tl 190.801†	16.7	0.00617	mg/L	0.000439	0.00617	mg/L	0.000439	7.11%
V 290.880†	116.5	-0.00054	mg/L	0.000162	-0.00054	mg/L	0.000162	29.98%
Zn 206.200†	10450.7	0.313	mg/L	0.0074	0.313	mg/L	0.0074	2.36%
K 766.490†	4346.8	1.74	mg/L	0.058	1.74	mg/L	0.058	3.35%
Na 589.592†	190558.2	14.5	mg/L	0.27	14.5	mg/L	0.27	1.84%
Sr 407.771†	30082.9	0.0291	mg/L	0.00194	0.0291	mg/L	0.00194	6.67%
Li 670.784†	207.0	0.00119	mg/L	0.001849	0.00119	mg/L	0.001849	156.06%

Sequence No.: 26 **Autosampler Location: 50**
Sample ID: L1102052404 **Date Collected: 2/23/2011 12:00:34 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:45 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102052404

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052404

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5048777.2						94738.60	1.88%
YRADIAL	301932.8						8081.70	2.68%
Ga 417.206	1363877.2						42990.08	3.15%
GaRADIAL	65960.7						2152.58	3.26%
Ag 328.068†	538.9	0.00191	mg/L	0.000282	0.00191	mg/L	0.000282	14.79%
Al 396.153†	277.9	0.0474	mg/L	0.00423	0.0474	mg/L	0.00423	8.93%
As 188.979†	-0.4	0.00142	mg/L	0.000483	0.00142	mg/L	0.000483	33.93%
Ba 233.527†	1118.0	0.0184	mg/L	0.00032	0.0184	mg/L	0.00032	1.74%
Be 234.861†	289.4	0.00032	mg/L	0.000039	0.00032	mg/L	0.000039	12.14%
B 249.677†	865.1	0.0233	mg/L	0.00243	0.0233	mg/L	0.00243	10.41%
Ca 227.546†	678.3	6.41	mg/L	0.213	6.41	mg/L	0.213	3.32%
Cd 228.802†	5.0	0.00154	mg/L	0.000185	0.00154	mg/L	0.000185	12.06%
Co 228.616†	2146.1	0.108	mg/L	0.0021	0.108	mg/L	0.0021	1.93%
Cr 267.716†	27487.1	0.237	mg/L	0.0028	0.237	mg/L	0.0028	1.19%
Cu 327.393†	92402.7	0.631	mg/L	0.0177	0.631	mg/L	0.0177	2.81%
Fe 239.562†	412.5	0.973	mg/L	0.0428	0.973	mg/L	0.0428	4.39%
Mg 279.077†	1065.4	1.36	mg/L	0.053	1.36	mg/L	0.053	3.88%
Mn 257.610†	7597.1	0.0179	mg/L	0.00039	0.0179	mg/L	0.00039	2.19%
Mo 202.031†	24.6	0.00108	mg/L	0.000231	0.00108	mg/L	0.000231	21.34%
Ni 231.604†	2567.0	0.0740	mg/L	0.00136	0.0740	mg/L	0.00136	1.84%
Pb 220.353†	53.1	0.00792	mg/L	0.001083	0.00792	mg/L	0.001083	13.67%
Sb 206.836†	6.8	0.00258	mg/L	0.001162	0.00258	mg/L	0.001162	45.03%
Se 196.026†	-7.8	0.00084	mg/L	0.002106	0.00084	mg/L	0.002106	250.49%
Si 251.611†	138661.3	4.02	mg/L	0.067	4.02	mg/L	0.067	1.67%
Sn 189.927†	54.7	0.0110	mg/L	0.00107	0.0110	mg/L	0.00107	9.70%
Ti 334.940†	136.3	0.00002	mg/L	0.000239	0.00002	mg/L	0.000239	>999.9%
Tl 190.801†	16.3	0.00561	mg/L	0.004683	0.00561	mg/L	0.004683	83.50%
V 290.880†	100.3	-0.00058	mg/L	0.001145	-0.00058	mg/L	0.001145	196.21%
Zn 206.200†	138754.6	4.16	mg/L	0.049	4.16	mg/L	0.049	1.19%
K 766.490†	4842.3	1.93	mg/L	0.041	1.93	mg/L	0.041	2.14%
Na 589.592†	250496.7	19.1	mg/L	0.04	19.1	mg/L	0.04	0.19%
Sr 407.771†	30833.1	0.0297	mg/L	0.00233	0.0297	mg/L	0.00233	7.85%
Li 670.784†	-75.9	-0.00254	mg/L	0.001881	-0.00254	mg/L	0.001881	74.05%

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Sequence No.: 27
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : peicp2
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 2/23/2011 12:07:12 PM
Data Type: Reprocessed on 2/23/2011 2:46:46 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4732896.9						67308.68	1.42%
YRADIAL	285686.2						6460.15	2.26%
Ga 417.206	1247004.0						25806.84	2.07%
GaRADIAL	61411.4						1457.20	2.37%
Ag 328.068†	79667.3	0.402	mg/L	0.0069	0.402	mg/L	0.0069	1.72%
QC value within limits for Ag 328.068 Recovery = 100.60%								
Al 396.153†	46684.1	9.92	mg/L	0.084	9.92	mg/L	0.084	0.85%
QC value within limits for Al 396.153 Recovery = 99.20%								
As 188.979†	431.1	0.390	mg/L	0.0086	0.390	mg/L	0.0086	2.19%
QC value within limits for As 188.979 Recovery = 97.60%								
Ba 233.527†	59327.3	1.01	mg/L	0.011	1.01	mg/L	0.011	1.12%
QC value within limits for Ba 233.527 Recovery = 100.62%								
Be 234.861†	28725.3	0.0505	mg/L	0.00114	0.0505	mg/L	0.00114	2.26%
QC value within limits for Be 234.861 Recovery = 100.95%								
B 249.677†	26252.5	0.506	mg/L	0.0065	0.506	mg/L	0.0065	1.28%
QC value within limits for B 249.677 Recovery = 101.25%								
Ca 227.546†	1040.4	10.1	mg/L	0.18	10.1	mg/L	0.18	1.79%
QC value within limits for Ca 227.546 Recovery = 101.44%								
Cd 228.802†	884.3	0.0496	mg/L	0.00109	0.0496	mg/L	0.00109	2.19%
QC value within limits for Cd 228.802 Recovery = 99.12%								
Co 228.616†	3902.5	0.194	mg/L	0.0030	0.194	mg/L	0.0030	1.57%
QC value within limits for Co 228.616 Recovery = 97.06%								
Cr 267.716†	57673.3	0.497	mg/L	0.0074	0.497	mg/L	0.0074	1.49%
QC value within limits for Cr 267.716 Recovery = 99.45%								
Cu 327.393†	71902.3	0.493	mg/L	0.0091	0.493	mg/L	0.0091	1.84%
QC value within limits for Cu 327.393 Recovery = 98.60%								
Fe 239.562†	1633.4	3.86	mg/L	0.104	3.86	mg/L	0.104	2.70%
QC value within limits for Fe 239.562 Recovery = 96.53%								
Mg 279.077†	7606.6	9.76	mg/L	0.248	9.76	mg/L	0.248	2.54%
QC value within limits for Mg 279.077 Recovery = 97.62%								
Mn 257.610†	225907.9	0.507	mg/L	0.0063	0.507	mg/L	0.0063	1.25%
QC value within limits for Mn 257.610 Recovery = 101.44%								
Mo 202.031†	13543.7	1.000	mg/L	0.0154	1.000	mg/L	0.0154	1.54%
QC value within limits for Mo 202.031 Recovery = 100.00%								
Ni 231.604†	17373.0	0.501	mg/L	0.0075	0.501	mg/L	0.0075	1.49%
QC value within limits for Ni 231.604 Recovery = 100.28%								
Pb 220.353†	2995.4	0.500	mg/L	0.0069	0.500	mg/L	0.0069	1.38%
QC value within limits for Pb 220.353 Recovery = 100.00%								
Sb 206.836†	1892.9	1.18	mg/L	0.024	1.18	mg/L	0.024	2.01%
QC value within limits for Sb 206.836 Recovery = 98.52%								
Se 196.026†	557.9	0.396	mg/L	0.0029	0.396	mg/L	0.0029	0.73%
QC value within limits for Se 196.026 Recovery = 98.97%								
Si 251.611†	170652.1	4.94	mg/L	0.074	4.94	mg/L	0.074	1.49%
QC value within limits for Si 251.611 Recovery = 98.76%								
Sn 189.927†	5877.3	1.00	mg/L	0.014	1.00	mg/L	0.014	1.38%
QC value within limits for Sn 189.927 Recovery = 100.48%								
Ti 334.940†	720712.2	0.993	mg/L	0.0047	0.993	mg/L	0.0047	0.47%
QC value within limits for Ti 334.940 Recovery = 99.35%								
Tl 190.801†	863.7	0.511	mg/L	0.0071	0.511	mg/L	0.0071	1.39%
QC value within limits for Tl 190.801 Recovery = 102.22%								
V 290.880†	149829.6	1.00	mg/L	0.015	1.00	mg/L	0.015	1.51%
QC value within limits for V 290.880 Recovery = 100.02%								
Zn 206.200†	33613.8	1.01	mg/L	0.009	1.01	mg/L	0.009	0.88%
QC value within limits for Zn 206.200 Recovery = 101.06%								
K 766.490†	121462.4	48.9	mg/L	0.33	48.9	mg/L	0.33	0.67%
QC value within limits for K 766.490 Recovery = 97.82%								
Na 589.592†	630927.8	48.8	mg/L	0.29	48.8	mg/L	0.29	0.58%

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QC value within limits for Na 589.592 Recovery = 97.58%
Sr 407.771† 993579.9 0.980 mg/L 0.0753 0.980 mg/L 0.0753 7.68%
QC value within limits for Sr 407.771 Recovery = 98.03%
Li 670.784† 74638.9 0.981 mg/L 0.0024 0.981 mg/L 0.0024 0.24%
QC value within limits for Li 670.784 Recovery = 98.12%
All analyte(s) passed QC.

Sequence No.: 28 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 12:13:57 PM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:46:47 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4962538.4						43656.59	0.88%
YRADIAL	291584.4						2445.59	0.84%
Ga 417.206	1281967.3						16854.46	1.31%
GaRADIAL	62441.9						738.37	1.18%
Ag 328.068†	15.0	-0.00063	mg/L	0.000247	-0.00063	mg/L	0.000247	39.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	2.0	-0.0114	mg/L	0.01543	-0.0114	mg/L	0.01543	135.35%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.9	-0.00049	mg/L	0.002725	-0.00049	mg/L	0.002725	554.61%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.0	-0.00051	mg/L	0.000078	-0.00051	mg/L	0.000078	15.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	15.1	0.00003	mg/L	0.000043	0.00003	mg/L	0.000043	144.71%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	325.0	0.00965	mg/L	0.001577	0.00965	mg/L	0.001577	16.35%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	4.5	0.00933	mg/L	0.081867	0.00933	mg/L	0.081867	877.62%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	0.2	0.00008	mg/L	0.000150	0.00008	mg/L	0.000150	189.50%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-5.5	0.00015	mg/L	0.000185	0.00015	mg/L	0.000185	119.79%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-18.0	-0.00038	mg/L	0.000040	-0.00038	mg/L	0.000040	10.70%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	5.9	0.00011	mg/L	0.001245	0.00011	mg/L	0.001245	>999.9%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.6	-0.00075	mg/L	0.001929	-0.00075	mg/L	0.001929	257.70%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	4.6	-0.00122	mg/L	0.006715	-0.00122	mg/L	0.006715	550.13%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	1.1	-0.00034	mg/L	0.000015	-0.00034	mg/L	0.000015	4.29%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.8	-0.00028	mg/L	0.000178	-0.00028	mg/L	0.000178	64.53%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-2.0	-0.00020	mg/L	0.000255	-0.00020	mg/L	0.000255	125.33%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.9	-0.00033	mg/L	0.000894	-0.00033	mg/L	0.000894	267.17%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.2	-0.00028	mg/L	0.001304	-0.00028	mg/L	0.001304	471.74%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.5	0.00385	mg/L	0.002177	0.00385	mg/L	0.002177	56.50%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	7.9	-0.00123	mg/L	0.000088	-0.00123	mg/L	0.000088	7.15%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-53.8	-0.00752	mg/L	0.000299	-0.00752	mg/L	0.000299	3.97%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	3.9	-0.00016	mg/L	0.000139	-0.00016	mg/L	0.000139	87.27%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.1	-0.00230	mg/L	0.001226	-0.00230	mg/L	0.001226	53.26%

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QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† 70.5 -0.00086 mg/L 0.000395 -0.00086 mg/L 0.000395 46.14%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† -105.6 -0.00361 mg/L 0.000057 -0.00361 mg/L 0.000057 1.59%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 9.7 0.0237 mg/L 0.01109 0.0237 mg/L 0.01109 46.81%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 40.9 0.00389 mg/L 0.009553 0.00389 mg/L 0.009553 245.66%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† 48.9 -0.00059 mg/L 0.000103 -0.00059 mg/L 0.000103 17.59%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 74.8 -0.00056 mg/L 0.002025 -0.00056 mg/L 0.002025 364.30%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 29 **Autosampler Location: 51**
Sample ID: PBW 47 WG357322-02 **Date Collected: 2/23/2011 12:56:22 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:58 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 47 WG357322-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: PBW 47 WG357322-02

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5185189.9						43324.78	0.84%
YRADIAL	300158.9						3623.28	1.21%
Ga 417.206	1319495.9						6296.12	0.48%
GaRADIAL	65027.9						1793.40	2.76%
Ag 328.068†	-40.2	-0.00091	mg/L	0.000721	-0.00091	mg/L	0.000721	78.91%
Al 396.153†	49.8	-0.00121	mg/L	0.004853	-0.00121	mg/L	0.004853	400.46%
As 188.979†	-1.0	-0.00053	mg/L	0.001430	-0.00053	mg/L	0.001430	269.85%
Ba 233.527†	-9.3	-0.00067	mg/L	0.000068	-0.00067	mg/L	0.000068	10.05%
Be 234.861†	-80.0	-0.00014	mg/L	0.000007	-0.00014	mg/L	0.000007	5.41%
B 249.677†	-315.3	-0.00244	mg/L	0.000325	-0.00244	mg/L	0.000325	13.29%
Ca 227.546†	2.5	-0.00921	mg/L	0.055685	-0.00921	mg/L	0.055685	604.73%
Cd 228.802†	1.3	0.00014	mg/L	0.000059	0.00014	mg/L	0.000059	40.95%
Co 228.616†	-2.3	0.00032	mg/L	0.000338	0.00032	mg/L	0.000338	107.03%
Cr 267.716†	13.2	-0.00011	mg/L	0.000067	-0.00011	mg/L	0.000067	60.53%
Cu 327.393†	496.8	0.00346	mg/L	0.000626	0.00346	mg/L	0.000626	18.09%
Fe 239.562†	4.4	0.00830	mg/L	0.005513	0.00830	mg/L	0.005513	66.39%
Mg 279.077†	13.1	0.00965	mg/L	0.004165	0.00965	mg/L	0.004165	43.17%
Mn 257.610†	-9.9	-0.00037	mg/L	0.000016	-0.00037	mg/L	0.000016	4.20%
Mo 202.031†	1.7	-0.00065	mg/L	0.000302	-0.00065	mg/L	0.000302	46.72%
Ni 231.604†	12.1	0.00020	mg/L	0.000199	0.00020	mg/L	0.000199	99.28%
Pb 220.353†	3.1	-0.00015	mg/L	0.001094	-0.00015	mg/L	0.001094	747.78%
Sb 206.836†	0.8	0.00034	mg/L	0.004300	0.00034	mg/L	0.004300	>999.9%
Se 196.026†	1.0	0.00494	mg/L	0.002546	0.00494	mg/L	0.002546	51.55%
Si 251.611†	-11.9	-0.00180	mg/L	0.000709	-0.00180	mg/L	0.000709	39.48%
Sn 189.927†	-17.6	-0.00134	mg/L	0.002305	-0.00134	mg/L	0.002305	172.19%
Ti 334.940†	-185.8	-0.00042	mg/L	0.000179	-0.00042	mg/L	0.000179	42.61%
Tl 190.801†	6.4	0.00079	mg/L	0.001946	0.00079	mg/L	0.001946	247.17%
V 290.880†	-146.4	-0.00231	mg/L	0.000113	-0.00231	mg/L	0.000113	4.92%
Zn 206.200†	47.5	0.00099	mg/L	0.000380	0.00099	mg/L	0.000380	38.49%
K 766.490†	-82.5	-0.0131	mg/L	0.02676	-0.0131	mg/L	0.02676	204.04%
Na 589.592†	-60.7	-0.00378	mg/L	0.006460	-0.00378	mg/L	0.006460	170.92%
Sr 407.771†	9.1	-0.00063	mg/L	0.000047	-0.00063	mg/L	0.000047	7.48%
Li 670.784†	-82.8	-0.00263	mg/L	0.001299	-0.00263	mg/L	0.001299	49.38%

Sequence No.: 30 **Autosampler Location: 52**
Sample ID: LCSW 47 WG357322-03 **Date Collected: 2/23/2011 1:03:00 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:59 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011
Pierre Morris

Nebulizer Parameters: LCSW 47 WG357322-03

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: LCSW 47 WG357322-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5047538.3						92333.39	1.83%
YRADIAL	289907.5						7166.48	2.47%
Ga 417.206	1303117.3						43564.28	3.34%
GaRADIAL	62676.3						811.56	1.29%
Ag 328.068†	37818.7	0.191	mg/L	0.0073	0.191	mg/L	0.0073	3.85%
Al 396.153†	22764.5	4.83	mg/L	0.118	4.83	mg/L	0.118	2.43%
As 188.979†	194.8	0.177	mg/L	0.0045	0.177	mg/L	0.0045	2.55%
Ba 233.527†	28013.9	0.475	mg/L	0.0103	0.475	mg/L	0.0103	2.17%
Be 234.861†	13103.0	0.0230	mg/L	0.00095	0.0230	mg/L	0.00095	4.11%
B 249.677†	47289.6	0.901	mg/L	0.0393	0.901	mg/L	0.0393	4.36%
Ca 227.546†	478.4	4.65	mg/L	0.165	4.65	mg/L	0.165	3.54%
Cd 228.802†	409.4	0.0230	mg/L	0.00070	0.0230	mg/L	0.00070	3.03%
Co 228.616†	1818.5	0.0906	mg/L	0.00149	0.0906	mg/L	0.00149	1.64%
Cr 267.716†	27282.4	0.235	mg/L	0.0056	0.235	mg/L	0.0056	2.39%
Cu 327.393†	34836.8	0.239	mg/L	0.0104	0.239	mg/L	0.0104	4.34%
Fe 239.562†	791.3	1.87	mg/L	0.040	1.87	mg/L	0.040	2.14%
Mg 279.077†	3740.7	4.80	mg/L	0.111	4.80	mg/L	0.111	2.31%
Mn 257.610†	107687.4	0.242	mg/L	0.0057	0.242	mg/L	0.0057	2.38%
Mo 202.031†	6425.2	0.474	mg/L	0.0126	0.474	mg/L	0.0126	2.67%
Ni 231.604†	8132.9	0.235	mg/L	0.0048	0.235	mg/L	0.0048	2.05%
Pb 220.353†	1388.4	0.231	mg/L	0.0048	0.231	mg/L	0.0048	2.09%
Sb 206.836†	886.7	0.554	mg/L	0.0188	0.554	mg/L	0.0188	3.39%
Se 196.026†	247.3	0.178	mg/L	0.0040	0.178	mg/L	0.0040	2.22%
Si 251.611†	82365.0	2.38	mg/L	0.095	2.38	mg/L	0.095	4.00%
Sn 189.927†	-18.9	-0.00156	mg/L	0.000370	-0.00156	mg/L	0.000370	23.70%
Ti 334.940†	347090.7	0.478	mg/L	0.0057	0.478	mg/L	0.0057	1.18%
Tl 190.801†	400.7	0.236	mg/L	0.0015	0.236	mg/L	0.0015	0.62%
V 290.880†	70698.7	0.471	mg/L	0.0116	0.471	mg/L	0.0116	2.47%
Zn 206.200†	15302.7	0.460	mg/L	0.0108	0.460	mg/L	0.0108	2.35%
K 766.490†	58353.3	23.4	mg/L	0.58	23.4	mg/L	0.58	2.46%
Na 589.592†	308458.1	23.6	mg/L	0.29	23.6	mg/L	0.29	1.23%
Sr 407.771†	490880.7	0.484	mg/L	0.0329	0.484	mg/L	0.0329	6.79%
Li 670.784†	36271.2	0.476	mg/L	0.0104	0.476	mg/L	0.0104	2.19%

Sequence No.: 31 **Autosampler Location: 53**
Sample ID: FBLK WG357257-01 **Date Collected: 2/23/2011 1:09:38 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:47:00 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG357257-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: FBLK WG357257-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5032587.5						1368.43	0.03%
YRADIAL	283639.8						10566.97	3.73%
Ga 417.206	1311688.7						10022.44	0.76%
GaRADIAL	61375.0						1332.89	2.17%
Ag 328.068†	104.4	-0.00022	mg/L	0.000383	-0.00022	mg/L	0.000383	173.64%
Al 396.153†	1854.2	0.383	mg/L	0.0109	0.383	mg/L	0.0109	2.86%
As 188.979†	-1.0	-0.00044	mg/L	0.000926	-0.00044	mg/L	0.000926	209.17%
Ba 233.527†	161.8	0.00222	mg/L	0.000049	0.00222	mg/L	0.000049	2.20%
Be 234.861†	-9.1	-0.00017	mg/L	0.000127	-0.00017	mg/L	0.000127	73.06%
B 249.677†	-81.0	0.00509	mg/L	0.000780	0.00509	mg/L	0.000780	15.33%
Ca 227.546†	18.9	0.149	mg/L	0.0740	0.149	mg/L	0.0740	49.65%
Cd 228.802†	-0.2	0.00006	mg/L	0.000253	0.00006	mg/L	0.000253	460.36%

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Co 228.616†	-3.7	0.00020 mg/L	0.000086	0.00020 mg/L	0.000086	43.27%
Cr 267.716†	76.6	0.00042 mg/L	0.000119	0.00042 mg/L	0.000119	28.05%
Cu 327.393†	707.4	0.00500 mg/L	0.000240	0.00500 mg/L	0.000240	4.80%
Fe 239.562†	324.7	0.766 mg/L	0.0154	0.766 mg/L	0.0154	2.01%
Mg 279.077†	108.7	0.132 mg/L	0.0038	0.132 mg/L	0.0038	2.91%
Mn 257.610†	6478.7	0.0155 mg/L	0.00013	0.0155 mg/L	0.00013	0.87%
Mo 202.031†	5.9	-0.00030 mg/L	0.000263	-0.00030 mg/L	0.000263	89.13%
Ni 231.604†	26.7	0.00062 mg/L	0.000133	0.00062 mg/L	0.000133	21.24%
Pb 220.353†	21.0	0.00280 mg/L	0.001631	0.00280 mg/L	0.001631	58.26%
Sb 206.836†	1.5	0.00077 mg/L	0.002677	0.00077 mg/L	0.002677	346.95%
Se 196.026†	-2.1	0.00301 mg/L	0.001732	0.00301 mg/L	0.001732	57.56%
Si 251.611†	11729.7	0.339 mg/L	0.0029	0.339 mg/L	0.0029	0.87%
Sn 189.927†	-52.4	-0.00728 mg/L	0.000310	-0.00728 mg/L	0.000310	4.26%
Ti 334.940†	6931.4	0.00939 mg/L	0.001627	0.00939 mg/L	0.001627	17.33%
Tl 190.801†	1.6	-0.00188 mg/L	0.002102	-0.00188 mg/L	0.002102	112.02%
V 290.880†	205.1	0.00010 mg/L	0.000242	0.00010 mg/L	0.000242	237.27%
Zn 206.200†	272.4	0.00772 mg/L	0.000413	0.00772 mg/L	0.000413	5.35%
K 766.490†	806.3	0.203 mg/L	0.0258	0.203 mg/L	0.0258	12.73%
Na 589.592†	1712642.5	139 mg/L	4.4	139 mg/L	4.4	3.17%
Sr 407.771†	1847.3	0.00110 mg/L	0.000616	0.00110 mg/L	0.000616	56.03%
Li 670.784†	160.9	0.00058 mg/L	0.001100	0.00058 mg/L	0.001100	190.39%

Sequence No.: 32 **Autosampler Location: 54**
Sample ID: L1102054201 WG357322-01 **Date Collected: 2/23/2011 1:16:21 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:47:02 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102054201 WG357322-01

Analyte	Back Pressure	Flow
All	165.0 kPa	0.50 L/min

Mean Data: L1102054201 WG357322-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4952155.5						77004.75	1.55%
YRADIAL	291361.6						12069.52	4.14%
Ga 417.206	1284228.1						29130.96	2.27%
GaRADIAL	62075.5						1200.91	1.93%
Ag 328.068†	248.9	0.00053	mg/L	0.000290	0.00053	mg/L	0.000290	55.26%
Al 396.153†	241.8	0.0397	mg/L	0.01746	0.0397	mg/L	0.01746	43.99%
As 188.979†	6.6	0.00500	mg/L	0.003631	0.00500	mg/L	0.003631	72.56%
Ba 233.527†	3181.1	0.0533	mg/L	0.00095	0.0533	mg/L	0.00095	1.78%
Be 234.861†	-53.8	-0.00010	mg/L	0.000056	-0.00010	mg/L	0.000056	56.07%
B 249.677†	1516.3	0.0323	mg/L	0.00134	0.0323	mg/L	0.00134	4.15%
Ca 227.546†	7592.0	71.8	mg/L	1.76	71.8	mg/L	1.76	2.45%
Cd 228.802†	5.8	0.00034	mg/L	0.000219	0.00034	mg/L	0.000219	63.97%
Co 228.616†	-12.9	-0.00024	mg/L	0.000330	-0.00024	mg/L	0.000330	136.24%
Cr 267.716†	63.7	0.00032	mg/L	0.000063	0.00032	mg/L	0.000063	19.36%
Cu 327.393†	1077.7	0.00744	mg/L	0.000242	0.00744	mg/L	0.000242	3.26%
Fe 239.562†	19.2	0.0434	mg/L	0.00666	0.0434	mg/L	0.00666	15.34%
Mg 279.077†	1290.0	1.65	mg/L	0.057	1.65	mg/L	0.057	3.44%
Mn 257.610†	2213.7	0.00609	mg/L	0.000114	0.00609	mg/L	0.000114	1.87%
Mo 202.031†	-7.0	-0.00129	mg/L	0.000190	-0.00129	mg/L	0.000190	14.78%
Ni 231.604†	-4.3	-0.00031	mg/L	0.000060	-0.00031	mg/L	0.000060	19.56%
Pb 220.353†	-5.9	0.00180	mg/L	0.001398	0.00180	mg/L	0.001398	77.53%
Sb 206.836†	15.3	0.00937	mg/L	0.002029	0.00937	mg/L	0.002029	21.65%
Se 196.026†	-32.2	-0.00031	mg/L	0.004211	-0.00031	mg/L	0.004211	>999.9%
Si 251.611†	28277.1	0.819	mg/L	0.0194	0.819	mg/L	0.0194	2.37%
Sn 189.927†	-47.6	-0.00645	mg/L	0.001207	-0.00645	mg/L	0.001207	18.72%
Ti 334.940†	382.7	0.00108	mg/L	0.000073	0.00108	mg/L	0.000073	6.79%
Tl 190.801†	106.7	0.0527	mg/L	0.00231	0.0527	mg/L	0.00231	4.38%
V 290.880†	82.1	-0.00078	mg/L	0.000519	-0.00078	mg/L	0.000519	66.66%
Zn 206.200†	828.5	0.0244	mg/L	0.00037	0.0244	mg/L	0.00037	1.52%
K 766.490†	4402.7	1.64	mg/L	0.098	1.64	mg/L	0.098	5.98%
Na 589.592†	1698071.0	138	mg/L	2.4	138	mg/L	2.4	1.71%
Sr 407.771†	100182.0	0.0983	mg/L	0.00568	0.0983	mg/L	0.00568	5.77%
Li 670.784†	164.8	0.00063	mg/L	0.000691	0.00063	mg/L	0.000691	109.68%

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Sequence No.: 33 **Autosampler Location: 55**
Sample ID: L1102054201PS WG357379-01 **Date Collected: 2/23/2011 1:23:02 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:47:03 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102054201PS WG357379-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102054201PS WG357379-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4836882.7						17055.37	0.35%
YRADIAL	293027.2						4584.13	1.56%
Ga 417.206	1267283.3						6954.12	0.55%
GaRADIAL	63843.6						729.69	1.14%
Ag 328.068†	39056.8	0.197	mg/L	0.0035	0.197	mg/L	0.0035	1.76%
Al 396.153†	23137.0	4.91	mg/L	0.025	4.91	mg/L	0.025	0.51%
As 188.979†	217.5	0.196	mg/L	0.0018	0.196	mg/L	0.0018	0.94%
Ba 233.527†	30935.3	0.524	mg/L	0.0042	0.524	mg/L	0.0042	0.80%
Be 234.861†	13711.7	0.0241	mg/L	0.00026	0.0241	mg/L	0.00026	1.08%
B 249.677†	51262.3	0.977	mg/L	0.0144	0.977	mg/L	0.0144	1.48%
Ca 227.546†	7464.9	70.7	mg/L	0.35	70.7	mg/L	0.35	0.50%
Cd 228.802†	429.4	0.0240	mg/L	0.00017	0.0240	mg/L	0.00017	0.70%
Co 228.616†	1869.8	0.0932	mg/L	0.00045	0.0932	mg/L	0.00045	0.48%
Cr 267.716†	27909.9	0.241	mg/L	0.0028	0.241	mg/L	0.0028	1.14%
Cu 327.393†	36173.8	0.248	mg/L	0.0043	0.248	mg/L	0.0043	1.74%
Fe 239.562†	812.3	1.92	mg/L	0.025	1.92	mg/L	0.025	1.30%
Mg 279.077†	4856.1	6.23	mg/L	0.093	6.23	mg/L	0.093	1.50%
Mn 257.610†	110448.7	0.249	mg/L	0.0029	0.249	mg/L	0.0029	1.18%
Mo 202.031†	6797.8	0.502	mg/L	0.0016	0.502	mg/L	0.0016	0.32%
Ni 231.604†	8365.6	0.241	mg/L	0.0007	0.241	mg/L	0.0007	0.29%
Pb 220.353†	1421.6	0.240	mg/L	0.0018	0.240	mg/L	0.0018	0.74%
Sb 206.836†	935.4	0.584	mg/L	0.0036	0.584	mg/L	0.0036	0.61%
Se 196.026†	244.9	0.193	mg/L	0.0082	0.193	mg/L	0.0082	4.23%
Si 251.611†	110895.1	3.21	mg/L	0.050	3.21	mg/L	0.050	1.56%
Sn 189.927†	-43.3	-0.00572	mg/L	0.000486	-0.00572	mg/L	0.000486	8.49%
Ti 334.940†	357003.2	0.493	mg/L	0.0084	0.493	mg/L	0.0084	1.71%
Tl 190.801†	492.3	0.283	mg/L	0.0033	0.283	mg/L	0.0033	1.16%
V 290.880†	73703.6	0.491	mg/L	0.0077	0.491	mg/L	0.0077	1.56%
Zn 206.200†	16636.4	0.500	mg/L	0.0026	0.500	mg/L	0.0026	0.52%
K 766.490†	64603.6	25.8	mg/L	0.13	25.8	mg/L	0.13	0.52%
Na 589.592†	1800065.5	147	mg/L	1.8	147	mg/L	1.8	1.25%
Sr 407.771†	582169.2	0.574	mg/L	0.0513	0.574	mg/L	0.0513	8.93%
Li 670.784†	37141.1	0.487	mg/L	0.0029	0.487	mg/L	0.0029	0.59%

Sequence No.: 34 **Autosampler Location: 56**
Sample ID: L1102054201DL WG357379-02 **Date Collected: 2/23/2011 1:29:45 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:47:09 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102054201DL WG357379-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102054201DL WG357379-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4899234.2						50380.86	1.03%
YRADIAL	286806.0						2216.65	0.77%
Ga 417.206	1300832.7						39279.20	3.02%
GaRADIAL	61586.9						722.27	1.17%
Ag 328.068†	23.0	-0.00059	mg/L	0.000421	-0.00059	mg/L	0.000421	70.76%

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Al 396.153†	67.4	0.00253 mg/L	0.011756	0.00253 mg/L	0.011756	464.62%
As 188.979†	1.9	0.00182 mg/L	0.002985	0.00182 mg/L	0.002985	164.31%
Ba 233.527†	656.6	0.0106 mg/L	0.00049	0.0106 mg/L	0.00049	4.65%
Be 234.861†	12.5	0.00002 mg/L	0.000030	0.00002 mg/L	0.000030	132.48%
B 249.677†	419.2	0.0115 mg/L	0.00148	0.0115 mg/L	0.00148	12.89%
Ca 227.546†	1484.3	14.0 mg/L	0.69	14.0 mg/L	0.69	4.96%
Cd 228.802†	-2.3	-0.00008 mg/L	0.000100	-0.00008 mg/L	0.000100	123.45%
Co 228.616†	-5.6	0.00014 mg/L	0.000071	0.00014 mg/L	0.000071	49.95%
Cr 267.716†	24.5	-0.00001 mg/L	0.000065	-0.00001 mg/L	0.000065	568.67%
Cu 327.393†	98.4	0.00074 mg/L	0.000109	0.00074 mg/L	0.000109	14.67%
Fe 239.562†	4.7	0.00898 mg/L	0.007590	0.00898 mg/L	0.007590	84.55%
Mg 279.077†	289.1	0.364 mg/L	0.0078	0.364 mg/L	0.0078	2.13%
Mn 257.610†	583.9	0.00127 mg/L	0.000065	0.00127 mg/L	0.000065	5.14%
Mo 202.031†	3.5	-0.00051 mg/L	0.000127	-0.00051 mg/L	0.000127	24.61%
Ni 231.604†	-4.2	-0.00028 mg/L	0.000261	-0.00028 mg/L	0.000261	93.36%
Pb 220.353†	-1.5	-0.00024 mg/L	0.001073	-0.00024 mg/L	0.001073	453.52%
Sb 206.836†	6.3	0.00380 mg/L	0.002147	0.00380 mg/L	0.002147	56.44%
Se 196.026†	-10.3	0.00055 mg/L	0.003553	0.00055 mg/L	0.003553	650.41%
Si 251.611†	5755.2	0.166 mg/L	0.0110	0.166 mg/L	0.0110	6.62%
Sn 189.927†	-50.7	-0.00698 mg/L	0.000264	-0.00698 mg/L	0.000264	3.78%
Ti 334.940†	10.6	-0.00001 mg/L	0.000258	-0.00001 mg/L	0.000258	>999.9%
Tl 190.801†	33.2	0.0151 mg/L	0.00167	0.0151 mg/L	0.00167	11.03%
V 290.880†	288.1	0.00060 mg/L	0.001131	0.00060 mg/L	0.001131	189.08%
Zn 206.200†	241.9	0.00682 mg/L	0.000291	0.00682 mg/L	0.000291	4.26%
K 766.490†	994.1	0.388 mg/L	0.0582	0.388 mg/L	0.0582	15.01%
Na 589.592†	378488.7	29.0 mg/L	0.53	29.0 mg/L	0.53	1.82%
Sr 407.771†	22646.2	0.0217 mg/L	0.00165	0.0217 mg/L	0.00165	7.60%
Li 670.784†	289.2	0.00227 mg/L	0.000528	0.00227 mg/L	0.000528	23.29%

Sequence No.: 35 **Autosampler Location: 57**
Sample ID: L1102054201S WG357322-04 **Date Collected: 2/23/2011 1:36:28 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:47:15 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102054201S WG357322-04

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102054201S WG357322-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4787566.4						23404.67	0.49%
YRADIAL	283176.2						4370.64	1.54%
Ga 417.206	1270252.8						21931.60	1.73%
GaRADIAL	62059.0						639.60	1.03%
Ag 328.068†	36851.5	0.186	mg/L	0.0034	0.186	mg/L	0.0034	1.83%
Al 396.153†	24658.2	5.23	mg/L	0.019	5.23	mg/L	0.019	0.35%
As 188.979†	209.7	0.189	mg/L	0.0036	0.189	mg/L	0.0036	1.91%
Ba 233.527†	30480.6	0.517	mg/L	0.0103	0.517	mg/L	0.0103	1.99%
Be 234.861†	13180.3	0.0229	mg/L	0.00038	0.0229	mg/L	0.00038	1.65%
B 249.677†	49143.7	0.942	mg/L	0.0176	0.942	mg/L	0.0176	1.87%
Ca 227.546†	8010.2	75.9	mg/L	1.05	75.9	mg/L	1.05	1.38%
Cd 228.802†	409.1	0.0229	mg/L	0.00029	0.0229	mg/L	0.00029	1.27%
Co 228.616†	1790.7	0.0892	mg/L	0.00042	0.0892	mg/L	0.00042	0.47%
Cr 267.716†	26843.1	0.231	mg/L	0.0043	0.231	mg/L	0.0043	1.85%
Cu 327.393†	34857.5	0.239	mg/L	0.0033	0.239	mg/L	0.0033	1.39%
Fe 239.562†	1303.3	3.08	mg/L	0.011	3.08	mg/L	0.011	0.35%
Mg 279.077†	5149.4	6.61	mg/L	0.039	6.61	mg/L	0.039	0.60%
Mn 257.610†	113282.9	0.256	mg/L	0.0053	0.256	mg/L	0.0053	2.07%
Mo 202.031†	6506.8	0.480	mg/L	0.0023	0.480	mg/L	0.0023	0.47%
Ni 231.604†	8010.5	0.231	mg/L	0.0011	0.231	mg/L	0.0011	0.48%
Pb 220.353†	1383.1	0.234	mg/L	0.0007	0.234	mg/L	0.0007	0.29%
Sb 206.836†	887.5	0.554	mg/L	0.0089	0.554	mg/L	0.0089	1.60%
Se 196.026†	232.3	0.186	mg/L	0.0007	0.186	mg/L	0.0007	0.36%
Si 251.611†	114592.8	3.32	mg/L	0.060	3.32	mg/L	0.060	1.79%
Sn 189.927†	-34.0	-0.00413	mg/L	0.000957	-0.00413	mg/L	0.000957	23.16%
Ti 334.940†	350837.8	0.484	mg/L	0.0081	0.484	mg/L	0.0081	1.68%
Tl 190.801†	481.8	0.277	mg/L	0.0060	0.277	mg/L	0.0060	2.17%

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V 290.880†	70939.7	0.473	mg/L	0.0095	0.473	mg/L	0.0095 2.00%
Zn 206.200†	16277.4	0.489	mg/L	0.0093	0.489	mg/L	0.0093 1.89%
K 766.490†	61029.2	24.3	mg/L	0.06	24.3	mg/L	0.06 0.24%
Na 589.592†	1948762.1	160	mg/L	0.5	160	mg/L	0.5 0.30%
Sr 407.771†	581172.1	0.573	mg/L	0.0471	0.573	mg/L	0.0471 8.21%
Li 670.784†	34254.6	0.449	mg/L	0.0026	0.449	mg/L	0.0026 0.57%

Sequence No.: 36 **Autosampler Location: 58**
Sample ID: L1102054201SD WG357322-05 **Date Collected: 2/23/2011 1:43:10 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:47:16 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102054201SD WG357322-05

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102054201SD WG357322-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4823986.5						52728.40	1.09%
YRADIAL	284324.6						3475.87	1.22%
Ga 417.206	1270806.2						4960.62	0.39%
GaRADIAL	62488.5						1414.28	2.26%
Ag 328.068†	37531.9	0.189	mg/L	0.0017	0.189	mg/L	0.0017	0.92%
Al 396.153†	22464.4	4.77	mg/L	0.013	4.77	mg/L	0.013	0.28%
As 188.979†	210.4	0.189	mg/L	0.0027	0.189	mg/L	0.0027	1.42%
Ba 233.527†	30312.8	0.514	mg/L	0.0059	0.514	mg/L	0.0059	1.15%
Be 234.861†	13240.2	0.0233	mg/L	0.00021	0.0233	mg/L	0.00021	0.90%
B 249.677†	50337.8	0.959	mg/L	0.0114	0.959	mg/L	0.0114	1.19%
Ca 227.546†	8158.1	77.3	mg/L	0.33	77.3	mg/L	0.33	0.43%
Cd 228.802†	412.1	0.0231	mg/L	0.00037	0.0231	mg/L	0.00037	1.61%
Co 228.616†	1796.4	0.0895	mg/L	0.00145	0.0895	mg/L	0.00145	1.62%
Cr 267.716†	27120.7	0.234	mg/L	0.0047	0.234	mg/L	0.0047	2.01%
Cu 327.393†	34811.5	0.239	mg/L	0.0032	0.239	mg/L	0.0032	1.32%
Fe 239.562†	799.1	1.89	mg/L	0.039	1.89	mg/L	0.039	2.04%
Mg 279.077†	4930.9	6.33	mg/L	0.119	6.33	mg/L	0.119	1.88%
Mn 257.610†	107167.9	0.242	mg/L	0.0028	0.242	mg/L	0.0028	1.15%
Mo 202.031†	6548.0	0.483	mg/L	0.0066	0.483	mg/L	0.0066	1.36%
Ni 231.604†	8035.5	0.232	mg/L	0.0030	0.232	mg/L	0.0030	1.27%
Pb 220.353†	1368.3	0.232	mg/L	0.0045	0.232	mg/L	0.0045	1.93%
Sb 206.836†	903.8	0.564	mg/L	0.0060	0.564	mg/L	0.0060	1.06%
Se 196.026†	232.8	0.186	mg/L	0.0070	0.186	mg/L	0.0070	3.74%
Si 251.611†	142061.5	4.12	mg/L	0.033	4.12	mg/L	0.033	0.81%
Sn 189.927†	-33.0	-0.00395	mg/L	0.001739	-0.00395	mg/L	0.001739	43.99%
Ti 334.940†	363165.6	0.501	mg/L	0.0053	0.501	mg/L	0.0053	1.05%
Tl 190.801†	478.1	0.275	mg/L	0.0020	0.275	mg/L	0.0020	0.72%
V 290.880†	71521.7	0.477	mg/L	0.0084	0.477	mg/L	0.0084	1.76%
Zn 206.200†	16209.2	0.487	mg/L	0.0025	0.487	mg/L	0.0025	0.51%
K 766.490†	62181.4	24.8	mg/L	0.12	24.8	mg/L	0.12	0.47%
Na 589.592†	1974225.7	162	mg/L	4.1	162	mg/L	4.1	2.51%
Sr 407.771†	586428.6	0.578	mg/L	0.0502	0.578	mg/L	0.0502	8.69%
Li 670.784†	35203.5	0.462	mg/L	0.0033	0.462	mg/L	0.0033	0.72%

Sequence No.: 37 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 1:49:54 PM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:47:17 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Approved: February 24, 2011
Pierre Morris

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4730135.6						31735.17	0.67%
YRADIAL	285045.7						791.24	0.28%
Ga 417.206	1249978.4						17104.13	1.37%
GaRADIAL	61724.7						1080.14	1.75%
Ag 328.068†	79674.1	0.402	mg/L	0.0025	0.402	mg/L	0.0025	0.62%
QC value within limits for Ag 328.068 Recovery = 100.61%								
Al 396.153†	47052.5	10.00	mg/L	0.026	10.00	mg/L	0.026	0.26%
QC value within limits for Al 396.153 Recovery = 99.99%								
As 188.979†	435.4	0.394	mg/L	0.0063	0.394	mg/L	0.0063	1.59%
QC value within limits for As 188.979 Recovery = 98.57%								
Ba 233.527†	59386.6	1.01	mg/L	0.002	1.01	mg/L	0.002	0.23%
QC value within limits for Ba 233.527 Recovery = 100.73%								
Be 234.861†	28650.7	0.0504	mg/L	0.00018	0.0504	mg/L	0.00018	0.35%
QC value within limits for Be 234.861 Recovery = 100.70%								
B 249.677†	26664.2	0.514	mg/L	0.0034	0.514	mg/L	0.0034	0.67%
QC value within limits for B 249.677 Recovery = 102.80%								
Ca 227.546†	1048.0	10.2	mg/L	0.15	10.2	mg/L	0.15	1.50%
QC value within limits for Ca 227.546 Recovery = 102.16%								
Cd 228.802†	889.4	0.0498	mg/L	0.00065	0.0498	mg/L	0.00065	1.31%
QC value within limits for Cd 228.802 Recovery = 99.68%								
Co 228.616†	3932.2	0.196	mg/L	0.0015	0.196	mg/L	0.0015	0.76%
QC value within limits for Co 228.616 Recovery = 97.81%								
Cr 267.716†	57956.6	0.500	mg/L	0.0012	0.500	mg/L	0.0012	0.24%
QC value within limits for Cr 267.716 Recovery = 99.94%								
Cu 327.393†	71885.1	0.493	mg/L	0.0025	0.493	mg/L	0.0025	0.50%
QC value within limits for Cu 327.393 Recovery = 98.57%								
Fe 239.562†	1636.3	3.87	mg/L	0.059	3.87	mg/L	0.059	1.52%
QC value within limits for Fe 239.562 Recovery = 96.70%								
Mg 279.077†	7622.7	9.78	mg/L	0.114	9.78	mg/L	0.114	1.17%
QC value within limits for Mg 279.077 Recovery = 97.83%								
Mn 257.610†	226282.5	0.508	mg/L	0.0021	0.508	mg/L	0.0021	0.41%
QC value within limits for Mn 257.610 Recovery = 101.62%								
Mo 202.031†	13614.5	1.01	mg/L	0.005	1.01	mg/L	0.005	0.49%
QC value within limits for Mo 202.031 Recovery = 100.52%								
Ni 231.604†	17399.3	0.502	mg/L	0.0018	0.502	mg/L	0.0018	0.37%
QC value within limits for Ni 231.604 Recovery = 100.43%								
Pb 220.353†	3034.7	0.507	mg/L	0.0034	0.507	mg/L	0.0034	0.67%
QC value within limits for Pb 220.353 Recovery = 101.31%								
Sb 206.836†	1900.7	1.19	mg/L	0.020	1.19	mg/L	0.020	1.67%
QC value within limits for Sb 206.836 Recovery = 98.93%								
Se 196.026†	557.7	0.396	mg/L	0.0046	0.396	mg/L	0.0046	1.17%
QC value within limits for Se 196.026 Recovery = 98.93%								
Si 251.611†	170284.6	4.93	mg/L	0.016	4.93	mg/L	0.016	0.32%
QC value within limits for Si 251.611 Recovery = 98.54%								
Sn 189.927†	5943.4	1.02	mg/L	0.006	1.02	mg/L	0.006	0.61%
QC value within limits for Sn 189.927 Recovery = 101.61%								
Ti 334.940†	718110.8	0.990	mg/L	0.0055	0.990	mg/L	0.0055	0.56%
QC value within limits for Ti 334.940 Recovery = 98.99%								
Tl 190.801†	869.8	0.515	mg/L	0.0028	0.515	mg/L	0.0028	0.55%
QC value within limits for Tl 190.801 Recovery = 102.93%								
V 290.880†	150470.1	1.00	mg/L	0.003	1.00	mg/L	0.003	0.34%
QC value within limits for V 290.880 Recovery = 100.45%								
Zn 206.200†	33560.1	1.01	mg/L	0.003	1.01	mg/L	0.003	0.30%
QC value within limits for Zn 206.200 Recovery = 100.90%								
K 766.490†	123197.5	49.6	mg/L	0.36	49.6	mg/L	0.36	0.73%
QC value within limits for K 766.490 Recovery = 99.23%								
Na 589.592†	637811.5	49.3	mg/L	0.33	49.3	mg/L	0.33	0.67%
QC value within limits for Na 589.592 Recovery = 98.68%								
Sr 407.771†	1026677.3	1.01	mg/L	0.069	1.01	mg/L	0.069	6.86%
QC value within limits for Sr 407.771 Recovery = 101.29%								
Li 670.784†	75989.7	0.999	mg/L	0.0027	0.999	mg/L	0.0027	0.27%
QC value within limits for Li 670.784 Recovery = 99.90%								

All analyte(s) passed QC.

Sequence No.: 38 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 1:56:33 PM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:47:18 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

Pierre Morris

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5065128.6						23258.24	0.46%
YRADIAL	294874.5						10720.74	3.64%
Ga 417.206	1325965.3						6320.12	0.48%
GaRADIAL	63297.9						1667.33	2.63%
Ag 328.068†	-88.0	-0.00115	mg/L	0.000743	-0.00115	mg/L	0.000743	64.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-44.5	-0.0213	mg/L	0.01139	-0.0213	mg/L	0.01139	53.47%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-2.5	-0.00192	mg/L	0.000793	-0.00192	mg/L	0.000793	41.35%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.2	-0.00046	mg/L	0.000099	-0.00046	mg/L	0.000099	21.62%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	27.3	0.00005	mg/L	0.000015	0.00005	mg/L	0.000015	29.80%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	673.2	0.0162	mg/L	0.00065	0.0162	mg/L	0.00065	3.97%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	3.9	0.00410	mg/L	0.036008	0.00410	mg/L	0.036008	877.88%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-0.4	0.00005	mg/L	0.000162	0.00005	mg/L	0.000162	296.26%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-6.7	0.00009	mg/L	0.000171	0.00009	mg/L	0.000171	184.00%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-0.9	-0.00023	mg/L	0.000156	-0.00023	mg/L	0.000156	67.47%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	33.5	0.00030	mg/L	0.000440	0.00030	mg/L	0.000440	148.51%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.0	-0.00200	mg/L	0.000949	-0.00200	mg/L	0.000949	47.50%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	7.6	0.00262	mg/L	0.007432	0.00262	mg/L	0.007432	283.93%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-4.9	-0.00036	mg/L	0.000043	-0.00036	mg/L	0.000043	12.13%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.8	-0.00012	mg/L	0.000319	-0.00012	mg/L	0.000319	256.32%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	13.7	0.00025	mg/L	0.000154	0.00025	mg/L	0.000154	61.95%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	5.7	0.00028	mg/L	0.000631	0.00028	mg/L	0.000631	223.94%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.4	0.00011	mg/L	0.001364	0.00011	mg/L	0.001364	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-4.6	0.00098	mg/L	0.003729	0.00098	mg/L	0.003729	380.07%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-25.1	-0.00219	mg/L	0.000234	-0.00219	mg/L	0.000234	10.71%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-61.9	-0.00889	mg/L	0.000935	-0.00889	mg/L	0.000935	10.52%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	40.3	-0.00011	mg/L	0.000212	-0.00011	mg/L	0.000212	195.15%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	3.9	-0.00067	mg/L	0.001617	-0.00067	mg/L	0.001617	242.26%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	70.1	-0.00086	mg/L	0.000179	-0.00086	mg/L	0.000179	20.88%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-115.7	-0.00391	mg/L	0.000073	-0.00391	mg/L	0.000073	1.87%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	32.8	0.0328	mg/L	0.01178	0.0328	mg/L	0.01178	35.86%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	634.1	0.0486	mg/L	0.01568	0.0486	mg/L	0.01568	32.23%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	432.3	-0.00021	mg/L	0.000491	-0.00021	mg/L	0.000491	237.46%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	75.6	-0.00054	mg/L	0.002817	-0.00054	mg/L	0.002817	517.51%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Approved: February 24, 2011

Pierre Morris

Sequence No.: 39 Autosampler Location: 59
Sample ID: PBW 81 WG357296-02 Date Collected: 2/23/2011 2:35:00 PM
Analyst: PDM Data Type: Reprocessed on 2/23/2011 2:47:20 PM
Logged In Analyst (Original) : peicp2
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: PBW 81 WG357296-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: PBW 81 WG357296-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5150243.3						57428.53	1.12%
YRADIAL	300809.7						9507.11	3.16%
Ga 417.206	1389964.2						22390.64	1.61%
GaRADIAL	64722.3						1947.01	3.01%
Ag 328.068†	-93.2	-0.00118	mg/L	0.000855	-0.00118	mg/L	0.000855	72.45%
Al 396.153†	86.4	0.00658	mg/L	0.003706	0.00658	mg/L	0.003706	56.36%
As 188.979†	0.5	0.00087	mg/L	0.001699	0.00087	mg/L	0.001699	196.02%
Ba 233.527†	20.1	-0.00017	mg/L	0.000043	-0.00017	mg/L	0.000043	24.74%
Be 234.861†	39.5	0.00007	mg/L	0.000028	0.00007	mg/L	0.000028	39.57%
B 249.677†	-240.5	-0.00105	mg/L	0.000308	-0.00105	mg/L	0.000308	29.36%
Ca 227.546†	6.0	0.0244	mg/L	0.05571	0.0244	mg/L	0.05571	228.61%
Cd 228.802†	-2.0	-0.00005	mg/L	0.000059	-0.00005	mg/L	0.000059	112.15%
Co 228.616†	-6.8	0.00008	mg/L	0.000205	0.00008	mg/L	0.000205	243.80%
Cr 267.716†	-17.1	-0.00037	mg/L	0.000115	-0.00037	mg/L	0.000115	30.94%
Cu 327.393†	39.2	0.00034	mg/L	0.000357	0.00034	mg/L	0.000357	106.22%
Fe 239.562†	2.9	0.00475	mg/L	0.001944	0.00475	mg/L	0.001944	40.97%
Mg 279.077†	-1.8	-0.00951	mg/L	0.006026	-0.00951	mg/L	0.006026	63.34%
Mn 257.610†	31.3	-0.00028	mg/L	0.000025	-0.00028	mg/L	0.000025	8.88%
Mo 202.031†	1.5	-0.00067	mg/L	0.000128	-0.00067	mg/L	0.000128	19.24%
Ni 231.604†	4.0	-0.00003	mg/L	0.000220	-0.00003	mg/L	0.000220	679.93%
Pb 220.353†	6.8	0.00047	mg/L	0.001124	0.00047	mg/L	0.001124	237.38%
Sb 206.836†	-0.1	-0.00022	mg/L	0.001115	-0.00022	mg/L	0.001115	517.12%
Se 196.026†	-5.9	0.00012	mg/L	0.002698	0.00012	mg/L	0.002698	>999.9%
Si 251.611†	58.4	0.00025	mg/L	0.000350	0.00025	mg/L	0.000350	142.08%
Sn 189.927†	-77.0	-0.0115	mg/L	0.00068	-0.0115	mg/L	0.00068	5.93%
Ti 334.940†	39.7	-0.00011	mg/L	0.000074	-0.00011	mg/L	0.000074	67.88%
Tl 190.801†	1.5	-0.00211	mg/L	0.002843	-0.00211	mg/L	0.002843	134.99%
V 290.880†	-1.0	-0.00133	mg/L	0.001066	-0.00133	mg/L	0.001066	79.89%
Zn 206.200†	-118.6	-0.00400	mg/L	0.000116	-0.00400	mg/L	0.000116	2.91%
K 766.490†	-66.6	-0.00678	mg/L	0.008622	-0.00678	mg/L	0.008622	127.21%
Na 589.592†	-167.0	-0.0118	mg/L	0.00755	-0.0118	mg/L	0.00755	63.96%
Sr 407.771†	199.4	-0.00044	mg/L	0.000016	-0.00044	mg/L	0.000016	3.72%
Li 670.784†	-76.4	-0.00255	mg/L	0.001509	-0.00255	mg/L	0.001509	59.25%

Approved: February 24, 2011
Pierre Morris

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Analysis Begun

Start Time: 2/23/2011 2:48:10 PM **Plasma On Time: 2/23/2011 7:13:52 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\WEDNESDAY1.sif
Batch ID:
Results Data Set: 022311HR
Results Library: C:\pe\peicp2\Results\Results.mdb

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Method Loaded
Method Name: 200.7-6010 PE-ICP2.1 **Method Last Saved: 2/23/2011 2:45:44 PM**
IEC File: CA227 LiBeMOD.iec **MSF File:**
Method Description: STANDARD

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Sequence No.: 1 **Autosampler Location: 60**
Sample ID: LCSW 81 WG357296-03 **Date Collected: 2/23/2011 2:48:14 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 81 WG357296-03

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: LCSW 81 WG357296-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4922688.5						25059.86	0.51%
YRADIAL	291586.2						6718.74	2.30%
Ga 417.206	1320204.7						19755.77	1.50%
GaRADIAL	63655.7						737.96	1.16%
Ag 328.068†	37902.0	0.191	mg/L	0.0058	0.191	mg/L	0.0058	3.06%
Al 396.153†	22423.3	4.76	mg/L	0.017	4.76	mg/L	0.017	0.35%
As 188.979†	201.6	0.183	mg/L	0.0054	0.183	mg/L	0.0054	2.96%
Ba 233.527†	28639.2	0.485	mg/L	0.0077	0.485	mg/L	0.0077	1.59%
Be 234.861†	13529.2	0.0238	mg/L	0.00084	0.0238	mg/L	0.00084	3.54%
B 249.677†	50129.3	0.955	mg/L	0.0342	0.955	mg/L	0.0342	3.58%
Ca 227.546†	493.6	4.80	mg/L	0.062	4.80	mg/L	0.062	1.28%
Cd 228.802†	419.8	0.0236	mg/L	0.00031	0.0236	mg/L	0.00031	1.30%
Co 228.616†	1887.3	0.0941	mg/L	0.00051	0.0941	mg/L	0.00051	0.54%
Cr 267.716†	27625.8	0.238	mg/L	0.0045	0.238	mg/L	0.0045	1.90%
Cu 327.393†	33909.6	0.233	mg/L	0.0088	0.233	mg/L	0.0088	3.80%
Fe 239.562†	786.3	1.86	mg/L	0.026	1.86	mg/L	0.026	1.39%
Mg 279.077†	3722.5	4.77	mg/L	0.073	4.77	mg/L	0.073	1.54%
Mn 257.610†	108910.3	0.244	mg/L	0.0044	0.244	mg/L	0.0044	1.78%
Mo 202.031†	6513.9	0.481	mg/L	0.0125	0.481	mg/L	0.0125	2.59%
Ni 231.604†	8505.6	0.245	mg/L	0.0047	0.245	mg/L	0.0047	1.91%
Pb 220.353†	1445.3	0.241	mg/L	0.0018	0.241	mg/L	0.0018	0.74%
Sb 206.836†	899.2	0.562	mg/L	0.0090	0.562	mg/L	0.0090	1.60%
Se 196.026†	264.5	0.190	mg/L	0.0031	0.190	mg/L	0.0031	1.66%
Si 251.611†	82934.9	2.40	mg/L	0.080	2.40	mg/L	0.080	3.35%
Sn 189.927†	-71.9	-0.0106	mg/L	0.00135	-0.0106	mg/L	0.00135	12.72%
Ti 334.940†	349133.6	0.481	mg/L	0.0121	0.481	mg/L	0.0121	2.52%
Tl 190.801†	425.9	0.250	mg/L	0.0027	0.250	mg/L	0.0027	1.08%
V 290.880†	71937.8	0.480	mg/L	0.0097	0.480	mg/L	0.0097	2.02%
Zn 206.200†	15877.1	0.477	mg/L	0.0051	0.477	mg/L	0.0051	1.08%
K 766.490†	58604.7	23.5	mg/L	0.09	23.5	mg/L	0.09	0.39%
Na 589.592†	308038.3	23.5	mg/L	0.59	23.5	mg/L	0.59	2.52%
Sr 407.771†	513186.2	0.506	mg/L	0.0387	0.506	mg/L	0.0387	7.64%
Li 670.784†	35924.1	0.471	mg/L	0.0025	0.471	mg/L	0.0025	0.53%

User canceled analysis.

Approved: February 24, 2011

Pierre Morris

Analysis Begun

Start Time: 2/23/2011 2:54:25 PM **Plasma On Time: 2/23/2011 7:13:52 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\WEDNESDAY1.sif
Batch ID:
Results Data Set: 022311HR
Results Library: C:\pe\peicp2\Results\Results.mdb

Sequence No.: 1 **Autosampler Location: 61**
Sample ID: L1102056201 WG357296-01 **Date Collected: 2/23/2011 2:54:27 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056201 WG357296-01

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102056201 WG357296-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4825287.4						34186.56	0.71%
YRADIAL	291102.5						8239.11	2.83%
Ga 417.206	1347134.2						9746.16	0.72%
GaRADIAL	64135.1						1263.94	1.97%
Ag 328.068†	686.9	0.00263	mg/L	0.000526	0.00263	mg/L	0.000526	20.01%
Al 396.153†	1785.2	0.369	mg/L	0.0179	0.369	mg/L	0.0179	4.85%
As 188.979†	12.7	0.00899	mg/L	0.001367	0.00899	mg/L	0.001367	15.21%
Ba 233.527†	5957.6	0.100	mg/L	0.0005	0.100	mg/L	0.0005	0.52%
Be 234.861†	203.4	0.00017	mg/L	0.000086	0.00017	mg/L	0.000086	51.45%
B 249.677†	22950.3	0.441	mg/L	0.0099	0.441	mg/L	0.0099	2.25%
Ca 227.546†	16171.0	153	mg/L	0.6	153	mg/L	0.6	0.38%
Cd 228.802†	566.8	0.0320	mg/L	0.00018	0.0320	mg/L	0.00018	0.56%
Co 228.616†	2.1	0.00046	mg/L	0.000291	0.00046	mg/L	0.000291	63.07%
Cr 267.716†	155.5	0.00114	mg/L	0.000235	0.00114	mg/L	0.000235	20.69%
Cu 327.393†	72718.9	0.497	mg/L	0.0109	0.497	mg/L	0.0109	2.19%
Fe 239.562†	395.0	0.932	mg/L	0.0330	0.932	mg/L	0.0330	3.54%
Mg 279.077†	6340.4	8.13	mg/L	0.251	8.13	mg/L	0.251	3.08%
Mn 257.610†	32679.9	0.0748	mg/L	0.00186	0.0748	mg/L	0.00186	2.49%
Mo 202.031†	16.2	0.00048	mg/L	0.000330	0.00048	mg/L	0.000330	68.68%
Ni 231.604†	442.3	0.0126	mg/L	0.00012	0.0126	mg/L	0.00012	0.95%
Pb 220.353†	21.5	0.00984	mg/L	0.000536	0.00984	mg/L	0.000536	5.44%
Sb 206.836†	50.7	0.0314	mg/L	0.00186	0.0314	mg/L	0.00186	5.93%
Se 196.026†	-34.3	0.0188	mg/L	0.00201	0.0188	mg/L	0.00201	10.66%
Si 251.611†	343971.7	9.98	mg/L	0.153	9.98	mg/L	0.153	1.53%
Sn 189.927†	-4.2	0.00096	mg/L	0.001472	0.00096	mg/L	0.001472	152.84%
Ti 334.940†	4136.1	0.00707	mg/L	0.001588	0.00707	mg/L	0.001588	22.47%
Tl 190.801†	129.1	0.0586	mg/L	0.00274	0.0586	mg/L	0.00274	4.68%
V 290.880†	-26.9	-0.00144	mg/L	0.000460	-0.00144	mg/L	0.000460	31.89%
Zn 206.200†	50855.7	1.53	mg/L	0.026	1.53	mg/L	0.026	1.68%
K 766.490†	5847.6	2.33	mg/L	0.096	2.33	mg/L	0.096	4.11%
Na 589.592†	306012.2	23.4	mg/L	0.26	23.4	mg/L	0.26	1.11%
Sr 407.771†	186162.1	0.183	mg/L	0.0114	0.183	mg/L	0.0114	6.23%
Li 670.784†	999.1	0.0116	mg/L	0.00135	0.0116	mg/L	0.00135	11.64%

Sequence No.: 2 **Autosampler Location: 62**
Sample ID: L1102056201D WG357296-04 **Date Collected: 2/23/2011 3:01:16 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056201D WG357296-04

Analyte	Back Pressure	Flow

Approved: February 24, 2011

Pierre Morris

All	166.0 kPa	0.50 L/min

Mean Data: L1102056201D WG357296-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4846522.5						22413.65	0.46%
YRADIAL	286484.9						3532.29	1.23%
Ga 417.206	1337869.5						32004.21	2.39%
GaRADIAL	63764.9						662.53	1.04%
Ag 328.068†	595.4	0.00217	mg/L	0.000287	0.00217	mg/L	0.000287	13.25%
Al 396.153†	1804.4	0.373	mg/L	0.0243	0.373	mg/L	0.0243	6.53%
As 188.979†	13.4	0.00966	mg/L	0.001640	0.00966	mg/L	0.001640	16.99%
Ba 233.527†	5817.9	0.0979	mg/L	0.00054	0.0979	mg/L	0.00054	0.55%
Be 234.861†	180.0	0.00013	mg/L	0.000222	0.00013	mg/L	0.000222	174.46%
B 249.677†	22649.8	0.435	mg/L	0.0085	0.435	mg/L	0.0085	1.95%
Ca 227.546†	16039.8	152	mg/L	3.3	152	mg/L	3.3	2.18%
Cd 228.802†	543.5	0.0307	mg/L	0.00068	0.0307	mg/L	0.00068	2.23%
Co 228.616†	3.5	0.00054	mg/L	0.000115	0.00054	mg/L	0.000115	21.39%
Cr 267.716†	166.0	0.00123	mg/L	0.000063	0.00123	mg/L	0.000063	5.14%
Cu 327.393†	73398.8	0.502	mg/L	0.0122	0.502	mg/L	0.0122	2.43%
Fe 239.562†	391.8	0.925	mg/L	0.0070	0.925	mg/L	0.0070	0.76%
Mg 279.077†	6295.0	8.07	mg/L	0.071	8.07	mg/L	0.071	0.87%
Mn 257.610†	32219.0	0.0737	mg/L	0.00011	0.0737	mg/L	0.00011	0.15%
Mo 202.031†	10.7	0.00007	mg/L	0.000730	0.00007	mg/L	0.000730	978.41%
Ni 231.604†	432.6	0.0123	mg/L	0.00016	0.0123	mg/L	0.00016	1.29%
Pb 220.353†	30.8	0.0113	mg/L	0.00057	0.0113	mg/L	0.00057	5.05%
Sb 206.836†	44.2	0.0274	mg/L	0.00080	0.0274	mg/L	0.00080	2.93%
Se 196.026†	-31.2	0.0207	mg/L	0.00351	0.0207	mg/L	0.00351	16.99%
Si 251.611†	337070.3	9.78	mg/L	0.212	9.78	mg/L	0.212	2.17%
Sn 189.927†	-2.3	0.00128	mg/L	0.001155	0.00128	mg/L	0.001155	90.53%
Ti 334.940†	2540.0	0.00485	mg/L	0.000188	0.00485	mg/L	0.000188	3.86%
Tl 190.801†	128.0	0.0581	mg/L	0.00050	0.0581	mg/L	0.00050	0.86%
V 290.880†	50.4	-0.00093	mg/L	0.000662	-0.00093	mg/L	0.000662	71.48%
Zn 206.200†	48635.1	1.46	mg/L	0.007	1.46	mg/L	0.007	0.46%
K 766.490†	5664.8	2.26	mg/L	0.050	2.26	mg/L	0.050	2.19%
Na 589.592†	300641.7	22.9	mg/L	0.13	22.9	mg/L	0.13	0.59%
Sr 407.771†	183459.7	0.180	mg/L	0.0139	0.180	mg/L	0.0139	7.70%
Li 670.784†	726.4	0.00802	mg/L	0.001681	0.00802	mg/L	0.001681	20.95%

Sequence No.: 3 **Autosampler Location: 63**
Sample ID: L1102056201S WG357296-05 **Date Collected: 2/23/2011 3:07:55 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056201S WG357296-05

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102056201S WG357296-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4718697.2						35523.77	0.75%
YRADIAL	285145.7						9967.52	3.50%
Ga 417.206	1327042.9						16846.41	1.27%
GaRADIAL	63378.0						1180.49	1.86%
Ag 328.068†	38143.7	0.192	mg/L	0.0009	0.192	mg/L	0.0009	0.45%
Al 396.153†	24704.7	5.24	mg/L	0.037	5.24	mg/L	0.037	0.70%
As 188.979†	212.0	0.189	mg/L	0.0018	0.189	mg/L	0.0018	0.94%
Ba 233.527†	34708.3	0.588	mg/L	0.0042	0.588	mg/L	0.0042	0.72%
Be 234.861†	13778.6	0.0240	mg/L	0.00024	0.0240	mg/L	0.00024	1.01%
B 249.677†	74557.5	1.42	mg/L	0.008	1.42	mg/L	0.008	0.59%
Ca 227.546†	16753.4	159	mg/L	1.3	159	mg/L	1.3	0.84%
Cd 228.802†	975.0	0.0549	mg/L	0.00036	0.0549	mg/L	0.00036	0.65%
Co 228.616†	1865.3	0.0929	mg/L	0.00092	0.0929	mg/L	0.00092	1.00%
Cr 267.716†	28240.0	0.243	mg/L	0.0017	0.243	mg/L	0.0017	0.70%
Cu 327.393†	107822.7	0.738	mg/L	0.0068	0.738	mg/L	0.0068	0.92%
Fe 239.562†	1193.1	2.82	mg/L	0.071	2.82	mg/L	0.071	2.50%
Mg 279.077†	10143.9	13.0	mg/L	0.33	13.0	mg/L	0.33	2.56%

Approved: February 24, 2011

Pierre Morris

Mn 257.610†	143942.8	0.325	mg/L	0.0013	0.325	mg/L	0.0013	0.41%
Mo 202.031†	6746.1	0.498	mg/L	0.0034	0.498	mg/L	0.0034	0.69%
Ni 231.604†	8724.7	0.252	mg/L	0.0015	0.252	mg/L	0.0015	0.60%
Pb 220.353†	1473.7	0.253	mg/L	0.0033	0.253	mg/L	0.0033	1.31%
Sb 206.836†	941.9	0.588	mg/L	0.0057	0.588	mg/L	0.0057	0.97%
Se 196.026†	232.2	0.206	mg/L	0.0053	0.206	mg/L	0.0053	2.57%
Si 251.611†	444591.2	12.9	mg/L	0.09	12.9	mg/L	0.09	0.72%
Sn 189.927†	0.8	0.00182	mg/L	0.001204	0.00182	mg/L	0.001204	66.33%
Ti 334.940†	359201.8	0.497	mg/L	0.0021	0.497	mg/L	0.0021	0.43%
Tl 190.801†	531.2	0.298	mg/L	0.0085	0.298	mg/L	0.0085	2.84%
V 290.880†	74413.4	0.496	mg/L	0.0035	0.496	mg/L	0.0035	0.71%
Zn 206.200†	70831.0	2.13	mg/L	0.009	2.13	mg/L	0.009	0.44%
K 766.490†	66234.7	26.5	mg/L	0.11	26.5	mg/L	0.11	0.41%
Na 589.592†	624731.4	48.3	mg/L	1.36	48.3	mg/L	1.36	2.81%
Sr 407.771†	706272.9	0.697	mg/L	0.0495	0.697	mg/L	0.0495	7.11%
Li 670.784†	37531.0	0.493	mg/L	0.0018	0.493	mg/L	0.0018	0.37%

Sequence No.: 4 **Autosampler Location: 64**
Sample ID: L1102058601 **Date Collected: 2/23/2011 3:14:39 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102058601

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102058601

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4597427.7						62194.83	1.35%
YRADIAL	279812.2						6730.01	2.41%
Ga 417.206	1253639.4						18426.89	1.47%
GaRADIAL	62107.3						428.25	0.69%
Ag 328.068†	402.7	0.00048	mg/L	0.000262	0.00048	mg/L	0.000262	54.83%
Al 396.153†	4062.6	0.854	mg/L	0.0130	0.854	mg/L	0.0130	1.52%
As 188.979†	17.0	0.0142	mg/L	0.00518	0.0142	mg/L	0.00518	36.40%
Ba 233.527†	3421.6	0.0574	mg/L	0.00082	0.0574	mg/L	0.00082	1.44%
Be 234.861†	449.8	0.00119	mg/L	0.000005	0.00119	mg/L	0.000005	0.40%
B 249.677†	19439.9	0.374	mg/L	0.0084	0.374	mg/L	0.0084	2.24%
Ca 227.546†	9159.1	86.6	mg/L	1.57	86.6	mg/L	1.57	1.81%
Cd 228.802†	5.3	0.00060	mg/L	0.000281	0.00060	mg/L	0.000281	47.01%
Co 228.616†	586.9	0.0299	mg/L	0.00024	0.0299	mg/L	0.00024	0.82%
Cr 267.716†	1898.0	0.0143	mg/L	0.00052	0.0143	mg/L	0.00052	3.60%
Cu 327.393†	395.2	0.00283	mg/L	0.000399	0.00283	mg/L	0.000399	14.14%
Fe 239.562†	307.6	0.723	mg/L	0.0182	0.723	mg/L	0.0182	2.52%
Mg 279.077†	15281.1	19.6	mg/L	0.11	19.6	mg/L	0.11	0.55%
Mn 257.610†	1881257.5	4.20	mg/L	0.023	4.20	mg/L	0.023	0.54%
Mo 202.031†	182.6	0.0136	mg/L	0.00019	0.0136	mg/L	0.00019	1.39%
Ni 231.604†	1834.1	0.0528	mg/L	0.00096	0.0528	mg/L	0.00096	1.82%
Pb 220.353†	9.5	0.00471	mg/L	0.001099	0.00471	mg/L	0.001099	23.35%
Sb 206.836†	22.7	0.0140	mg/L	0.00229	0.0140	mg/L	0.00229	16.35%
Se 196.026†	-28.6	0.00425	mg/L	0.002436	0.00425	mg/L	0.002436	57.35%
Si 251.611†	155016.5	4.50	mg/L	0.074	4.50	mg/L	0.074	1.65%
Sn 189.927†	-74.9	-0.0111	mg/L	0.00123	-0.0111	mg/L	0.00123	11.04%
Ti 334.940†	9032.8	0.0132	mg/L	0.00145	0.0132	mg/L	0.00145	11.06%
Tl 190.801†	108.8	0.0589	mg/L	0.00295	0.0589	mg/L	0.00295	5.00%
V 290.880†	-42.6	-0.00157	mg/L	0.000293	-0.00157	mg/L	0.000293	18.68%
Zn 206.200†	1422.2	0.0423	mg/L	0.00077	0.0423	mg/L	0.00077	1.83%
K 766.490†	15451.2	5.43	mg/L	0.107	5.43	mg/L	0.107	1.98%
Na 589.592†	6266110.3	764	mg/L	23.2	764	mg/L	23.2	3.03%
Sr 407.771†	1337557.9	1.32	mg/L	0.122	1.32	mg/L	0.122	9.22%
Li 670.784†	11808.3	0.154	mg/L	0.0018	0.154	mg/L	0.0018	1.19%

Sequence No.: 5 **Autosampler Location: 65**
Sample ID: L1102058601PS WG357405-01 **Date Collected: 2/23/2011 3:21:23 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

Pierre Morris

Nebulizer Parameters: L1102058601PS WG357405-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102058601PS WG357405-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4521539.8						47126.38	1.04%
YRADIAL	280356.0						7262.01	2.59%
Ga 417.206	1223988.7						7151.96	0.58%
GaRADIAL	62274.7						1415.26	2.27%
Ag 328.068†	40501.7	0.203	mg/L	0.0040	0.203	mg/L	0.0040	1.95%
Al 396.153†	26764.4	5.68	mg/L	0.014	5.68	mg/L	0.014	0.24%
As 188.979†	233.9	0.210	mg/L	0.0057	0.210	mg/L	0.0057	2.69%
Ba 233.527†	32375.7	0.549	mg/L	0.0147	0.549	mg/L	0.0147	2.68%
Be 234.861†	14760.6	0.0263	mg/L	0.00043	0.0263	mg/L	0.00043	1.62%
B 249.677†	71287.0	1.36	mg/L	0.030	1.36	mg/L	0.030	2.21%
Ca 227.546†	8957.6	84.9	mg/L	0.56	84.9	mg/L	0.56	0.66%
Cd 228.802†	443.1	0.0251	mg/L	0.00037	0.0251	mg/L	0.00037	1.47%
Co 228.616†	2479.5	0.124	mg/L	0.0016	0.124	mg/L	0.0016	1.27%
Cr 267.716†	30130.7	0.258	mg/L	0.0061	0.258	mg/L	0.0061	2.36%
Cu 327.393†	36469.3	0.250	mg/L	0.0042	0.250	mg/L	0.0042	1.67%
Fe 239.562†	1091.2	2.58	mg/L	0.052	2.58	mg/L	0.052	2.04%
Mg 279.077†	17915.4	23.0	mg/L	0.17	23.0	mg/L	0.17	0.72%
Mn 257.610†	1838811.9	4.10	mg/L	0.019	4.10	mg/L	0.019	0.45%
Mo 202.031†	7086.4	0.524	mg/L	0.0064	0.524	mg/L	0.0064	1.23%
Ni 231.604†	10366.3	0.299	mg/L	0.0038	0.299	mg/L	0.0038	1.26%
Pb 220.353†	1474.9	0.249	mg/L	0.0032	0.249	mg/L	0.0032	1.29%
Sb 206.836†	979.5	0.612	mg/L	0.0058	0.612	mg/L	0.0058	0.96%
Se 196.026†	254.1	0.201	mg/L	0.0086	0.201	mg/L	0.0086	4.28%
Si 251.611†	232316.6	6.74	mg/L	0.149	6.74	mg/L	0.149	2.21%
Sn 189.927†	-80.4	-0.0120	mg/L	0.00036	-0.0120	mg/L	0.00036	2.99%
Ti 334.940†	375852.3	0.519	mg/L	0.0169	0.519	mg/L	0.0169	3.25%
Tl 190.801†	503.5	0.295	mg/L	0.0050	0.295	mg/L	0.0050	1.70%
V 290.880†	76302.6	0.509	mg/L	0.0128	0.509	mg/L	0.0128	2.51%
Zn 206.200†	17947.6	0.539	mg/L	0.0134	0.539	mg/L	0.0134	2.48%
K 766.490†	76461.2	30.1	mg/L	0.10	30.1	mg/L	0.10	0.32%
Na 589.592†	5835772.4	655	mg/L	41.6	655	mg/L	41.6	6.35%
Sr 407.771†	1681933.7	1.66	mg/L	0.136	1.66	mg/L	0.136	8.20%
Li 670.784†	48945.3	0.643	mg/L	0.0054	0.643	mg/L	0.0054	0.84%

Sequence No.: 6 **Autosampler Location: 66**
Sample ID: L1102058601DL WG357405-02 **Date Collected: 2/23/2011 3:28:08 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102058601DL WG357405-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102058601DL WG357405-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4958628.3						61000.19	1.23%
YRADIAL	288280.4						8412.24	2.92%
Ga 417.206	1333262.0						20623.79	1.55%
GaRADIAL	62749.1						654.85	1.04%
Ag 328.068†	-53.9	-0.00115	mg/L	0.001226	-0.00115	mg/L	0.001226	106.46%
Al 396.153†	715.1	0.140	mg/L	0.0133	0.140	mg/L	0.0133	9.46%
As 188.979†	5.5	0.00506	mg/L	0.001932	0.00506	mg/L	0.001932	38.16%
Ba 233.527†	681.7	0.0110	mg/L	0.00011	0.0110	mg/L	0.00011	1.03%
Be 234.861†	133.4	0.00032	mg/L	0.000030	0.00032	mg/L	0.000030	9.36%
B 249.677†	4612.6	0.0913	mg/L	0.00135	0.0913	mg/L	0.00135	1.48%
Ca 227.546†	1732.7	16.4	mg/L	0.23	16.4	mg/L	0.23	1.39%
Cd 228.802†	0.3	0.00012	mg/L	0.000131	0.00012	mg/L	0.000131	112.89%
Co 228.616†	116.2	0.00625	mg/L	0.000295	0.00625	mg/L	0.000295	4.72%

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Cr 267.716†	384.7	0.00272 mg/L	0.000071	0.00272 mg/L	0.000071	2.60%
Cu 327.393†	133.7	0.00099 mg/L	0.000447	0.00099 mg/L	0.000447	45.07%
Fe 239.562†	62.5	0.145 mg/L	0.0048	0.145 mg/L	0.0048	3.29%
Mg 279.077†	3132.9	4.02 mg/L	0.095	4.02 mg/L	0.095	2.36%
Mn 257.610†	382109.8	0.852 mg/L	0.0031	0.852 mg/L	0.0031	0.37%
Mo 202.031†	40.6	0.00241 mg/L	0.000322	0.00241 mg/L	0.000322	13.39%
Ni 231.604†	367.0	0.0104 mg/L	0.00017	0.0104 mg/L	0.00017	1.63%
Pb 220.353†	6.9	0.00120 mg/L	0.001458	0.00120 mg/L	0.001458	121.32%
Sb 206.836†	4.1	0.00242 mg/L	0.002347	0.00242 mg/L	0.002347	97.14%
Se 196.026†	-10.5	0.00061 mg/L	0.002983	0.00061 mg/L	0.002983	487.06%
Si 251.611†	30283.1	0.878 mg/L	0.0092	0.878 mg/L	0.0092	1.05%
Sn 189.927†	-75.2	-0.0112 mg/L	0.00095	-0.0112 mg/L	0.00095	8.53%
Ti 334.940†	1528.3	0.00211 mg/L	0.000385	0.00211 mg/L	0.000385	18.27%
Tl 190.801†	39.5	0.0198 mg/L	0.00408	0.0198 mg/L	0.00408	20.61%
V 290.880†	-153.9	-0.00235 mg/L	0.000659	-0.00235 mg/L	0.000659	28.05%
Zn 206.200†	182.7	0.00506 mg/L	0.000305	0.00506 mg/L	0.000305	6.04%
K 766.490†	3050.1	1.14 mg/L	0.033	1.14 mg/L	0.033	2.93%
Na 589.592†	1288911.6	102 mg/L	2.2	102 mg/L	2.2	2.15%
Sr 407.771†	259982.4	0.256 mg/L	0.0175	0.256 mg/L	0.0175	6.83%
Li 670.784†	2582.7	0.0325 mg/L	0.00217	0.0325 mg/L	0.00217	6.69%

Sequence No.: 7 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 3:35:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4804069.1						21123.30	0.44%
YRADIAL	287791.5						8606.65	2.99%
Ga 417.206	1261436.1						13287.82	1.05%
GaRADIAL	62127.4						1106.72	1.78%
Ag 328.068†	80055.2	0.404	mg/L	0.0071	0.404	mg/L	0.0071	1.77%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 396.153†	46544.0	9.89	mg/L	0.214	9.89	mg/L	0.214	2.16%
QC value within limits for Al 396.153 Recovery = 98.90%								
As 188.979†	424.8	0.385	mg/L	0.0036	0.385	mg/L	0.0036	0.92%
QC value within limits for As 188.979 Recovery = 96.16%								
Ba 233.527†	58988.4	1.00	mg/L	0.012	1.00	mg/L	0.012	1.22%
QC value within limits for Ba 233.527 Recovery = 100.05%								
Be 234.861†	28674.9	0.0504	mg/L	0.00082	0.0504	mg/L	0.00082	1.64%
QC value within limits for Be 234.861 Recovery = 100.76%								
B 249.677†	26940.5	0.519	mg/L	0.0100	0.519	mg/L	0.0100	1.92%
QC value within limits for B 249.677 Recovery = 103.87%								
Ca 227.546†	1039.3	10.1	mg/L	0.12	10.1	mg/L	0.12	1.18%
QC value within limits for Ca 227.546 Recovery = 101.31%								
Cd 228.802†	876.3	0.0491	mg/L	0.00066	0.0491	mg/L	0.00066	1.34%
QC value within limits for Cd 228.802 Recovery = 98.23%								
Co 228.616†	3845.3	0.191	mg/L	0.0006	0.191	mg/L	0.0006	0.33%
QC value within limits for Co 228.616 Recovery = 95.62%								
Cr 267.716†	57366.9	0.495	mg/L	0.0048	0.495	mg/L	0.0048	0.97%
QC value within limits for Cr 267.716 Recovery = 98.92%								
Cu 327.393†	72146.3	0.495	mg/L	0.0102	0.495	mg/L	0.0102	2.06%
QC value within limits for Cu 327.393 Recovery = 98.93%								
Fe 239.562†	1633.6	3.86	mg/L	0.121	3.86	mg/L	0.121	3.15%
QC value within limits for Fe 239.562 Recovery = 96.54%								
Mg 279.077†	7591.5	9.74	mg/L	0.293	9.74	mg/L	0.293	3.01%
QC value within limits for Mg 279.077 Recovery = 97.43%								
Mn 257.610†	225213.1	0.506	mg/L	0.0067	0.506	mg/L	0.0067	1.32%
QC value within limits for Mn 257.610 Recovery = 101.13%								
Mo 202.031†	13478.1	0.995	mg/L	0.0079	0.995	mg/L	0.0079	0.79%
QC value within limits for Mo 202.031 Recovery = 99.51%								
Ni 231.604†	17257.2	0.498	mg/L	0.0064	0.498	mg/L	0.0064	1.28%
QC value within limits for Ni 231.604 Recovery = 99.61%								

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Pb 220.353†	2942.4	0.491 mg/L	0.0046	0.491 mg/L	0.0046	0.93%
QC value within limits for Pb 220.353 Recovery = 98.24%						
Sb 206.836†	1866.7	1.17 mg/L	0.014	1.17 mg/L	0.014	1.21%
QC value within limits for Sb 206.836 Recovery = 97.16%						
Se 196.026†	553.7	0.393 mg/L	0.0069	0.393 mg/L	0.0069	1.76%
QC value within limits for Se 196.026 Recovery = 98.23%						
Si 251.611†	171250.6	4.96 mg/L	0.082	4.96 mg/L	0.082	1.65%
QC value within limits for Si 251.611 Recovery = 99.11%						
Sn 189.927†	5769.0	0.986 mg/L	0.0032	0.986 mg/L	0.0032	0.33%
QC value within limits for Sn 189.927 Recovery = 98.63%						
Ti 334.940†	717813.8	0.989 mg/L	0.0034	0.989 mg/L	0.0034	0.35%
QC value within limits for Ti 334.940 Recovery = 98.95%						
Tl 190.801†	848.2	0.502 mg/L	0.0018	0.502 mg/L	0.0018	0.36%
QC value within limits for Tl 190.801 Recovery = 100.42%						
V 290.880†	149813.3	1.00 mg/L	0.017	1.00 mg/L	0.017	1.68%
QC value within limits for V 290.880 Recovery = 100.01%						
Zn 206.200†	33025.4	0.993 mg/L	0.0053	0.993 mg/L	0.0053	0.54%
QC value within limits for Zn 206.200 Recovery = 99.29%						
K 766.490†	121167.5	48.8 mg/L	1.14	48.8 mg/L	1.14	2.34%
QC value within limits for K 766.490 Recovery = 97.58%						
Na 589.592†	629253.8	48.7 mg/L	0.37	48.7 mg/L	0.37	0.77%
QC value within limits for Na 589.592 Recovery = 97.32%						
Sr 407.771†	1000778.1	0.987 mg/L	0.0913	0.987 mg/L	0.0913	9.25%
QC value within limits for Sr 407.771 Recovery = 98.74%						
Li 670.784†	74595.7	0.981 mg/L	0.0163	0.981 mg/L	0.0163	1.66%
QC value within limits for Li 670.784 Recovery = 98.06%						

All analyte(s) passed QC.

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Sequence No.: 8 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 3:42:24 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5036856.9						65527.94	1.30%
YRADIAL	294191.5						6503.68	2.21%
Ga 417.206	1337863.4						18603.36	1.39%
GaRADIAL	63126.5						1679.36	2.66%
Ag 328.068†	-66.9	-0.00105	mg/L	0.000789	-0.00105	mg/L	0.000789	75.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	2.5	-0.0113	mg/L	0.00804	-0.0113	mg/L	0.00804	71.22%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.8	0.00114	mg/L	0.001669	0.00114	mg/L	0.001669	146.41%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.8	-0.00053	mg/L	0.000081	-0.00053	mg/L	0.000081	15.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	43.1	0.00008	mg/L	0.000035	0.00008	mg/L	0.000035	45.40%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	677.9	0.0163	mg/L	0.00027	0.0163	mg/L	0.00027	1.64%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	1.3	-0.0205	mg/L	0.03696	-0.0205	mg/L	0.03696	180.44%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-4.3	-0.00018	mg/L	0.000028	-0.00018	mg/L	0.000028	15.26%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-0.8	0.00039	mg/L	0.000254	0.00039	mg/L	0.000254	65.61%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	6.7	-0.00017	mg/L	0.000055	-0.00017	mg/L	0.000055	33.30%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	9.0	0.00013	mg/L	0.000330	0.00013	mg/L	0.000330	258.13%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.0	-0.00198	mg/L	0.006814	-0.00198	mg/L	0.006814	344.53%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	1.7	-0.00490	mg/L	0.002425	-0.00490	mg/L	0.002425	49.47%



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QC value within limits for Mg 279.077 Recovery = Not calculated
Mn 257.610† 77.0 -0.00017 mg/L 0.000032 -0.00017 mg/L 0.000032 18.72%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† -2.5 -0.00096 mg/L 0.000308 -0.00096 mg/L 0.000308 32.15%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† 2.6 -0.00007 mg/L 0.000113 -0.00007 mg/L 0.000113 163.16%
QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† 5.4 0.00023 mg/L 0.001010 0.00023 mg/L 0.001010 438.62%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 0.1 -0.00005 mg/L 0.000974 -0.00005 mg/L 0.000974 >999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -1.9 0.00285 mg/L 0.002729 0.00285 mg/L 0.002729 95.72%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 1.4 -0.00140 mg/L 0.000551 -0.00140 mg/L 0.000551 39.27%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -74.3 -0.0110 mg/L 0.00060 -0.0110 mg/L 0.00060 5.44%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -149.2 -0.00037 mg/L 0.000156 -0.00037 mg/L 0.000156 42.28%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -2.9 -0.00466 mg/L 0.001343 -0.00466 mg/L 0.001343 28.81%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† 29.8 -0.00113 mg/L 0.000479 -0.00113 mg/L 0.000479 42.39%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† -176.0 -0.00572 mg/L 0.000192 -0.00572 mg/L 0.000192 3.36%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 46.4 0.0383 mg/L 0.03406 0.0383 mg/L 0.03406 89.01%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 1026.6 0.0783 mg/L 0.01201 0.0783 mg/L 0.01201 15.34%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -40.1 -0.00067 mg/L 0.000059 -0.00067 mg/L 0.000059 8.71%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 38.4 -0.00103 mg/L 0.001054 -0.00103 mg/L 0.001054 101.89%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 67**
Sample ID: PBW 66 WG357295-01 **Date Collected: 2/23/2011 3:49:00 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 66 WG357295-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: PBW 66 WG357295-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5192781.5						76332.10	1.47%
YRADIAL	289656.5						4449.52	1.54%
Ga 417.206	1318692.4						30381.65	2.30%
GaRADIAL	62821.1						250.30	0.40%
Ag 328.068†	-172.6	-0.00158	mg/L	0.000366	-0.00158	mg/L	0.000366	23.19%
Al 396.153†	87.4	0.00679	mg/L	0.006496	0.00679	mg/L	0.006496	95.61%
As 188.979†	-0.4	0.00004	mg/L	0.001173	0.00004	mg/L	0.001173	>999.9%
Ba 233.527†	-2.8	-0.00056	mg/L	0.000037	-0.00056	mg/L	0.000037	6.61%
Be 234.861†	-49.0	-0.00008	mg/L	0.000041	-0.00008	mg/L	0.000041	49.19%
B 249.677†	730.9	0.0173	mg/L	0.00060	0.0173	mg/L	0.00060	3.48%
Ca 227.546†	4.6	0.0112	mg/L	0.02317	0.0112	mg/L	0.02317	206.62%
Cd 228.802†	1.5	0.00015	mg/L	0.000229	0.00015	mg/L	0.000229	153.50%
Co 228.616†	-5.1	0.00018	mg/L	0.000137	0.00018	mg/L	0.000137	78.02%
Cr 267.716†	33.1	0.00006	mg/L	0.000074	0.00006	mg/L	0.000074	121.28%
Cu 327.393†	194.5	0.00140	mg/L	0.000642	0.00140	mg/L	0.000642	46.03%
Fe 239.562†	2.3	0.00349	mg/L	0.005511	0.00349	mg/L	0.005511	157.92%
Mg 279.077†	41.9	0.0466	mg/L	0.00207	0.0466	mg/L	0.00207	4.43%
Mn 257.610†	53.4	-0.00022	mg/L	0.000114	-0.00022	mg/L	0.000114	50.98%
Mo 202.031†	2.7	-0.00057	mg/L	0.000287	-0.00057	mg/L	0.000287	50.06%
Ni 231.604†	9.4	0.00012	mg/L	0.000295	0.00012	mg/L	0.000295	236.82%
Pb 220.353†	5.5	0.00025	mg/L	0.001285	0.00025	mg/L	0.001285	524.54%
Sb 206.836†	3.6	0.00208	mg/L	0.000592	0.00208	mg/L	0.000592	28.50%

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Se 196.026†	0.6	0.00463 mg/L	0.001354	0.00463 mg/L	0.001354	29.27%
Si 251.611†	87.4	0.00109 mg/L	0.000372	0.00109 mg/L	0.000372	34.28%
Sn 189.927†	-47.5	-0.00643 mg/L	0.000380	-0.00643 mg/L	0.000380	5.91%
Ti 334.940†	-128.7	-0.00034 mg/L	0.000123	-0.00034 mg/L	0.000123	35.92%
Tl 190.801†	1.7	-0.00196 mg/L	0.005035	-0.00196 mg/L	0.005035	257.25%
V 290.880†	22.7	-0.00118 mg/L	0.000955	-0.00118 mg/L	0.000955	81.19%
Zn 206.200†	-87.3	-0.00306 mg/L	0.000046	-0.00306 mg/L	0.000046	1.51%
K 766.490†	92.6	0.0566 mg/L	0.02188	0.0566 mg/L	0.02188	38.62%
Na 589.592†	1643.5	0.125 mg/L	0.0126	0.125 mg/L	0.0126	10.06%
Sr 407.771†	829.1	0.00018 mg/L	0.000179	0.00018 mg/L	0.000179	97.08%
Li 670.784†	32.5	-0.00111 mg/L	0.001092	-0.00111 mg/L	0.001092	98.09%

Sequence No.: 10 **Autosampler Location: 68**
Sample ID: LCSW 66 WG357295-02 **Date Collected: 2/23/2011 3:55:45 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 66 WG357295-02

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: LCSW 66 WG357295-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5070838.2						65599.52	1.29%
YRADIAL	299934.6						2512.91	0.84%
Ga 417.206	1333057.0						24677.72	1.85%
GaRADIAL	64779.7						551.16	0.85%
Ag 328.068†	36651.9	0.185	mg/L	0.0040	0.185	mg/L	0.0040	2.17%
Al 396.153†	22378.3	4.75	mg/L	0.014	4.75	mg/L	0.014	0.30%
As 188.979†	191.0	0.173	mg/L	0.0031	0.173	mg/L	0.0031	1.81%
Ba 233.527†	27648.9	0.469	mg/L	0.0063	0.469	mg/L	0.0063	1.34%
Be 234.861†	12627.6	0.0222	mg/L	0.00035	0.0222	mg/L	0.00035	1.56%
B 249.677†	46922.3	0.894	mg/L	0.0121	0.894	mg/L	0.0121	1.35%
Ca 227.546†	469.8	4.57	mg/L	0.137	4.57	mg/L	0.137	3.01%
Cd 228.802†	399.3	0.0225	mg/L	0.00033	0.0225	mg/L	0.00033	1.47%
Co 228.616†	1806.3	0.0901	mg/L	0.00109	0.0901	mg/L	0.00109	1.21%
Cr 267.716†	26854.6	0.231	mg/L	0.0024	0.231	mg/L	0.0024	1.02%
Cu 327.393†	33488.3	0.230	mg/L	0.0025	0.230	mg/L	0.0025	1.07%
Fe 239.562†	760.9	1.80	mg/L	0.025	1.80	mg/L	0.025	1.38%
Mg 279.077†	3632.2	4.66	mg/L	0.027	4.66	mg/L	0.027	0.58%
Mn 257.610†	105445.3	0.237	mg/L	0.0031	0.237	mg/L	0.0031	1.32%
Mo 202.031†	6339.3	0.468	mg/L	0.0030	0.468	mg/L	0.0030	0.64%
Ni 231.604†	8044.0	0.232	mg/L	0.0028	0.232	mg/L	0.0028	1.23%
Pb 220.353†	1382.6	0.230	mg/L	0.0037	0.230	mg/L	0.0037	1.60%
Sb 206.836†	861.0	0.538	mg/L	0.0112	0.538	mg/L	0.0112	2.08%
Se 196.026†	252.0	0.181	mg/L	0.0058	0.181	mg/L	0.0058	3.18%
Si 251.611†	79866.9	2.31	mg/L	0.035	2.31	mg/L	0.035	1.53%
Sn 189.927†	-47.0	-0.00635	mg/L	0.000158	-0.00635	mg/L	0.000158	2.49%
Ti 334.940†	340939.2	0.470	mg/L	0.0067	0.470	mg/L	0.0067	1.43%
Tl 190.801†	394.0	0.232	mg/L	0.0048	0.232	mg/L	0.0048	2.05%
V 290.880†	69799.5	0.465	mg/L	0.0038	0.465	mg/L	0.0038	0.83%
Zn 206.200†	15016.4	0.451	mg/L	0.0075	0.451	mg/L	0.0075	1.66%
K 766.490†	57157.9	22.9	mg/L	0.08	22.9	mg/L	0.08	0.37%
Na 589.592†	300283.8	22.9	mg/L	0.22	22.9	mg/L	0.22	0.95%
Sr 407.771†	488788.8	0.482	mg/L	0.0378	0.482	mg/L	0.0378	7.84%
Li 670.784†	35543.2	0.466	mg/L	0.0009	0.466	mg/L	0.0009	0.19%

Sequence No.: 11 **Autosampler Location: 69**
Sample ID: LCSW DUP WG357295-03 **Date Collected: 2/23/2011 4:02:24 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW DUP WG357295-03

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Approved: February 24, 2011

Pierre Morris

Mean Data: LCSW DUP WG357295-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4976413.7						64403.47	1.29%
YRADIAL	292984.8						3041.93	1.04%
Ga 417.206	1283952.9						16170.88	1.26%
GaRADIAL	63386.8						1547.48	2.44%
Ag 328.068†	37546.7	0.189	mg/L	0.0048	0.189	mg/L	0.0048	2.53%
Al 396.153†	22381.5	4.75	mg/L	0.016	4.75	mg/L	0.016	0.34%
As 188.979†	199.0	0.180	mg/L	0.0049	0.180	mg/L	0.0049	2.71%
Ba 233.527†	27856.9	0.472	mg/L	0.0113	0.472	mg/L	0.0113	2.39%
Be 234.861†	13172.7	0.0232	mg/L	0.00038	0.0232	mg/L	0.00038	1.63%
B 249.677†	48315.2	0.921	mg/L	0.0216	0.921	mg/L	0.0216	2.35%
Ca 227.546†	481.7	4.68	mg/L	0.057	4.68	mg/L	0.057	1.21%
Cd 228.802†	414.0	0.0233	mg/L	0.00020	0.0233	mg/L	0.00020	0.86%
Co 228.616†	1838.7	0.0917	mg/L	0.00100	0.0917	mg/L	0.00100	1.09%
Cr 267.716†	27182.2	0.234	mg/L	0.0054	0.234	mg/L	0.0054	2.32%
Cu 327.393†	34161.5	0.234	mg/L	0.0044	0.234	mg/L	0.0044	1.86%
Fe 239.562†	777.7	1.84	mg/L	0.045	1.84	mg/L	0.045	2.44%
Mg 279.077†	3701.1	4.75	mg/L	0.091	4.75	mg/L	0.091	1.91%
Mn 257.610†	107281.7	0.241	mg/L	0.0058	0.241	mg/L	0.0058	2.41%
Mo 202.031†	6372.2	0.470	mg/L	0.0114	0.470	mg/L	0.0114	2.42%
Ni 231.604†	8153.3	0.235	mg/L	0.0068	0.235	mg/L	0.0068	2.91%
Pb 220.353†	1408.5	0.235	mg/L	0.0028	0.235	mg/L	0.0028	1.19%
Sb 206.836†	893.0	0.558	mg/L	0.0063	0.558	mg/L	0.0063	1.13%
Se 196.026†	259.9	0.187	mg/L	0.0014	0.187	mg/L	0.0014	0.77%
Si 251.611†	82332.1	2.38	mg/L	0.054	2.38	mg/L	0.054	2.26%
Sn 189.927†	-48.9	-0.00668	mg/L	0.000427	-0.00668	mg/L	0.000427	6.39%
Ti 334.940†	340057.6	0.469	mg/L	0.0032	0.469	mg/L	0.0032	0.67%
Tl 190.801†	400.6	0.236	mg/L	0.0020	0.236	mg/L	0.0020	0.86%
V 290.880†	70552.6	0.470	mg/L	0.0122	0.470	mg/L	0.0122	2.59%
Zn 206.200†	15297.3	0.460	mg/L	0.0092	0.460	mg/L	0.0092	2.01%
K 766.490†	57406.1	23.0	mg/L	0.19	23.0	mg/L	0.19	0.82%
Na 589.592†	301666.8	23.0	mg/L	0.22	23.0	mg/L	0.22	0.94%
Sr 407.771†	484518.7	0.478	mg/L	0.0311	0.478	mg/L	0.0311	6.52%
Li 670.784†	35319.7	0.463	mg/L	0.0044	0.463	mg/L	0.0044	0.95%

Sequence No.: 12 **Autosampler Location: 70**
Sample ID: L1102043901 **Date Collected: 2/23/2011 4:09:02 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102043901

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102043901

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4914553.5						32838.27	0.67%
YRADIAL	293188.4						7152.09	2.44%
Ga 417.206	1354748.8						12040.72	0.89%
GaRADIAL	64402.8						670.86	1.04%
Ag 328.068†	1081.5	0.00349	mg/L	0.000508	0.00349	mg/L	0.000508	14.57%
Al 396.153†	18382.6	3.90	mg/L	0.014	3.90	mg/L	0.014	0.36%
As 188.979†	12.3	0.00864	mg/L	0.003597	0.00864	mg/L	0.003597	41.64%
Ba 233.527†	20328.6	0.344	mg/L	0.0050	0.344	mg/L	0.0050	1.46%
Be 234.861†	1064.7	0.00141	mg/L	0.000187	0.00141	mg/L	0.000187	13.27%
B 249.677†	544.7	0.0374	mg/L	0.00044	0.0374	mg/L	0.00044	1.18%
Ca 227.546†	19757.8	187	mg/L	4.6	187	mg/L	4.6	2.44%
Cd 228.802†	2.2	0.00018	mg/L	0.000105	0.00018	mg/L	0.000105	58.77%
Co 228.616†	81.9	0.00402	mg/L	0.000206	0.00402	mg/L	0.000206	5.12%
Cr 267.716†	5817.3	0.0471	mg/L	0.00017	0.0471	mg/L	0.00017	0.36%
Cu 327.393†	18918.9	0.130	mg/L	0.0034	0.130	mg/L	0.0034	2.58%
Fe 239.562†	2542.8	6.01	mg/L	0.072	6.01	mg/L	0.072	1.20%
Mg 279.077†	6839.9	8.77	mg/L	0.133	8.77	mg/L	0.133	1.52%
Mn 257.610†	2837680.0	6.32	mg/L	0.010	6.32	mg/L	0.010	0.15%

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Mo 202.031†	159.6	0.0126 mg/L	0.00058	0.0126 mg/L	0.00058	4.57%
Ni 231.604†	2586.5	0.0745 mg/L	0.00022	0.0745 mg/L	0.00022	0.29%
Pb 220.353†	26.0	0.0118 mg/L	0.00067	0.0118 mg/L	0.00067	5.67%
Sb 206.836†	20.4	0.0123 mg/L	0.00200	0.0123 mg/L	0.00200	16.28%
Se 196.026†	-44.6	0.0188 mg/L	0.00208	0.0188 mg/L	0.00208	11.05%
Si 251.611†	223680.7	6.49 mg/L	0.132	6.49 mg/L	0.132	2.04%
Sn 189.927†	12.2	0.00376 mg/L	0.000833	0.00376 mg/L	0.000833	22.17%
Ti 334.940†	85164.2	0.119 mg/L	0.0024	0.119 mg/L	0.0024	2.01%
Tl 190.801†	131.0	0.0674 mg/L	0.00497	0.0674 mg/L	0.00497	7.38%
V 290.880†	2030.9	0.0127 mg/L	0.00070	0.0127 mg/L	0.00070	5.52%
Zn 206.200†	12531.3	0.376 mg/L	0.0044	0.376 mg/L	0.0044	1.17%
K 766.490†	1533.4	0.626 mg/L	0.0301	0.626 mg/L	0.0301	4.81%
Na 589.592†	79309.0	6.00 mg/L	0.090	6.00 mg/L	0.090	1.49%
Sr 407.771†	775812.7	0.765 mg/L	0.0613	0.765 mg/L	0.0613	8.01%
Li 670.784†	647.1	0.00698 mg/L	0.001010	0.00698 mg/L	0.001010	14.47%

Sequence No.: 13 **Autosampler Location: 71**
Sample ID: L1102043901PS WG357406-01 **Date Collected: 2/23/2011 4:15:46 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102043901PS WG357406-01

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102043901PS WG357406-01

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4852614.8						51212.95	1.06%
YRADIAL	296936.9						2085.35	0.70%
Ga 417.206	1333298.4						16120.14	1.21%
GaRADIAL	65783.0						945.86	1.44%
Ag 328.068†	38753.2	0.194	mg/L	0.0035	0.194	mg/L	0.0035	1.79%
Al 396.153†	39071.9	8.31	mg/L	0.017	8.31	mg/L	0.017	0.20%
As 188.979†	208.0	0.186	mg/L	0.0033	0.186	mg/L	0.0033	1.78%
Ba 233.527†	46600.9	0.789	mg/L	0.0087	0.789	mg/L	0.0087	1.11%
Be 234.861†	14466.8	0.0250	mg/L	0.00044	0.0250	mg/L	0.00044	1.75%
B 249.677†	49044.3	0.956	mg/L	0.0163	0.956	mg/L	0.0163	1.71%
Ca 227.546†	18569.6	176	mg/L	2.9	176	mg/L	2.9	1.65%
Cd 228.802†	402.8	0.0226	mg/L	0.00026	0.0226	mg/L	0.00026	1.14%
Co 228.616†	1940.1	0.0963	mg/L	0.00175	0.0963	mg/L	0.00175	1.82%
Cr 267.716†	33362.3	0.285	mg/L	0.0015	0.285	mg/L	0.0015	0.54%
Cu 327.393†	51201.9	0.351	mg/L	0.0056	0.351	mg/L	0.0056	1.58%
Fe 239.562†	3074.4	7.27	mg/L	0.067	7.27	mg/L	0.067	0.93%
Mg 279.077†	9790.7	12.6	mg/L	0.06	12.6	mg/L	0.06	0.49%
Mn 257.610†	2682058.1	5.97	mg/L	0.004	5.97	mg/L	0.004	0.07%
Mo 202.031†	6915.7	0.512	mg/L	0.0086	0.512	mg/L	0.0086	1.69%
Ni 231.604†	10741.4	0.310	mg/L	0.0045	0.310	mg/L	0.0045	1.47%
Pb 220.353†	1441.6	0.248	mg/L	0.0058	0.248	mg/L	0.0058	2.34%
Sb 206.836†	911.0	0.569	mg/L	0.0090	0.569	mg/L	0.0090	1.58%
Se 196.026†	213.8	0.196	mg/L	0.0026	0.196	mg/L	0.0026	1.34%
Si 251.611†	315946.5	9.16	mg/L	0.144	9.16	mg/L	0.144	1.57%
Sn 189.927†	1.3	0.00189	mg/L	0.001053	0.00189	mg/L	0.001053	55.83%
Ti 334.940†	432269.2	0.597	mg/L	0.0022	0.597	mg/L	0.0022	0.36%
Tl 190.801†	527.4	0.304	mg/L	0.0081	0.304	mg/L	0.0081	2.68%
V 290.880†	76334.0	0.509	mg/L	0.0039	0.509	mg/L	0.0039	0.77%
Zn 206.200†	27308.8	0.820	mg/L	0.0090	0.820	mg/L	0.0090	1.10%
K 766.490†	61239.6	24.6	mg/L	0.09	24.6	mg/L	0.09	0.36%
Na 589.592†	379428.6	29.0	mg/L	0.46	29.0	mg/L	0.46	1.59%
Sr 407.771†	1199934.6	1.18	mg/L	0.064	1.18	mg/L	0.064	5.44%
Li 670.784†	37096.7	0.487	mg/L	0.0008	0.487	mg/L	0.0008	0.15%

Sequence No.: 14 **Autosampler Location: 72**
Sample ID: L1102043901DL WG357406-02 **Date Collected: 2/23/2011 4:22:30 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

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Pierre Morris

Nebulizer Parameters: L1102043901DL WG357406-02

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102043901DL WG357406-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5000980.7						50257.53	1.00%
YRADIAL	296420.2						546.87	0.18%
Ga 417.206	1380249.7						32580.08	2.36%
GaRADIAL	64876.5						1231.59	1.90%
Ag 328.068†	254.2	0.00030	mg/L	0.000213	0.00030	mg/L	0.000213	70.50%
Al 396.153†	4301.5	0.905	mg/L	0.0112	0.905	mg/L	0.0112	1.24%
As 188.979†	4.2	0.00370	mg/L	0.001913	0.00370	mg/L	0.001913	51.72%
Ba 233.527†	4072.1	0.0684	mg/L	0.00299	0.0684	mg/L	0.00299	4.38%
Be 234.861†	241.9	0.00030	mg/L	0.000054	0.00030	mg/L	0.000054	17.74%
B 249.677†	651.0	0.0212	mg/L	0.00079	0.0212	mg/L	0.00079	3.72%
Ca 227.546†	3802.4	35.9	mg/L	2.02	35.9	mg/L	2.02	5.62%
Cd 228.802†	-2.5	-0.00009	mg/L	0.000144	-0.00009	mg/L	0.000144	155.34%
Co 228.616†	14.0	0.00102	mg/L	0.000074	0.00102	mg/L	0.000074	7.24%
Cr 267.716†	1193.0	0.00947	mg/L	0.000418	0.00947	mg/L	0.000418	4.42%
Cu 327.393†	3836.5	0.0265	mg/L	0.00214	0.0265	mg/L	0.00214	8.07%
Fe 239.562†	583.8	1.38	mg/L	0.043	1.38	mg/L	0.043	3.09%
Mg 279.077†	1573.1	2.01	mg/L	0.064	2.01	mg/L	0.064	3.17%
Mn 257.610†	593256.1	1.32	mg/L	0.069	1.32	mg/L	0.069	5.24%
Mo 202.031†	34.6	0.00212	mg/L	0.000244	0.00212	mg/L	0.000244	11.51%
Ni 231.604†	521.9	0.0149	mg/L	0.00059	0.0149	mg/L	0.00059	3.97%
Pb 220.353†	4.7	0.00167	mg/L	0.000738	0.00167	mg/L	0.000738	44.07%
Sb 206.836†	9.4	0.00564	mg/L	0.001682	0.00564	mg/L	0.001682	29.82%
Se 196.026†	-28.2	-0.00664	mg/L	0.004418	-0.00664	mg/L	0.004418	66.49%
Si 251.611†	44552.2	1.29	mg/L	0.080	1.29	mg/L	0.080	6.23%
Sn 189.927†	-50.6	-0.00696	mg/L	0.000380	-0.00696	mg/L	0.000380	5.45%
Ti 334.940†	16747.5	0.0233	mg/L	0.00111	0.0233	mg/L	0.00111	4.75%
Tl 190.801†	69.7	0.0366	mg/L	0.00128	0.0366	mg/L	0.00128	3.51%
V 290.880†	503.1	0.00214	mg/L	0.000798	0.00214	mg/L	0.000798	37.36%
Zn 206.200†	2471.6	0.0738	mg/L	0.00363	0.0738	mg/L	0.00363	4.92%
K 766.490†	334.8	0.152	mg/L	0.0236	0.152	mg/L	0.0236	15.49%
Na 589.592†	17873.9	1.35	mg/L	0.014	1.35	mg/L	0.014	1.02%
Sr 407.771†	178929.6	0.176	mg/L	0.0113	0.176	mg/L	0.0113	6.45%
Li 670.784†	79.6	-0.00049	mg/L	0.000685	-0.00049	mg/L	0.000685	138.96%

Sequence No.: 15 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 4:29:10 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4823512.2						87760.11	1.82%
YRADIAL	282431.0						6018.78	2.13%
Ga 417.206	1297310.9						32622.34	2.51%
GaRADIAL	62353.4						589.78	0.95%
Ag 328.068†	76773.3	0.388	mg/L	0.0140	0.388	mg/L	0.0140	3.62%
QC value within limits for Ag 328.068 Recovery = 96.94%								
Al 396.153†	46433.0	9.87	mg/L	0.055	9.87	mg/L	0.055	0.55%
QC value within limits for Al 396.153 Recovery = 98.67%								
As 188.979†	412.1	0.373	mg/L	0.0060	0.373	mg/L	0.0060	1.62%
QC value within limits for As 188.979 Recovery = 93.28%								
Ba 233.527†	58397.2	0.990	mg/L	0.0295	0.990	mg/L	0.0295	2.98%
QC value within limits for Ba 233.527 Recovery = 99.05%								
Be 234.861†	27664.6	0.0486	mg/L	0.00191	0.0486	mg/L	0.00191	3.92%
QC value within limits for Be 234.861 Recovery = 97.26%								

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B 249.677†	25735.0	0.496 mg/L	0.0195	0.496 mg/L	0.0195	3.93%
QC value within limits for B 249.677 Recovery = 99.27%						
Ca 227.546†	998.7	9.75 mg/L	0.239	9.75 mg/L	0.239	2.45%
QC value within limits for Ca 227.546 Recovery = 97.46%						
Cd 228.802†	849.0	0.0476 mg/L	0.00117	0.0476 mg/L	0.00117	2.46%
QC value within limits for Cd 228.802 Recovery = 95.26%						
Co 228.616†	3808.8	0.189 mg/L	0.0036	0.189 mg/L	0.0036	1.88%
QC value within limits for Co 228.616 Recovery = 94.72%						
Cr 267.716†	56661.3	0.489 mg/L	0.0137	0.489 mg/L	0.0137	2.81%
QC value within limits for Cr 267.716 Recovery = 97.70%						
Cu 327.393†	69085.1	0.474 mg/L	0.0198	0.474 mg/L	0.0198	4.17%
QC value within limits for Cu 327.393 Recovery = 94.74%						
Fe 239.562†	1612.8	3.81 mg/L	0.058	3.81 mg/L	0.058	1.53%
QC value within limits for Fe 239.562 Recovery = 95.31%						
Mg 279.077†	7565.8	9.71 mg/L	0.165	9.71 mg/L	0.165	1.69%
QC value within limits for Mg 279.077 Recovery = 97.10%						
Mn 257.610†	222455.6	0.499 mg/L	0.0149	0.499 mg/L	0.0149	2.99%
QC value within limits for Mn 257.610 Recovery = 99.90%						
Mo 202.031†	13362.6	0.987 mg/L	0.0350	0.987 mg/L	0.0350	3.55%
QC value within limits for Mo 202.031 Recovery = 98.66%						
Ni 231.604†	17132.5	0.494 mg/L	0.0144	0.494 mg/L	0.0144	2.91%
QC value within limits for Ni 231.604 Recovery = 98.89%						
Pb 220.353†	2933.6	0.490 mg/L	0.0090	0.490 mg/L	0.0090	1.83%
QC value within limits for Pb 220.353 Recovery = 97.94%						
Sb 206.836†	1815.5	1.13 mg/L	0.025	1.13 mg/L	0.025	2.21%
QC value within limits for Sb 206.836 Recovery = 94.50%						
Se 196.026†	533.0	0.378 mg/L	0.0130	0.378 mg/L	0.0130	3.43%
QC value within limits for Se 196.026 Recovery = 94.59%						
Si 251.611†	165068.9	4.78 mg/L	0.187	4.78 mg/L	0.187	3.91%
QC value within limits for Si 251.611 Recovery = 95.52%						
Sn 189.927†	5749.6	0.983 mg/L	0.0187	0.983 mg/L	0.0187	1.90%
QC value within limits for Sn 189.927 Recovery = 98.30%						
Ti 334.940†	709324.9	0.978 mg/L	0.0079	0.978 mg/L	0.0079	0.80%
QC value within limits for Ti 334.940 Recovery = 97.78%						
Tl 190.801†	840.8	0.498 mg/L	0.0140	0.498 mg/L	0.0140	2.81%
QC value within limits for Tl 190.801 Recovery = 99.53%						
V 290.880†	147656.2	0.986 mg/L	0.0308	0.986 mg/L	0.0308	3.13%
QC value within limits for V 290.880 Recovery = 98.57%						
Zn 206.200†	33021.6	0.993 mg/L	0.0284	0.993 mg/L	0.0284	2.86%
QC value within limits for Zn 206.200 Recovery = 99.28%						
K 766.490†	120973.6	48.7 mg/L	0.15	48.7 mg/L	0.15	0.31%
QC value within limits for K 766.490 Recovery = 97.43%						
Na 589.592†	618655.2	47.8 mg/L	0.21	47.8 mg/L	0.21	0.43%
QC value within limits for Na 589.592 Recovery = 95.64%						
Sr 407.771†	1081106.6	1.07 mg/L	0.033	1.07 mg/L	0.033	3.10%
QC value within limits for Sr 407.771 Recovery = 106.67%						
Li 670.784†	73790.9	0.970 mg/L	0.0076	0.970 mg/L	0.0076	0.78%
QC value within limits for Li 670.784 Recovery = 97.00%						

All analyte(s) passed QC.

Sequence No.: 16 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 4:36:16 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5006151.0						58998.73	1.18%
YRADIAL	294310.9						10925.99	3.71%
Ga 417.206	1312933.2						20201.97	1.54%
GaRADIAL	63347.9						1748.38	2.76%
Ag 328.068†	-34.0	-0.00088	mg/L	0.000527	-0.00088	mg/L	0.000527	60.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-23.3	-0.0168	mg/L	0.00095	-0.0168	mg/L	0.00095	5.64%

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QC value within limits for Al 396.153 Recovery = Not calculated

As 188.979†	-1.4	-0.00087 mg/L	0.003795	-0.00087 mg/L	0.003795	436.46%	
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	0.0	-0.00051 mg/L	0.000043	-0.00051 mg/L	0.000043	8.47%	
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 234.861†	26.7	0.00005 mg/L	0.000025	0.00005 mg/L	0.000025	49.72%	
QC value within limits for Be 234.861 Recovery = Not calculated							
B 249.677†	636.5	0.0156 mg/L	0.00144	0.0156 mg/L	0.00144	9.23%	
QC value within limits for B 249.677 Recovery = Not calculated							
Ca 227.546†	2.6	-0.00858 mg/L	0.018478	-0.00858 mg/L	0.018478	215.39%	
QC value within limits for Ca 227.546 Recovery = Not calculated							
Cd 228.802†	-2.4	-0.00006 mg/L	0.000228	-0.00006 mg/L	0.000228	353.70%	
QC value within limits for Cd 228.802 Recovery = Not calculated							
Co 228.616†	-6.5	0.00010 mg/L	0.000134	0.00010 mg/L	0.000134	133.26%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	3.0	-0.00020 mg/L	0.000129	-0.00020 mg/L	0.000129	65.32%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 327.393†	58.5	0.00047 mg/L	0.000266	0.00047 mg/L	0.000266	56.85%	
QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe 239.562†	1.3	0.00096 mg/L	0.003108	0.00096 mg/L	0.003108	324.46%	
QC value within limits for Fe 239.562 Recovery = Not calculated							
Mg 279.077†	3.0	-0.00333 mg/L	0.004882	-0.00333 mg/L	0.004882	146.50%	
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	141.7	-0.00003 mg/L	0.000020	-0.00003 mg/L	0.000020	67.50%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	6.1	-0.00032 mg/L	0.000205	-0.00032 mg/L	0.000205	63.31%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	8.6	0.00010 mg/L	0.000382	0.00010 mg/L	0.000382	368.15%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	4.8	0.00013 mg/L	0.000608	0.00013 mg/L	0.000608	475.61%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	3.5	0.00203 mg/L	0.001492	0.00203 mg/L	0.001492	73.43%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-4.1	0.00137 mg/L	0.003845	0.00137 mg/L	0.003845	280.29%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	69.1	0.00055 mg/L	0.000298	0.00055 mg/L	0.000298	54.12%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-70.8	-0.0104 mg/L	0.00064	-0.0104 mg/L	0.00064	6.16%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	41.4	-0.00011 mg/L	0.000135	-0.00011 mg/L	0.000135	125.94%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.1	-0.00302 mg/L	0.003606	-0.00302 mg/L	0.003606	119.47%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	209.3	0.00007 mg/L	0.000841	0.00007 mg/L	0.000841	>999.9%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-165.2	-0.00540 mg/L	0.000130	-0.00540 mg/L	0.000130	2.40%	
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	44.1	0.0374 mg/L	0.02014	0.0374 mg/L	0.02014	53.86%	
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	215.0	0.0170 mg/L	0.00510	0.0170 mg/L	0.00510	29.94%	
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	245.4	-0.00039 mg/L	0.000140	-0.00039 mg/L	0.000140	35.85%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	-3.8	-0.00159 mg/L	0.001218	-0.00159 mg/L	0.001218	76.58%	
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

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Sequence No.: 17 **Autosampler Location: 73**
Sample ID: PBW 4A WG357312-03 **Date Collected: 2/23/2011 4:42:59 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 4A WG357312-03

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: PBW 4A WG357312-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD

Approved: February 24, 2011

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Y 371.029	5126879.2					7964.65	0.16%
YRADIAL	296688.6					9655.47	3.25%
Ga 417.206	1360909.8					11482.92	0.84%
GaRADIAL	64212.5					950.71	1.48%
Ag 328.068†	-96.9	-0.00120 mg/L	0.000404	-0.00120 mg/L	0.000404	33.76%	
Al 396.153†	16.7	-0.00827 mg/L	0.005327	-0.00827 mg/L	0.005327	64.40%	
As 188.979†	-1.3	-0.00078 mg/L	0.000725	-0.00078 mg/L	0.000725	93.28%	
Ba 233.527†	-2.4	-0.00055 mg/L	0.000051	-0.00055 mg/L	0.000051	9.14%	
Be 234.861†	42.8	0.00008 mg/L	0.000008	0.00008 mg/L	0.000008	10.20%	
B 249.677†	359.6	0.0103 mg/L	0.00084	0.0103 mg/L	0.00084	8.18%	
Ca 227.546†	3.1	-0.00320 mg/L	0.028608	-0.00320 mg/L	0.028608	894.69%	
Cd 228.802†	-1.1	0.00001 mg/L	0.000135	0.00001 mg/L	0.000135	>999.9%	
Co 228.616†	-4.4	0.00021 mg/L	0.000298	0.00021 mg/L	0.000298	143.84%	
Cr 267.716†	-2.0	-0.00024 mg/L	0.000090	-0.00024 mg/L	0.000090	37.55%	
Cu 327.393†	-7.2	0.00002 mg/L	0.001150	0.00002 mg/L	0.001150	>999.9%	
Fe 239.562†	1.0	0.00033 mg/L	0.004228	0.00033 mg/L	0.004228	>999.9%	
Mg 279.077†	4.2	-0.00172 mg/L	0.002827	-0.00172 mg/L	0.002827	164.64%	
Mn 257.610†	44.9	-0.00025 mg/L	0.000013	-0.00025 mg/L	0.000013	5.16%	
Mo 202.031†	3.3	-0.00053 mg/L	0.000175	-0.00053 mg/L	0.000175	32.95%	
Ni 231.604†	2.6	-0.00007 mg/L	0.000034	-0.00007 mg/L	0.000034	48.42%	
Pb 220.353†	3.4	-0.00010 mg/L	0.001444	-0.00010 mg/L	0.001444	>999.9%	
Sb 206.836†	-2.2	-0.00152 mg/L	0.001315	-0.00152 mg/L	0.001315	86.27%	
Se 196.026†	1.0	0.00493 mg/L	0.002204	0.00493 mg/L	0.002204	44.70%	
Si 251.611†	38.4	-0.00034 mg/L	0.000373	-0.00034 mg/L	0.000373	111.03%	
Sn 189.927†	-78.7	-0.0118 mg/L	0.00077	-0.0118 mg/L	0.00077	6.53%	
Ti 334.940†	-126.3	-0.00034 mg/L	0.000102	-0.00034 mg/L	0.000102	30.20%	
Tl 190.801†	2.5	-0.00153 mg/L	0.000885	-0.00153 mg/L	0.000885	57.99%	
V 290.880†	29.3	-0.00113 mg/L	0.000481	-0.00113 mg/L	0.000481	42.50%	
Zn 206.200†	-128.0	-0.00428 mg/L	0.000068	-0.00428 mg/L	0.000068	1.58%	
K 766.490†	-33.4	0.00647 mg/L	0.004952	0.00647 mg/L	0.004952	76.52%	
Na 589.592†	153.0	0.0123 mg/L	0.00907	0.0123 mg/L	0.00907	73.48%	
Sr 407.771†	148.9	-0.00049 mg/L	0.000113	-0.00049 mg/L	0.000113	23.14%	
Li 670.784†	26.9	-0.00119 mg/L	0.000476	-0.00119 mg/L	0.000476	40.15%	

Sequence No.: 18 **Autosampler Location: 74**
Sample ID: LCSW 4A WG357312-04 **Date Collected: 2/23/2011 4:49:40 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 4A WG357312-04

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: LCSW 4A WG357312-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4949399.7						17372.64	0.35%
YRADIAL	289335.0						4324.75	1.49%
Ga 417.206	1335570.8						19131.86	1.43%
GaRADIAL	62667.8						276.64	0.44%
Ag 328.068†	38123.3	0.192	mg/L	0.0016	0.192	mg/L	0.0016	0.82%
Al 396.153†	23297.3	4.94	mg/L	0.022	4.94	mg/L	0.022	0.44%
As 188.979†	200.8	0.182	mg/L	0.0049	0.182	mg/L	0.0049	2.68%
Ba 233.527†	28795.9	0.488	mg/L	0.0043	0.488	mg/L	0.0043	0.88%
Be 234.861†	13512.6	0.0237	mg/L	0.00017	0.0237	mg/L	0.00017	0.73%
B 249.677†	50059.2	0.954	mg/L	0.0159	0.954	mg/L	0.0159	1.67%
Ca 227.546†	500.1	4.86	mg/L	0.095	4.86	mg/L	0.095	1.96%
Cd 228.802†	416.0	0.0234	mg/L	0.00048	0.0234	mg/L	0.00048	2.06%
Co 228.616†	1890.1	0.0942	mg/L	0.00017	0.0942	mg/L	0.00017	0.19%
Cr 267.716†	27888.0	0.240	mg/L	0.0029	0.240	mg/L	0.0029	1.22%
Cu 327.393†	34250.3	0.235	mg/L	0.0025	0.235	mg/L	0.0025	1.05%
Fe 239.562†	811.0	1.92	mg/L	0.001	1.92	mg/L	0.001	0.06%
Mg 279.077†	3830.9	4.91	mg/L	0.029	4.91	mg/L	0.029	0.60%
Mn 257.610†	110246.9	0.247	mg/L	0.0031	0.247	mg/L	0.0031	1.23%
Mo 202.031†	6519.0	0.481	mg/L	0.0056	0.481	mg/L	0.0056	1.16%
Ni 231.604†	8504.5	0.245	mg/L	0.0033	0.245	mg/L	0.0033	1.33%
Pb 220.353†	1455.4	0.243	mg/L	0.0021	0.243	mg/L	0.0021	0.88%
Sb 206.836†	896.7	0.560	mg/L	0.0085	0.560	mg/L	0.0085	1.52%
Se 196.026†	266.0	0.191	mg/L	0.0036	0.191	mg/L	0.0036	1.88%

Approved: February 24, 2011

Pierre Morris

Si 251.611†	83197.5	2.41	mg/L	0.037	2.41	mg/L	0.037 1.52%
Sn 189.927†	2935.8	0.503	mg/L	0.0030	0.503	mg/L	0.0030 0.61%
Ti 334.940†	353521.5	0.487	mg/L	0.0060	0.487	mg/L	0.0060 1.24%
Tl 190.801†	416.8	0.245	mg/L	0.0066	0.245	mg/L	0.0066 2.68%
V 290.880†	72669.2	0.484	mg/L	0.0079	0.484	mg/L	0.0079 1.63%
Zn 206.200†	15880.4	0.477	mg/L	0.0013	0.477	mg/L	0.0013 0.27%
K 766.490†	59991.1	24.1	mg/L	0.09	24.1	mg/L	0.09 0.39%
Na 589.592†	313032.7	23.9	mg/L	0.24	23.9	mg/L	0.24 1.00%
Sr 407.771†	506948.9	0.500	mg/L	0.0342	0.500	mg/L	0.0342 6.83%
Li 670.784†	37017.4	0.486	mg/L	0.0020	0.486	mg/L	0.0020 0.42%

Sequence No.: 19 **Autosampler Location: 75**
Sample ID: L1102056801 WG357312-01 **Date Collected: 2/23/2011 4:56:21 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056801 WG357312-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102056801 WG357312-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4990911.6						38896.95	0.78%
YRADIAL	288983.1						5963.09	2.06%
Ga 417.206	1382126.5						22332.17	1.62%
GaRADIAL	63803.2						636.54	1.00%
Ag 328.068†	285.3	0.00064	mg/L	0.000509	0.00064	mg/L	0.000509	79.62%
Al 396.153†	384.0	0.0700	mg/L	0.01231	0.0700	mg/L	0.01231	17.58%
As 188.979†	6.5	0.00540	mg/L	0.000303	0.00540	mg/L	0.000303	5.61%
Ba 233.527†	1189.4	0.0196	mg/L	0.00008	0.0196	mg/L	0.00008	0.40%
Be 234.861†	132.3	0.00012	mg/L	0.000026	0.00012	mg/L	0.000026	21.51%
B 249.677†	1326.5	0.0314	mg/L	0.00066	0.0314	mg/L	0.00066	2.11%
Ca 227.546†	5419.7	51.2	mg/L	0.85	51.2	mg/L	0.85	1.66%
Cd 228.802†	1.5	0.00011	mg/L	0.000115	0.00011	mg/L	0.000115	103.54%
Co 228.616†	-1.9	0.00031	mg/L	0.000096	0.00031	mg/L	0.000096	31.06%
Cr 267.716†	56.1	0.00019	mg/L	0.000139	0.00019	mg/L	0.000139	74.78%
Cu 327.393†	-122.5	-0.00069	mg/L	0.000759	-0.00069	mg/L	0.000759	109.28%
Fe 239.562†	264.7	0.624	mg/L	0.0059	0.624	mg/L	0.0059	0.95%
Mg 279.077†	6889.8	8.84	mg/L	0.022	8.84	mg/L	0.022	0.24%
Mn 257.610†	75150.7	0.168	mg/L	0.0024	0.168	mg/L	0.0024	1.41%
Mo 202.031†	1.7	-0.00058	mg/L	0.000720	-0.00058	mg/L	0.000720	123.80%
Ni 231.604†	13.2	0.00020	mg/L	0.000481	0.00020	mg/L	0.000481	235.76%
Pb 220.353†	-5.2	0.00089	mg/L	0.000921	0.00089	mg/L	0.000921	103.26%
Sb 206.836†	12.8	0.00781	mg/L	0.000851	0.00781	mg/L	0.000851	10.90%
Se 196.026†	-29.8	-0.00361	mg/L	0.003522	-0.00361	mg/L	0.003522	97.51%
Si 251.611†	115661.1	3.36	mg/L	0.064	3.36	mg/L	0.064	1.92%
Sn 189.927†	-76.1	-0.0113	mg/L	0.00036	-0.0113	mg/L	0.00036	3.16%
Ti 334.940†	665.1	0.00126	mg/L	0.000105	0.00126	mg/L	0.000105	8.30%
Tl 190.801†	88.4	0.0442	mg/L	0.00272	0.0442	mg/L	0.00272	6.16%
V 290.880†	-228.3	-0.00281	mg/L	0.000707	-0.00281	mg/L	0.000707	25.16%
Zn 206.200†	71.9	0.00171	mg/L	0.000183	0.00171	mg/L	0.000183	10.70%
K 766.490†	6840.7	2.74	mg/L	0.023	2.74	mg/L	0.023	0.85%
Na 589.592†	111945.3	8.48	mg/L	0.051	8.48	mg/L	0.051	0.60%
Sr 407.771†	187411.7	0.184	mg/L	0.0111	0.184	mg/L	0.0111	6.01%
Li 670.784†	-67.8	-0.00243	mg/L	0.002816	-0.00243	mg/L	0.002816	115.72%

Sequence No.: 20 **Autosampler Location: 76**
Sample ID: L1102056802S WG357312-05 **Date Collected: 2/23/2011 5:03:00 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056802S WG357312-05

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Approved: February 24, 2011

Pierre Morris

Mean Data: L1102056802S WG357312-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4880679.2						34641.85	0.71%
YRADIAL	290259.5						453.20	0.16%
Ga 417.206	1324198.4						3529.56	0.27%
GaRADIAL	63739.6						1112.65	1.75%
Ag 328.068†	38795.8	0.196	mg/L	0.0028	0.196	mg/L	0.0028	1.44%
Al 396.153†	23090.5	4.90	mg/L	0.022	4.90	mg/L	0.022	0.44%
As 188.979†	209.1	0.189	mg/L	0.0015	0.189	mg/L	0.0015	0.80%
Ba 233.527†	29885.4	0.507	mg/L	0.0055	0.507	mg/L	0.0055	1.09%
Be 234.861†	13965.9	0.0244	mg/L	0.00021	0.0244	mg/L	0.00021	0.86%
B 249.677†	52239.9	0.998	mg/L	0.0140	0.998	mg/L	0.0140	1.40%
Ca 227.546†	6054.2	57.4	mg/L	0.12	57.4	mg/L	0.12	0.20%
Cd 228.802†	413.3	0.0232	mg/L	0.00005	0.0232	mg/L	0.00005	0.23%
Co 228.616†	1870.5	0.0932	mg/L	0.00063	0.0932	mg/L	0.00063	0.67%
Cr 267.716†	28289.0	0.244	mg/L	0.0037	0.244	mg/L	0.0037	1.52%
Cu 327.393†	34303.3	0.235	mg/L	0.0031	0.235	mg/L	0.0031	1.30%
Fe 239.562†	1053.9	2.49	mg/L	0.025	2.49	mg/L	0.025	1.02%
Mg 279.077†	10391.2	13.3	mg/L	0.10	13.3	mg/L	0.10	0.77%
Mn 257.610†	185735.7	0.416	mg/L	0.0065	0.416	mg/L	0.0065	1.55%
Mo 202.031†	6691.4	0.494	mg/L	0.0032	0.494	mg/L	0.0032	0.65%
Ni 231.604†	8339.8	0.241	mg/L	0.0014	0.241	mg/L	0.0014	0.56%
Pb 220.353†	1437.1	0.242	mg/L	0.0016	0.242	mg/L	0.0016	0.65%
Sb 206.836†	912.2	0.570	mg/L	0.0009	0.570	mg/L	0.0009	0.16%
Se 196.026†	240.8	0.187	mg/L	0.0038	0.187	mg/L	0.0038	2.01%
Si 251.611†	204492.9	5.93	mg/L	0.031	5.93	mg/L	0.031	0.53%
Sn 189.927†	2949.6	0.505	mg/L	0.0028	0.505	mg/L	0.0028	0.55%
Ti 334.940†	360689.7	0.498	mg/L	0.0086	0.498	mg/L	0.0086	1.72%
Tl 190.801†	496.2	0.287	mg/L	0.0019	0.287	mg/L	0.0019	0.65%
V 290.880†	73954.7	0.493	mg/L	0.0083	0.493	mg/L	0.0083	1.68%
Zn 206.200†	15881.9	0.477	mg/L	0.0051	0.477	mg/L	0.0051	1.06%
K 766.490†	66737.0	26.8	mg/L	0.05	26.8	mg/L	0.05	0.19%
Na 589.592†	422400.2	32.4	mg/L	1.05	32.4	mg/L	1.05	3.24%
Sr 407.771†	689762.9	0.680	mg/L	0.0330	0.680	mg/L	0.0330	4.85%
Li 670.784†	36996.9	0.486	mg/L	0.0012	0.486	mg/L	0.0012	0.24%

Sequence No.: 21 **Autosampler Location: 77**
Sample ID: L1102056803SD WG357312-06 **Date Collected: 2/23/2011 5:09:44 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056803SD WG357312-06

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102056803SD WG357312-06

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4839391.3						13039.95	0.27%
YRADIAL	287835.4						3914.32	1.36%
Ga 417.206	1334258.8						12656.34	0.95%
GaRADIAL	63185.9						1403.20	2.22%
Ag 328.068†	38353.9	0.193	mg/L	0.0019	0.193	mg/L	0.0019	0.99%
Al 396.153†	22964.3	4.87	mg/L	0.016	4.87	mg/L	0.016	0.34%
As 188.979†	207.3	0.187	mg/L	0.0006	0.187	mg/L	0.0006	0.31%
Ba 233.527†	29939.3	0.508	mg/L	0.0026	0.508	mg/L	0.0026	0.52%
Be 234.861†	13870.7	0.0243	mg/L	0.00022	0.0243	mg/L	0.00022	0.92%
B 249.677†	51734.9	0.988	mg/L	0.0090	0.988	mg/L	0.0090	0.91%
Ca 227.546†	5983.3	56.7	mg/L	0.65	56.7	mg/L	0.65	1.15%
Cd 228.802†	407.4	0.0229	mg/L	0.00034	0.0229	mg/L	0.00034	1.47%
Co 228.616†	1886.3	0.0940	mg/L	0.00026	0.0940	mg/L	0.00026	0.27%
Cr 267.716†	28371.7	0.244	mg/L	0.0024	0.244	mg/L	0.0024	0.97%
Cu 327.393†	33928.7	0.233	mg/L	0.0023	0.233	mg/L	0.0023	1.01%
Fe 239.562†	1064.5	2.52	mg/L	0.039	2.52	mg/L	0.039	1.56%
Mg 279.077†	10490.5	13.5	mg/L	0.24	13.5	mg/L	0.24	1.81%
Mn 257.610†	186046.1	0.417	mg/L	0.0027	0.417	mg/L	0.0027	0.64%
Mo 202.031†	6725.9	0.496	mg/L	0.0004	0.496	mg/L	0.0004	0.08%

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Ni 231.604†	8405.1	0.242 mg/L	0.0007	0.242 mg/L	0.0007	0.27%
Pb 220.353†	1438.6	0.242 mg/L	0.0011	0.242 mg/L	0.0011	0.44%
Sb 206.836†	908.1	0.567 mg/L	0.0038	0.567 mg/L	0.0038	0.67%
Se 196.026†	236.3	0.183 mg/L	0.0040	0.183 mg/L	0.0040	2.20%
Si 251.611†	201392.6	5.84 mg/L	0.068	5.84 mg/L	0.068	1.16%
Sn 189.927†	2999.7	0.514 mg/L	0.0014	0.514 mg/L	0.0014	0.28%
Ti 334.940†	363074.4	0.501 mg/L	0.0063	0.501 mg/L	0.0063	1.25%
Tl 190.801†	494.9	0.286 mg/L	0.0015	0.286 mg/L	0.0015	0.53%
V 290.880†	74180.5	0.495 mg/L	0.0044	0.495 mg/L	0.0044	0.89%
Zn 206.200†	15929.2	0.479 mg/L	0.0013	0.479 mg/L	0.0013	0.27%
K 766.490†	66731.6	26.8 mg/L	0.21	26.8 mg/L	0.21	0.79%
Na 589.592†	421937.9	32.4 mg/L	1.11	32.4 mg/L	1.11	3.43%
Sr 407.771†	704344.8	0.695 mg/L	0.0544	0.695 mg/L	0.0544	7.84%
Li 670.784†	36965.4	0.485 mg/L	0.0016	0.485 mg/L	0.0016	0.33%

Sequence No.: 22 **Autosampler Location: 78**
Sample ID: L1102056901 WG357312-02 **Date Collected: 2/23/2011 5:16:33 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056901 WG357312-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102056901 WG357312-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4988939.6						109820.86	2.20%
YRADIAL	291912.7						6472.47	2.22%
Ga 417.206	1385090.8						30716.77	2.22%
GaRADIAL	64273.1						714.22	1.11%
Ag 328.068†	338.9	0.00092	mg/L	0.000170	0.00092	mg/L	0.000170	18.37%
Al 396.153†	180.6	0.0267	mg/L	0.00717	0.0267	mg/L	0.00717	26.90%
As 188.979†	6.2	0.00486	mg/L	0.002307	0.00486	mg/L	0.002307	47.43%
Ba 233.527†	427.2	0.00670	mg/L	0.000184	0.00670	mg/L	0.000184	2.75%
Be 234.861†	86.9	0.00012	mg/L	0.000033	0.00012	mg/L	0.000033	26.30%
B 249.677†	2281.6	0.0477	mg/L	0.00139	0.0477	mg/L	0.00139	2.91%
Ca 227.546†	6479.5	61.2	mg/L	1.09	61.2	mg/L	1.09	1.77%
Cd 228.802†	-6.0	-0.00031	mg/L	0.000055	-0.00031	mg/L	0.000055	17.55%
Co 228.616†	-6.0	0.00012	mg/L	0.000211	0.00012	mg/L	0.000211	175.97%
Cr 267.716†	88.9	0.00048	mg/L	0.000021	0.00048	mg/L	0.000021	4.43%
Cu 327.393†	-254.5	-0.00165	mg/L	0.000864	-0.00165	mg/L	0.000864	52.48%
Fe 239.562†	94.4	0.221	mg/L	0.0083	0.221	mg/L	0.0083	3.77%
Mg 279.077†	15037.2	19.3	mg/L	0.11	19.3	mg/L	0.11	0.56%
Mn 257.610†	61567.8	0.138	mg/L	0.0027	0.138	mg/L	0.0027	1.95%
Mo 202.031†	4.8	-0.00038	mg/L	0.000131	-0.00038	mg/L	0.000131	34.36%
Ni 231.604†	17.5	0.00032	mg/L	0.000118	0.00032	mg/L	0.000118	36.18%
Pb 220.353†	-9.4	0.00071	mg/L	0.000503	0.00071	mg/L	0.000503	71.33%
Sb 206.836†	13.9	0.00853	mg/L	0.001503	0.00853	mg/L	0.001503	17.62%
Se 196.026†	-32.0	-0.00273	mg/L	0.003850	-0.00273	mg/L	0.003850	141.08%
Si 251.611†	201223.4	5.84	mg/L	0.103	5.84	mg/L	0.103	1.76%
Sn 189.927†	-87.5	-0.0133	mg/L	0.00089	-0.0133	mg/L	0.00089	6.75%
Ti 334.940†	-712.8	-0.00053	mg/L	0.000128	-0.00053	mg/L	0.000128	23.93%
Tl 190.801†	97.9	0.0487	mg/L	0.00252	0.0487	mg/L	0.00252	5.18%
V 290.880†	-656.6	-0.00570	mg/L	0.000527	-0.00570	mg/L	0.000527	9.24%
Zn 206.200†	36.4	0.00065	mg/L	0.000462	0.00065	mg/L	0.000462	70.70%
K 766.490†	3598.3	1.44	mg/L	0.035	1.44	mg/L	0.035	2.41%
Na 589.592†	173550.2	13.2	mg/L	0.10	13.2	mg/L	0.10	0.75%
Sr 407.771†	208429.2	0.205	mg/L	0.0135	0.205	mg/L	0.0135	6.59%
Li 670.784†	81.6	-0.00047	mg/L	0.001742	-0.00047	mg/L	0.001742	373.65%

Sequence No.: 23 **Autosampler Location: 79**
Sample ID: L1102056902S WG357312-07 **Date Collected: 2/23/2011 5:23:12 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

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Nebulizer Parameters: L1102056902S WG357312-07

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102056902S WG357312-07

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4851830.1						63426.89	1.31%
YRADIAL	280933.0						5696.90	2.03%
Ga 417.206	1333061.5						37460.59	2.81%
GaRADIAL	62039.8						739.21	1.19%
Ag 328.068†	38092.4	0.192	mg/L	0.0059	0.192	mg/L	0.0059	3.07%
Al 396.153†	22821.2	4.84	mg/L	0.018	4.84	mg/L	0.018	0.38%
As 188.979†	210.4	0.189	mg/L	0.0061	0.189	mg/L	0.0061	3.22%
Ba 233.527†	28795.2	0.488	mg/L	0.0077	0.488	mg/L	0.0077	1.57%
Be 234.861†	13716.0	0.0241	mg/L	0.00073	0.0241	mg/L	0.00073	3.02%
B 249.677†	51917.7	0.990	mg/L	0.0266	0.990	mg/L	0.0266	2.69%
Ca 227.546†	7253.7	68.7	mg/L	1.65	68.7	mg/L	1.65	2.40%
Cd 228.802†	406.3	0.0228	mg/L	0.00044	0.0228	mg/L	0.00044	1.94%
Co 228.616†	1860.7	0.0927	mg/L	0.00116	0.0927	mg/L	0.00116	1.25%
Cr 267.716†	28077.6	0.242	mg/L	0.0022	0.242	mg/L	0.0022	0.92%
Cu 327.393†	33153.7	0.227	mg/L	0.0070	0.227	mg/L	0.0070	3.06%
Fe 239.562†	924.7	2.18	mg/L	0.026	2.18	mg/L	0.026	1.18%
Mg 279.077†	19010.2	24.4	mg/L	0.18	24.4	mg/L	0.18	0.76%
Mn 257.610†	173232.5	0.389	mg/L	0.0046	0.389	mg/L	0.0046	1.20%
Mo 202.031†	6740.3	0.497	mg/L	0.0062	0.497	mg/L	0.0062	1.24%
Ni 231.604†	8293.1	0.239	mg/L	0.0026	0.239	mg/L	0.0026	1.10%
Pb 220.353†	1433.3	0.242	mg/L	0.0040	0.242	mg/L	0.0040	1.66%
Sb 206.836†	903.8	0.565	mg/L	0.0134	0.565	mg/L	0.0134	2.37%
Se 196.026†	239.6	0.189	mg/L	0.0042	0.189	mg/L	0.0042	2.25%
Si 251.611†	293158.0	8.50	mg/L	0.244	8.50	mg/L	0.244	2.86%
Sn 189.927†	2955.6	0.506	mg/L	0.0076	0.506	mg/L	0.0076	1.50%
Ti 334.940†	356322.0	0.492	mg/L	0.0064	0.492	mg/L	0.0064	1.30%
Tl 190.801†	501.9	0.289	mg/L	0.0082	0.289	mg/L	0.0082	2.84%
V 290.880†	72808.8	0.485	mg/L	0.0062	0.485	mg/L	0.0062	1.28%
Zn 206.200†	15845.9	0.476	mg/L	0.0058	0.476	mg/L	0.0058	1.22%
K 766.490†	63967.1	25.6	mg/L	0.04	25.6	mg/L	0.04	0.15%
Na 589.592†	493250.7	37.9	mg/L	0.20	37.9	mg/L	0.20	0.53%
Sr 407.771†	714211.3	0.705	mg/L	0.0590	0.705	mg/L	0.0590	8.37%
Li 670.784†	37121.7	0.487	mg/L	0.0044	0.487	mg/L	0.0044	0.90%

Sequence No.: 24 **Autosampler Location: 80**
Sample ID: L1102056903SD WG357312-08 **Date Collected: 2/23/2011 5:29:55 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056903SD WG357312-08

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102056903SD WG357312-08

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4947276.7						54958.39	1.11%
YRADIAL	290970.4						3371.89	1.16%
Ga 417.206	1344866.2						14998.59	1.12%
GaRADIAL	64126.5						1055.27	1.65%
Ag 328.068†	37767.4	0.190	mg/L	0.0025	0.190	mg/L	0.0025	1.32%
Al 396.153†	22346.4	4.74	mg/L	0.011	4.74	mg/L	0.011	0.24%
As 188.979†	208.2	0.188	mg/L	0.0017	0.188	mg/L	0.0017	0.92%
Ba 233.527†	28291.2	0.480	mg/L	0.0063	0.480	mg/L	0.0063	1.32%
Be 234.861†	13610.4	0.0239	mg/L	0.00028	0.0239	mg/L	0.00028	1.19%
B 249.677†	52065.9	0.993	mg/L	0.0174	0.993	mg/L	0.0174	1.75%
Ca 227.546†	7033.0	66.6	mg/L	0.70	66.6	mg/L	0.70	1.05%
Cd 228.802†	404.4	0.0226	mg/L	0.00024	0.0226	mg/L	0.00024	1.04%
Co 228.616†	1808.1	0.0901	mg/L	0.00083	0.0901	mg/L	0.00083	0.92%
Cr 267.716†	27416.9	0.236	mg/L	0.0037	0.236	mg/L	0.0037	1.56%
Cu 327.393†	33209.1	0.228	mg/L	0.0040	0.228	mg/L	0.0040	1.76%

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Fe 239.562†	884.8	2.09	mg/L	0.029	2.09	mg/L	0.029 1.38%
Mg 279.077†	18269.1	23.5	mg/L	0.36	23.5	mg/L	0.36 1.54%
Mn 257.610†	168703.1	0.379	mg/L	0.0063	0.379	mg/L	0.0063 1.66%
Mo 202.031†	6551.8	0.483	mg/L	0.0046	0.483	mg/L	0.0046 0.95%
Ni 231.604†	8072.9	0.233	mg/L	0.0021	0.233	mg/L	0.0021 0.91%
Pb 220.353†	1402.4	0.237	mg/L	0.0007	0.237	mg/L	0.0007 0.30%
Sb 206.836†	892.8	0.558	mg/L	0.0049	0.558	mg/L	0.0049 0.87%
Se 196.026†	230.3	0.182	mg/L	0.0069	0.182	mg/L	0.0069 3.80%
Si 251.611†	289283.7	8.39	mg/L	0.128	8.39	mg/L	0.128 1.53%
Sn 189.927†	2875.0	0.492	mg/L	0.0071	0.492	mg/L	0.0071 1.45%
Ti 334.940†	347551.6	0.480	mg/L	0.0046	0.480	mg/L	0.0046 0.97%
Tl 190.801†	495.3	0.285	mg/L	0.0007	0.285	mg/L	0.0007 0.25%
V 290.880†	71553.9	0.477	mg/L	0.0098	0.477	mg/L	0.0098 2.06%
Zn 206.200†	15511.5	0.466	mg/L	0.0081	0.466	mg/L	0.0081 1.74%
K 766.490†	62642.5	25.1	mg/L	0.11	25.1	mg/L	0.11 0.43%
Na 589.592†	484772.2	37.3	mg/L	1.25	37.3	mg/L	1.25 3.36%
Sr 407.771†	715112.6	0.705	mg/L	0.0361	0.705	mg/L	0.0361 5.11%
Li 670.784†	36372.4	0.477	mg/L	0.0041	0.477	mg/L	0.0041 0.85%

Sequence No.: 25 **Autosampler Location: 81**
Sample ID: L1102057101 **Date Collected: 2/23/2011 5:36:40 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057101

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102057101

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5062853.3						54018.57	1.07%
YRADIAL	289967.8						3358.53	1.16%
Ga 417.206	1361363.5						22628.30	1.66%
GaRADIAL	63003.0						123.11	0.20%
Ag 328.068†	28.7	-0.00056	mg/L	0.000482	-0.00056	mg/L	0.000482	85.67%
Al 396.153†	46.2	-0.00200	mg/L	0.015676	-0.00200	mg/L	0.015676	785.27%
As 188.979†	-1.6	-0.00113	mg/L	0.000989	-0.00113	mg/L	0.000989	87.56%
Ba 233.527†	0.6	-0.00050	mg/L	0.000018	-0.00050	mg/L	0.000018	3.67%
Be 234.861†	48.3	0.00008	mg/L	0.000005	0.00008	mg/L	0.000005	6.20%
B 249.677†	912.6	0.0208	mg/L	0.00074	0.0208	mg/L	0.00074	3.57%
Ca 227.546†	11.5	0.0776	mg/L	0.02201	0.0776	mg/L	0.02201	28.37%
Cd 228.802†	-3.7	-0.00014	mg/L	0.000106	-0.00014	mg/L	0.000106	77.61%
Co 228.616†	-2.9	0.00028	mg/L	0.000133	0.00028	mg/L	0.000133	47.07%
Cr 267.716†	41.0	0.00013	mg/L	0.000056	0.00013	mg/L	0.000056	42.95%
Cu 327.393†	108.2	0.00081	mg/L	0.000173	0.00081	mg/L	0.000173	21.47%
Fe 239.562†	5.0	0.00967	mg/L	0.002622	0.00967	mg/L	0.002622	27.12%
Mg 279.077†	6.9	0.00177	mg/L	0.003070	0.00177	mg/L	0.003070	173.19%
Mn 257.610†	401.8	0.00055	mg/L	0.000008	0.00055	mg/L	0.000008	1.39%
Mo 202.031†	4.8	-0.00042	mg/L	0.000456	-0.00042	mg/L	0.000456	108.35%
Ni 231.604†	75.1	0.00202	mg/L	0.000179	0.00202	mg/L	0.000179	8.86%
Pb 220.353†	2.9	-0.00017	mg/L	0.000485	-0.00017	mg/L	0.000485	278.98%
Sb 206.836†	-1.5	-0.00105	mg/L	0.002189	-0.00105	mg/L	0.002189	207.89%
Se 196.026†	-4.7	0.00094	mg/L	0.001371	0.00094	mg/L	0.001371	145.58%
Si 251.611†	140.9	0.00264	mg/L	0.000968	0.00264	mg/L	0.000968	36.67%
Sn 189.927†	-74.2	-0.0110	mg/L	0.00058	-0.0110	mg/L	0.00058	5.32%
Ti 334.940†	-56.7	-0.00024	mg/L	0.000167	-0.00024	mg/L	0.000167	69.22%
Tl 190.801†	2.3	-0.00161	mg/L	0.002648	-0.00161	mg/L	0.002648	164.26%
V 290.880†	185.8	-0.00008	mg/L	0.001341	-0.00008	mg/L	0.001341	>999.9%
Zn 206.200†	-88.1	-0.00308	mg/L	0.000193	-0.00308	mg/L	0.000193	6.26%
K 766.490†	3.4	0.0211	mg/L	0.02933	0.0211	mg/L	0.02933	138.75%
Na 589.592†	436.5	0.0337	mg/L	0.00751	0.0337	mg/L	0.00751	22.25%
Sr 407.771†	57.4	-0.00058	mg/L	0.000107	-0.00058	mg/L	0.000107	18.58%
Li 670.784†	23.8	-0.00123	mg/L	0.001739	-0.00123	mg/L	0.001739	141.73%

Sequence No.: 26 **Autosampler Location: 82**
Sample ID: L1102057102 **Date Collected: 2/23/2011 5:43:19 PM**
Analyst: PDM **Data Type: Original**

Approved: February 24, 2011

Pierre Morris

Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057102

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102057102

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5024887.9						73471.02	1.46%
YRADIAL	292768.3						1572.79	0.54%
Ga 417.206	1346747.1						21188.61	1.57%
GaRADIAL	63443.1						502.55	0.79%
Ag 328.068†	9.5	-0.00066	mg/L	0.000765	-0.00066	mg/L	0.000765	115.95%
Al 396.153†	53.9	-0.00035	mg/L	0.013571	-0.00035	mg/L	0.013571	>999.9%
As 188.979†	-1.4	-0.00088	mg/L	0.000851	-0.00088	mg/L	0.000851	96.46%
Ba 233.527†	-2.9	-0.00056	mg/L	0.000018	-0.00056	mg/L	0.000018	3.27%
Be 234.861†	28.1	0.00005	mg/L	0.000015	0.00005	mg/L	0.000015	29.91%
B 249.677†	688.0	0.0165	mg/L	0.00052	0.0165	mg/L	0.00052	3.15%
Ca 227.546†	4.0	0.00512	mg/L	0.042730	0.00512	mg/L	0.042730	834.41%
Cd 228.802†	-3.3	-0.00011	mg/L	0.000154	-0.00011	mg/L	0.000154	134.62%
Co 228.616†	-4.8	0.00019	mg/L	0.000350	0.00019	mg/L	0.000350	187.69%
Cr 267.716†	12.8	-0.00011	mg/L	0.000084	-0.00011	mg/L	0.000084	74.92%
Cu 327.393†	74.2	0.00058	mg/L	0.000743	0.00058	mg/L	0.000743	129.01%
Fe 239.562†	1.6	0.00177	mg/L	0.000288	0.00177	mg/L	0.000288	16.24%
Mg 279.077†	0.2	-0.00685	mg/L	0.002788	-0.00685	mg/L	0.002788	40.68%
Mn 257.610†	-17.7	-0.00039	mg/L	0.000007	-0.00039	mg/L	0.000007	1.80%
Mo 202.031†	1.8	-0.00064	mg/L	0.000287	-0.00064	mg/L	0.000287	44.89%
Ni 231.604†	3.5	-0.00004	mg/L	0.000268	-0.00004	mg/L	0.000268	597.49%
Pb 220.353†	-1.8	-0.00096	mg/L	0.000682	-0.00096	mg/L	0.000682	71.07%
Sb 206.836†	0.3	0.00007	mg/L	0.000632	0.00007	mg/L	0.000632	857.04%
Se 196.026†	-7.7	-0.00118	mg/L	0.003384	-0.00118	mg/L	0.003384	286.92%
Si 251.611†	9.4	-0.00118	mg/L	0.000313	-0.00118	mg/L	0.000313	26.61%
Sn 189.927†	-79.7	-0.0119	mg/L	0.00068	-0.0119	mg/L	0.00068	5.69%
Ti 334.940†	-123.7	-0.00033	mg/L	0.000163	-0.00033	mg/L	0.000163	48.59%
Tl 190.801†	0.4	-0.00273	mg/L	0.000568	-0.00273	mg/L	0.000568	20.82%
V 290.880†	148.3	-0.00034	mg/L	0.000879	-0.00034	mg/L	0.000879	262.02%
Zn 206.200†	-137.6	-0.00457	mg/L	0.000135	-0.00457	mg/L	0.000135	2.95%
K 766.490†	1.1	0.0203	mg/L	0.02312	0.0203	mg/L	0.02312	114.05%
Na 589.592†	-178.5	-0.0127	mg/L	0.01700	-0.0127	mg/L	0.01700	134.19%
Sr 407.771†	104.7	-0.00053	mg/L	0.000040	-0.00053	mg/L	0.000040	7.53%
Li 670.784†	-10.7	-0.00168	mg/L	0.001299	-0.00168	mg/L	0.001299	77.22%

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Sequence No.: 27 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 5:49:59 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4852953.6						20357.13	0.42%
YRADIAL	287181.7						7063.93	2.46%
Ga 417.206	1270159.8						3429.28	0.27%
GaRADIAL	61936.2						1662.68	2.68%
Ag 328.068†	78647.6	0.397	mg/L	0.0026	0.397	mg/L	0.0026	0.65%
QC value within limits for Ag 328.068 Recovery = 99.31%								
Al 396.153†	46012.6	9.78	mg/L	0.055	9.78	mg/L	0.055	0.56%
QC value within limits for Al 396.153 Recovery = 97.77%								
As 188.979†	419.6	0.380	mg/L	0.0035	0.380	mg/L	0.0035	0.93%
QC value within limits for As 188.979 Recovery = 94.99%								
Ba 233.527†	58068.3	0.985	mg/L	0.0087	0.985	mg/L	0.0087	0.89%

Approved: February 24, 2011

Pierre Morris

QC value within limits for Ba 233.527 Recovery = 98.49%

Be 234.861†	28235.4	0.0496 mg/L	0.00066	0.0496 mg/L	0.00066	1.34%
QC value within limits for Be 234.861 Recovery = 99.25%						
B 249.677†	26270.0	0.506 mg/L	0.0033	0.506 mg/L	0.0033	0.65%
QC value within limits for B 249.677 Recovery = 101.25%						
Ca 227.546†	1023.6	9.98 mg/L	0.089	9.98 mg/L	0.089	0.89%
QC value within limits for Ca 227.546 Recovery = 99.80%						
Cd 228.802†	866.5	0.0486 mg/L	0.00008	0.0486 mg/L	0.00008	0.17%
QC value within limits for Cd 228.802 Recovery = 97.12%						
Co 228.616†	3790.8	0.189 mg/L	0.0014	0.189 mg/L	0.0014	0.73%
QC value within limits for Co 228.616 Recovery = 94.28%						
Cr 267.716†	56582.8	0.488 mg/L	0.0054	0.488 mg/L	0.0054	1.11%
QC value within limits for Cr 267.716 Recovery = 97.56%						
Cu 327.393†	70743.4	0.485 mg/L	0.0012	0.485 mg/L	0.0012	0.25%
QC value within limits for Cu 327.393 Recovery = 97.00%						
Fe 239.562†	1586.6	3.75 mg/L	0.092	3.75 mg/L	0.092	2.46%
QC value within limits for Fe 239.562 Recovery = 93.76%						
Mg 279.077†	7443.2	9.55 mg/L	0.255	9.55 mg/L	0.255	2.66%
QC value within limits for Mg 279.077 Recovery = 95.52%						
Mn 257.610†	221151.4	0.497 mg/L	0.0033	0.497 mg/L	0.0033	0.67%
QC value within limits for Mn 257.610 Recovery = 99.31%						
Mo 202.031†	13326.3	0.984 mg/L	0.0102	0.984 mg/L	0.0102	1.03%
QC value within limits for Mo 202.031 Recovery = 98.39%						
Ni 231.604†	17057.7	0.492 mg/L	0.0042	0.492 mg/L	0.0042	0.85%
QC value within limits for Ni 231.604 Recovery = 98.46%						
Pb 220.353†	2914.9	0.487 mg/L	0.0020	0.487 mg/L	0.0020	0.42%
QC value within limits for Pb 220.353 Recovery = 97.32%						
Sb 206.836†	1854.4	1.16 mg/L	0.005	1.16 mg/L	0.005	0.44%
QC value within limits for Sb 206.836 Recovery = 96.52%						
Se 196.026†	540.5	0.384 mg/L	0.0049	0.384 mg/L	0.0049	1.28%
QC value within limits for Se 196.026 Recovery = 95.92%						
Si 251.611†	167963.9	4.86 mg/L	0.035	4.86 mg/L	0.035	0.71%
QC value within limits for Si 251.611 Recovery = 97.20%						
Sn 189.927†	5697.0	0.974 mg/L	0.0061	0.974 mg/L	0.0061	0.62%
QC value within limits for Sn 189.927 Recovery = 97.40%						
Ti 334.940†	701160.7	0.966 mg/L	0.0022	0.966 mg/L	0.0022	0.22%
QC value within limits for Ti 334.940 Recovery = 96.65%						
Tl 190.801†	838.1	0.496 mg/L	0.0003	0.496 mg/L	0.0003	0.06%
QC value within limits for Tl 190.801 Recovery = 99.19%						
V 290.880†	146691.7	0.979 mg/L	0.0071	0.979 mg/L	0.0071	0.72%
QC value within limits for V 290.880 Recovery = 97.92%						
Zn 206.200†	32758.4	0.985 mg/L	0.0126	0.985 mg/L	0.0126	1.27%
QC value within limits for Zn 206.200 Recovery = 98.49%						
K 766.490†	120321.5	48.4 mg/L	0.37	48.4 mg/L	0.37	0.77%
QC value within limits for K 766.490 Recovery = 96.90%						
Na 589.592†	623899.7	48.2 mg/L	0.42	48.2 mg/L	0.42	0.87%
QC value within limits for Na 589.592 Recovery = 96.47%						
Sr 407.771†	998852.8	0.985 mg/L	0.0566	0.985 mg/L	0.0566	5.75%
QC value within limits for Sr 407.771 Recovery = 98.55%						
Li 670.784†	73536.5	0.967 mg/L	0.0041	0.967 mg/L	0.0041	0.42%
QC value within limits for Li 670.784 Recovery = 96.67%						

All analyte(s) passed QC.

Sequence No.: 28 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 5:56:39 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	5027054.7				34031.89	0.68%
YRADIAL	293376.6				6451.65	2.20%
Ga 417.206	1341795.1				17556.00	1.31%
GaRADIAL	63195.2				256.76	0.41%

Approved: February 24, 2011

Pierre Morris

Ag 328.068†	54.2	-0.00044 mg/L	0.000378	-0.00044 mg/L	0.000378	86.96%	
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153†	-7.8	-0.0135 mg/L	0.00396	-0.0135 mg/L	0.00396	29.40%	
QC value within limits for Al 396.153 Recovery = Not calculated							
As 188.979†	-0.2	0.00023 mg/L	0.001133	0.00023 mg/L	0.001133	491.74%	
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	5.7	-0.00042 mg/L	0.000130	-0.00042 mg/L	0.000130	31.14%	
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 234.861†	50.0	0.00009 mg/L	0.000023	0.00009 mg/L	0.000023	25.99%	
QC value within limits for Be 234.861 Recovery = Not calculated							
B 249.677†	508.0	0.0131 mg/L	0.00091	0.0131 mg/L	0.00091	6.94%	
QC value within limits for B 249.677 Recovery = Not calculated							
Ca 227.546†	5.3	0.0174 mg/L	0.01711	0.0174 mg/L	0.01711	98.45%	
QC value within limits for Ca 227.546 Recovery = Not calculated							
Cd 228.802†	-3.0	-0.00010 mg/L	0.000152	-0.00010 mg/L	0.000152	147.65%	
QC value within limits for Cd 228.802 Recovery = Not calculated							
Co 228.616†	-5.7	0.00014 mg/L	0.000180	0.00014 mg/L	0.000180	126.52%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-22.4	-0.00042 mg/L	0.000024	-0.00042 mg/L	0.000024	5.74%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 327.393†	127.3	0.00094 mg/L	0.000411	0.00094 mg/L	0.000411	43.91%	
QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe 239.562†	0.1	-0.00178 mg/L	0.000853	-0.00178 mg/L	0.000853	47.95%	
QC value within limits for Fe 239.562 Recovery = Not calculated							
Mg 279.077†	2.6	-0.00385 mg/L	0.005596	-0.00385 mg/L	0.005596	145.31%	
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	57.3	-0.00022 mg/L	0.000037	-0.00022 mg/L	0.000037	17.04%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.9	-0.00049 mg/L	0.000052	-0.00049 mg/L	0.000052	10.73%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	-0.0	-0.00015 mg/L	0.000132	-0.00015 mg/L	0.000132	89.80%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	0.8	-0.00052 mg/L	0.000803	-0.00052 mg/L	0.000803	153.64%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	-2.5	-0.00166 mg/L	0.001216	-0.00166 mg/L	0.001216	73.13%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-6.0	0.00006 mg/L	0.004191	0.00006 mg/L	0.004191	>999.9%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-35.2	-0.00247 mg/L	0.000934	-0.00247 mg/L	0.000934	37.73%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-73.9	-0.0109 mg/L	0.00041	-0.0109 mg/L	0.00041	3.78%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-116.2	-0.00032 mg/L	0.000046	-0.00032 mg/L	0.000046	14.13%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.5	-0.00209 mg/L	0.000904	-0.00209 mg/L	0.000904	43.28%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	27.4	-0.00115 mg/L	0.000689	-0.00115 mg/L	0.000689	60.17%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-194.5	-0.00628 mg/L	0.000131	-0.00628 mg/L	0.000131	2.09%	
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	-5.7	0.0175 mg/L	0.02438	0.0175 mg/L	0.02438	138.93%	
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	-126.2	-0.00872 mg/L	0.003783	-0.00872 mg/L	0.003783	43.37%	
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	167.9	-0.00047 mg/L	0.000187	-0.00047 mg/L	0.000187	40.00%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	62.7	-0.00071 mg/L	0.000596	-0.00071 mg/L	0.000596	83.43%	
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 29 **Autosampler Location: 83**
Sample ID: L1102057401 **Date Collected: 2/23/2011 6:03:22 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057401

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Approved: February 24, 2011

Pierre Morris

Mean Data: L1102057401

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4939490.8						39048.67	0.79%
YRADIAL	294650.9						5416.46	1.84%
Ga 417.206	1361920.0						15217.12	1.12%
GaRADIAL	63360.0						1008.03	1.59%
Ag 328.068†	403.4	0.00081	mg/L	0.001375	0.00081	mg/L	0.001375	170.47%
Al 396.153†	63115.2	13.4	mg/L	0.04	13.4	mg/L	0.04	0.31%
As 188.979†	5.3	0.00544	mg/L	0.002225	0.00544	mg/L	0.002225	40.89%
Ba 233.527†	2593.4	0.0433	mg/L	0.00054	0.0433	mg/L	0.00054	1.25%
Be 234.861†	1221.7	-0.00005	mg/L	0.000232	-0.00005	mg/L	0.000232	432.16%
B 249.677†	1378.0	0.0626	mg/L	0.00226	0.0626	mg/L	0.00226	3.61%
Ca 227.546†	1779.9	16.8	mg/L	0.13	16.8	mg/L	0.13	0.80%
Cd 228.802†	27.7	0.00162	mg/L	0.000139	0.00162	mg/L	0.000139	8.53%
Co 228.616†	72.2	0.00330	mg/L	0.000368	0.00330	mg/L	0.000368	11.16%
Cr 267.716†	1776.0	0.0147	mg/L	0.00013	0.0147	mg/L	0.00013	0.92%
Cu 327.393†	1528.6	0.0119	mg/L	0.00099	0.0119	mg/L	0.00099	8.29%
Fe 239.562†	4365.5	10.3	mg/L	0.23	10.3	mg/L	0.23	2.24%
Mg 279.077†	7475.3	9.59	mg/L	0.252	9.59	mg/L	0.252	2.62%
Mn 257.610†	106512.5	0.241	mg/L	0.0021	0.241	mg/L	0.0021	0.87%
Mo 202.031†	23.4	0.00152	mg/L	0.000303	0.00152	mg/L	0.000303	19.92%
Ni 231.604†	424.9	0.0121	mg/L	0.00037	0.0121	mg/L	0.00037	3.03%
Pb 220.353†	74.0	0.0124	mg/L	0.00049	0.0124	mg/L	0.00049	4.00%
Sb 206.836†	18.9	0.0116	mg/L	0.00121	0.0116	mg/L	0.00121	10.50%
Se 196.026†	-22.6	-0.00506	mg/L	0.003111	-0.00506	mg/L	0.003111	61.50%
Si 251.611†	551231.6	16.0	mg/L	0.12	16.0	mg/L	0.12	0.77%
Sn 189.927†	-80.7	-0.0121	mg/L	0.00003	-0.0121	mg/L	0.00003	0.21%
Ti 334.940†	155197.2	0.214	mg/L	0.0019	0.214	mg/L	0.0019	0.90%
Tl 190.801†	35.4	0.0191	mg/L	0.00334	0.0191	mg/L	0.00334	17.50%
V 290.880†	3903.8	0.0256	mg/L	0.00155	0.0256	mg/L	0.00155	6.06%
Zn 206.200†	8273.6	0.248	mg/L	0.0020	0.248	mg/L	0.0020	0.82%
K 766.490†	25812.6	10.3	mg/L	0.21	10.3	mg/L	0.21	2.07%
Na 589.592†	487823.7	37.5	mg/L	0.29	37.5	mg/L	0.29	0.76%
Sr 407.771†	89459.0	0.0865	mg/L	0.00226	0.0865	mg/L	0.00226	2.61%
Li 670.784†	873.2	0.00996	mg/L	0.000102	0.00996	mg/L	0.000102	1.03%

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Sequence No.: 30 **Autosampler Location: 84**
Sample ID: L1102057401PS WG357407-01 **Date Collected: 2/23/2011 6:09:08 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057401PS WG357407-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102057401PS WG357407-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4749450.1						32167.53	0.68%
YRADIAL	292695.6						12685.01	4.33%
Ga 417.206	1288788.9						17263.89	1.34%
GaRADIAL	62770.7						2459.28	3.92%
Ag 328.068†	40136.4	0.202	mg/L	0.0054	0.202	mg/L	0.0054	2.67%
Al 396.153†	81911.2	17.4	mg/L	0.06	17.4	mg/L	0.06	0.36%
As 188.979†	220.9	0.200	mg/L	0.0037	0.200	mg/L	0.0037	1.86%
Ba 233.527†	32687.4	0.554	mg/L	0.0049	0.554	mg/L	0.0049	0.88%
Be 234.861†	15715.2	0.0256	mg/L	0.00040	0.0256	mg/L	0.00040	1.55%
B 249.677†	53397.5	1.05	mg/L	0.020	1.05	mg/L	0.020	1.90%
Ca 227.546†	2222.4	21.2	mg/L	0.30	21.2	mg/L	0.30	1.43%
Cd 228.802†	457.0	0.0257	mg/L	0.00044	0.0257	mg/L	0.00044	1.73%
Co 228.616†	2061.4	0.102	mg/L	0.0008	0.102	mg/L	0.0008	0.78%
Cr 267.716†	30535.2	0.263	mg/L	0.0026	0.263	mg/L	0.0026	1.00%
Cu 327.393†	37495.7	0.258	mg/L	0.0061	0.258	mg/L	0.0061	2.37%
Fe 239.562†	4868.7	11.5	mg/L	0.65	11.5	mg/L	0.65	5.60%
Mg 279.077†	10770.6	13.8	mg/L	0.76	13.8	mg/L	0.76	5.49%
Mn 257.610†	213582.8	0.481	mg/L	0.0007	0.481	mg/L	0.0007	0.15%
Mo 202.031†	6852.1	0.506	mg/L	0.0058	0.506	mg/L	0.0058	1.16%
Ni 231.604†	9163.1	0.264	mg/L	0.0016	0.264	mg/L	0.0016	0.61%

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Pb 220.353†	1582.5	0.264	mg/L	0.0021	0.264	mg/L	0.0021	0.79%
Sb 206.836†	971.0	0.606	mg/L	0.0084	0.606	mg/L	0.0084	1.38%
Se 196.026†	249.0	0.185	mg/L	0.0019	0.185	mg/L	0.0019	1.03%
Si 251.611†	620760.7	18.0	mg/L	0.15	18.0	mg/L	0.15	0.84%
Sn 189.927†	-82.9	-0.0125	mg/L	0.00071	-0.0125	mg/L	0.00071	5.66%
Ti 334.940†	515238.4	0.710	mg/L	0.0054	0.710	mg/L	0.0054	0.76%
Tl 190.801†	471.1	0.278	mg/L	0.0031	0.278	mg/L	0.0031	1.12%
V 290.880†	79969.5	0.534	mg/L	0.0032	0.534	mg/L	0.0032	0.60%
Zn 206.200†	24540.0	0.737	mg/L	0.0038	0.737	mg/L	0.0038	0.52%
K 766.490†	85875.7	34.5	mg/L	0.17	34.5	mg/L	0.17	0.49%
Na 589.592†	773320.9	60.2	mg/L	0.03	60.2	mg/L	0.03	0.05%
Sr 407.771†	580647.7	0.571	mg/L	0.0108	0.571	mg/L	0.0108	1.88%
Li 670.784†	40102.7	0.526	mg/L	0.0045	0.526	mg/L	0.0045	0.85%

Sequence No.: 31 **Autosampler Location: 85**
Sample ID: L1102057401DL WG357407-02 **Date Collected: 2/23/2011 6:14:57 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057401DL WG357407-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102057401DL WG357407-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5084258.1						23548.69	0.46%
YRADIAL	293005.9						2487.66	0.85%
Ga 417.206	1418730.2						15219.31	1.07%
GaRADIAL	64426.9						1492.51	2.32%
Ag 328.068†	-71.0	-0.00117	mg/L	0.000243	-0.00117	mg/L	0.000243	20.70%
Al 396.153†	12614.8	2.68	mg/L	0.015	2.68	mg/L	0.015	0.55%
As 188.979†	0.3	0.00074	mg/L	0.001088	0.00074	mg/L	0.001088	147.09%
Ba 233.527†	517.8	0.00824	mg/L	0.000064	0.00824	mg/L	0.000064	0.77%
Be 234.861†	353.5	0.00017	mg/L	0.000026	0.00017	mg/L	0.000026	14.93%
B 249.677†	494.5	0.0196	mg/L	0.00140	0.0196	mg/L	0.00140	7.11%
Ca 227.546†	353.9	3.32	mg/L	0.082	3.32	mg/L	0.082	2.48%
Cd 228.802†	1.2	0.00014	mg/L	0.000168	0.00014	mg/L	0.000168	122.58%
Co 228.616†	13.7	0.00097	mg/L	0.000275	0.00097	mg/L	0.000275	28.49%
Cr 267.716†	377.6	0.00295	mg/L	0.000139	0.00295	mg/L	0.000139	4.70%
Cu 327.393†	371.8	0.00290	mg/L	0.000465	0.00290	mg/L	0.000465	16.03%
Fe 239.562†	890.3	2.10	mg/L	0.042	2.10	mg/L	0.042	2.00%
Mg 279.077†	1543.1	1.97	mg/L	0.023	1.97	mg/L	0.023	1.17%
Mn 257.610†	21397.4	0.0481	mg/L	0.00052	0.0481	mg/L	0.00052	1.09%
Mo 202.031†	6.6	-0.00017	mg/L	0.000409	-0.00017	mg/L	0.000409	241.16%
Ni 231.604†	88.1	0.00239	mg/L	0.000162	0.00239	mg/L	0.000162	6.74%
Pb 220.353†	23.3	0.00335	mg/L	0.000718	0.00335	mg/L	0.000718	21.45%
Sb 206.836†	2.7	0.00152	mg/L	0.001877	0.00152	mg/L	0.001877	123.34%
Se 196.026†	-12.8	-0.00340	mg/L	0.004537	-0.00340	mg/L	0.004537	133.54%
Si 251.611†	109157.7	3.17	mg/L	0.036	3.17	mg/L	0.036	1.12%
Sn 189.927†	-79.4	-0.0119	mg/L	0.00070	-0.0119	mg/L	0.00070	5.93%
Ti 334.940†	30446.3	0.0418	mg/L	0.00057	0.0418	mg/L	0.00057	1.37%
Tl 190.801†	7.3	0.00159	mg/L	0.002363	0.00159	mg/L	0.002363	148.26%
V 290.880†	884.7	0.00475	mg/L	0.000294	0.00475	mg/L	0.000294	6.19%
Zn 206.200†	1573.7	0.0468	mg/L	0.00021	0.0468	mg/L	0.00021	0.44%
K 766.490†	5268.3	2.12	mg/L	0.030	2.12	mg/L	0.030	1.42%
Na 589.592†	97846.8	7.41	mg/L	0.114	7.41	mg/L	0.114	1.53%
Sr 407.771†	19160.9	0.0180	mg/L	0.00090	0.0180	mg/L	0.00090	5.00%
Li 670.784†	128.5	0.00015	mg/L	0.001107	0.00015	mg/L	0.001107	728.38%

Sequence No.: 32 **Autosampler Location: 86**
Sample ID: L1102057901 **Date Collected: 2/23/2011 6:21:36 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057901

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Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102057901

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4568647.5						76101.61	1.67%
YRADIAL	282689.8						5874.59	2.08%
Ga 417.206	1227296.4						26664.75	2.17%
GaRADIAL	61845.9						1819.80	2.94%
Ag 328.068†	68.9	-0.00055	mg/L	0.000255	-0.00055	mg/L	0.000255	46.74%
Al 396.153†	-77.4	-0.0283	mg/L	0.00524	-0.0283	mg/L	0.00524	18.51%
As 188.979†	3.2	0.00287	mg/L	0.003581	0.00287	mg/L	0.003581	124.97%
Ba 233.527†	6116.0	0.103	mg/L	0.0018	0.103	mg/L	0.0018	1.71%
Be 234.861†	35.4	0.00000	mg/L	0.000029	0.00000	mg/L	0.000029	>999.9%
B 249.677†	4120.1	0.0829	mg/L	0.00141	0.0829	mg/L	0.00141	1.70%
Ca 227.546†	2611.6	24.6	mg/L	0.53	24.6	mg/L	0.53	2.17%
Cd 228.802†	-1.0	-0.00001	mg/L	0.000082	-0.00001	mg/L	0.000082	813.64%
Co 228.616†	0.7	0.00042	mg/L	0.000261	0.00042	mg/L	0.000261	61.47%
Cr 267.716†	282.1	0.00220	mg/L	0.000118	0.00220	mg/L	0.000118	5.36%
Cu 327.393†	-166.5	-0.00104	mg/L	0.000891	-0.00104	mg/L	0.000891	85.38%
Fe 239.562†	128.3	0.301	mg/L	0.0189	0.301	mg/L	0.0189	6.28%
Mg 279.077†	24200.2	31.1	mg/L	1.53	31.1	mg/L	1.53	4.93%
Mn 257.610†	4915.1	0.0183	mg/L	0.00047	0.0183	mg/L	0.00047	2.56%
Mo 202.031†	5.1	-0.00038	mg/L	0.000356	-0.00038	mg/L	0.000356	93.96%
Ni 231.604†	61.5	0.00161	mg/L	0.000058	0.00161	mg/L	0.000058	3.58%
Pb 220.353†	1.3	0.00073	mg/L	0.001351	0.00073	mg/L	0.001351	184.04%
Sb 206.836†	9.9	0.00599	mg/L	0.000876	0.00599	mg/L	0.000876	14.62%
Se 196.026†	-18.4	-0.00236	mg/L	0.005023	-0.00236	mg/L	0.005023	212.52%
Si 251.611†	390936.1	11.3	mg/L	0.06	11.3	mg/L	0.06	0.49%
Sn 189.927†	-77.2	-0.0115	mg/L	0.00045	-0.0115	mg/L	0.00045	3.92%
Ti 334.940†	-356.8	-0.00041	mg/L	0.000231	-0.00041	mg/L	0.000231	56.42%
Tl 190.801†	49.9	0.0238	mg/L	0.00336	0.0238	mg/L	0.00336	14.10%
V 290.880†	-741.5	-0.00627	mg/L	0.001065	-0.00627	mg/L	0.001065	17.00%
Zn 206.200†	10.3	-0.00013	mg/L	0.000261	-0.00013	mg/L	0.000261	204.83%
K 766.490†	6394.4	1.98	mg/L	0.022	1.98	mg/L	0.022	1.10%
Na 589.592†	5540414.3	595	mg/L	35.9	595	mg/L	35.9	6.03%
Sr 407.771†	814628.3	0.804	mg/L	0.0520	0.804	mg/L	0.0520	6.46%
Li 670.784†	2857.3	0.0361	mg/L	0.00121	0.0361	mg/L	0.00121	3.36%

Sequence No.: 33 **Autosampler Location: 87**
Sample ID: L1102057902 **Date Collected: 2/23/2011 6:28:23 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057902

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102057902

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4663983.6						22135.52	0.47%
YRADIAL	279316.2						3281.06	1.17%
Ga 417.206	1256929.0						15812.15	1.26%
GaRADIAL	61112.7						365.64	0.60%
Ag 328.068†	49.3	-0.00064	mg/L	0.000752	-0.00064	mg/L	0.000752	116.70%
Al 396.153†	-43.7	-0.0211	mg/L	0.01661	-0.0211	mg/L	0.01661	78.71%
As 188.979†	1.7	0.00157	mg/L	0.001387	0.00157	mg/L	0.001387	88.51%
Ba 233.527†	5691.5	0.0958	mg/L	0.00053	0.0958	mg/L	0.00053	0.56%
Be 234.861†	46.3	-0.00001	mg/L	0.000082	-0.00001	mg/L	0.000082	663.88%
B 249.677†	3779.8	0.0772	mg/L	0.00165	0.0772	mg/L	0.00165	2.14%
Ca 227.546†	2415.6	22.8	mg/L	0.31	22.8	mg/L	0.31	1.37%
Cd 228.802†	0.7	0.00009	mg/L	0.000066	0.00009	mg/L	0.000066	73.27%
Co 228.616†	-5.9	0.00009	mg/L	0.000207	0.00009	mg/L	0.000207	229.87%
Cr 267.716†	298.6	0.00235	mg/L	0.000168	0.00235	mg/L	0.000168	7.14%
Cu 327.393†	8.2	0.00017	mg/L	0.000795	0.00017	mg/L	0.000795	473.61%
Fe 239.562†	193.8	0.456	mg/L	0.0055	0.456	mg/L	0.0055	1.20%

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Mg 279.077†	22871.3	29.4	mg/L	0.15	29.4	mg/L	0.15 0.52%
Mn 257.610†	4389.2	0.0171	mg/L	0.00009	0.0171	mg/L	0.00009 0.55%
Mo 202.031†	6.5	-0.00027	mg/L	0.000571	-0.00027	mg/L	0.000571 209.45%
Ni 231.604†	66.1	0.00174	mg/L	0.000359	0.00174	mg/L	0.000359 20.57%
Pb 220.353†	5.1	0.00125	mg/L	0.001095	0.00125	mg/L	0.001095 87.31%
Sb 206.836†	4.9	0.00292	mg/L	0.000451	0.00292	mg/L	0.000451 15.41%
Se 196.026†	-19.9	-0.00379	mg/L	0.008988	-0.00379	mg/L	0.008988 237.13%
Si 251.611†	385687.0	11.2	mg/L	0.11	11.2	mg/L	0.11 0.96%
Sn 189.927†	-81.1	-0.0122	mg/L	0.00107	-0.0122	mg/L	0.00107 8.77%
Ti 334.940†	-296.4	-0.00035	mg/L	0.000126	-0.00035	mg/L	0.000126 36.40%
Tl 190.801†	48.3	0.0231	mg/L	0.00150	0.0231	mg/L	0.00150 6.47%
V 290.880†	-745.0	-0.00628	mg/L	0.001888	-0.00628	mg/L	0.001888 30.07%
Zn 206.200†	71.8	0.00171	mg/L	0.000154	0.00171	mg/L	0.000154 8.97%
K 766.490†	6085.1	1.86	mg/L	0.086	1.86	mg/L	0.086 4.65%
Na 589.592†	5530550.0	592	mg/L	10.2	592	mg/L	10.2 1.72%
Sr 407.771†	767969.5	0.758	mg/L	0.0488	0.758	mg/L	0.0488 6.44%
Li 670.784†	2824.2	0.0356	mg/L	0.00131	0.0356	mg/L	0.00131 3.69%

Sequence No.: 34 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 6:35:12 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	165.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4844304.4						49326.88	1.02%
YRADIAL	280635.2						3690.21	1.31%
Ga 417.206	1270497.9						7963.98	0.63%
GaRADIAL	60874.7						597.93	0.98%
Ag 328.068†	78469.2	0.396	mg/L	0.0039	0.396	mg/L	0.0039	0.98%
QC value within limits for Ag 328.068 Recovery = 99.08%								
Al 396.153†	46624.7	9.91	mg/L	0.085	9.91	mg/L	0.085	0.86%
QC value within limits for Al 396.153 Recovery = 99.08%								
As 188.979†	425.0	0.385	mg/L	0.0056	0.385	mg/L	0.0056	1.45%
QC value within limits for As 188.979 Recovery = 96.22%								
Ba 233.527†	58341.5	0.990	mg/L	0.0060	0.990	mg/L	0.0060	0.60%
QC value within limits for Ba 233.527 Recovery = 98.95%								
Be 234.861†	28379.8	0.0499	mg/L	0.00049	0.0499	mg/L	0.00049	0.99%
QC value within limits for Be 234.861 Recovery = 99.70%								
B 249.677†	25697.4	0.496	mg/L	0.0060	0.496	mg/L	0.0060	1.22%
QC value within limits for B 249.677 Recovery = 99.13%								
Ca 227.546†	1021.3	9.96	mg/L	0.110	9.96	mg/L	0.110	1.11%
QC value within limits for Ca 227.546 Recovery = 99.57%								
Cd 228.802†	868.6	0.0487	mg/L	0.00053	0.0487	mg/L	0.00053	1.09%
QC value within limits for Cd 228.802 Recovery = 97.32%								
Co 228.616†	3806.3	0.189	mg/L	0.0015	0.189	mg/L	0.0015	0.79%
QC value within limits for Co 228.616 Recovery = 94.66%								
Cr 267.716†	56566.7	0.488	mg/L	0.0024	0.488	mg/L	0.0024	0.50%
QC value within limits for Cr 267.716 Recovery = 97.54%								
Cu 327.393†	70589.8	0.484	mg/L	0.0056	0.484	mg/L	0.0056	1.16%
QC value within limits for Cu 327.393 Recovery = 96.80%								
Fe 239.562†	1622.4	3.83	mg/L	0.028	3.83	mg/L	0.028	0.73%
QC value within limits for Fe 239.562 Recovery = 95.87%								
Mg 279.077†	7601.6	9.76	mg/L	0.050	9.76	mg/L	0.050	0.52%
QC value within limits for Mg 279.077 Recovery = 97.56%								
Mn 257.610†	221585.7	0.498	mg/L	0.0021	0.498	mg/L	0.0021	0.42%
QC value within limits for Mn 257.610 Recovery = 99.51%								
Mo 202.031†	13284.7	0.981	mg/L	0.0055	0.981	mg/L	0.0055	0.56%
QC value within limits for Mo 202.031 Recovery = 98.08%								
Ni 231.604†	17032.8	0.492	mg/L	0.0020	0.492	mg/L	0.0020	0.41%
QC value within limits for Ni 231.604 Recovery = 98.31%								
Pb 220.353†	2921.9	0.488	mg/L	0.0049	0.488	mg/L	0.0049	1.01%
QC value within limits for Pb 220.353 Recovery = 97.55%								
Sb 206.836†	1849.0	1.15	mg/L	0.015	1.15	mg/L	0.015	1.26%

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   QC value within limits for Sb 206.836  Recovery = 96.24%
Se 196.026†            548.4       0.389 mg/L        0.0009       0.389 mg/L        0.0009   0.23%
   QC value within limits for Se 196.026  Recovery = 97.29%
Si 251.611†         168111.4        4.86 mg/L         0.056        4.86 mg/L         0.056   1.14%
   QC value within limits for Si 251.611  Recovery = 97.29%
Sn 189.927†           5717.8       0.978 mg/L        0.0086       0.978 mg/L        0.0086   0.88%
   QC value within limits for Sn 189.927  Recovery = 97.76%
Ti 334.940†         709930.6       0.979 mg/L        0.0108       0.979 mg/L        0.0108   1.10%
   QC value within limits for Ti 334.940  Recovery = 97.86%
Tl 190.801†            833.9       0.494 mg/L        0.0070       0.494 mg/L        0.0070   1.43%
   QC value within limits for Tl 190.801  Recovery = 98.72%
V 290.880†          147121.2       0.982 mg/L        0.0054       0.982 mg/L        0.0054   0.55%
   QC value within limits for V 290.880  Recovery = 98.21%
Zn 206.200†          32922.7       0.990 mg/L        0.0086       0.990 mg/L        0.0086   0.87%
   QC value within limits for Zn 206.200  Recovery = 98.98%
K 766.490†          121361.4        48.9 mg/L          0.55        48.9 mg/L          0.55   1.13%
   QC value within limits for K 766.490  Recovery = 97.74%
Na 589.592†         631254.2        48.8 mg/L          0.23        48.8 mg/L          0.23   0.47%
   QC value within limits for Na 589.592  Recovery = 97.64%
Sr 407.771†        1023744.7        1.01 mg/L         0.071        1.01 mg/L         0.071   7.00%
   QC value within limits for Sr 407.771  Recovery = 101.01%
Li 670.784†          74303.3       0.977 mg/L        0.0042       0.977 mg/L        0.0042   0.43%
   QC value within limits for Li 670.784  Recovery = 97.68%
All analyte(s) passed QC.

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Sequence No.: 35                                    Autosampler Location: 1
Sample ID: CCB                                      Date Collected: 2/23/2011 6:41:51 PM
Analyst:                                            Data Type: Original
Initial Sample Wt:                                  Initial Sample Vol:
Dilution:                                           Sample Prep Vol:

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Nebulizer Parameters: CCB
Analyte                Back Pressure    Flow
All                    166.0 kPa        0.50 L/min

----------------------------------------------------------------------------------------------------------------
Mean Data: CCB
                  Mean Corrected          Calib.                          Sample
Analyte              Intensity      Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029          4989548.5                                                      87690.83   1.76%
YRADIAL             295447.3                                                       5250.56   1.78%
Ga 417.206         1317560.3                                                      12531.45   0.95%
GaRADIAL             63761.1                                                       2057.66   3.23%
Ag 328.068†           -131.0    -0.00137 mg/L      0.000699    -0.00137 mg/L      0.000699  51.01%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†            -2.7     -0.0124 mg/L       0.01392     -0.0124 mg/L       0.01392 112.14%
   QC value within limits for Al 396.153  Recovery = Not calculated
As 188.979†            -0.5    -0.00004 mg/L      0.002301    -0.00004 mg/L      0.002301 >999.9%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†            -3.5    -0.00057 mg/L      0.000072    -0.00057 mg/L      0.000072  12.66%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†            40.6     0.00007 mg/L      0.000016     0.00007 mg/L      0.000016  21.78%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†            114.0     0.00567 mg/L      0.001237     0.00567 mg/L      0.001237  21.83%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†            3.0     -0.00466 mg/L      0.079075    -0.00466 mg/L      0.079075 >999.9%
   QC value within limits for Ca 227.546  Recovery = Not calculated
Cd 228.802†            -3.0    -0.00010 mg/L      0.000117    -0.00010 mg/L      0.000117 115.03%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†            -2.2     0.00032 mg/L      0.000183     0.00032 mg/L      0.000183  57.39%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†            -4.4    -0.00026 mg/L      0.000126    -0.00026 mg/L      0.000126  48.11%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†            74.3     0.00057 mg/L      0.000854     0.00057 mg/L      0.000854 148.58%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†            1.4      0.00124 mg/L      0.005745     0.00124 mg/L      0.005745 462.32%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†            5.8      0.00035 mg/L      0.007516     0.00035 mg/L      0.007516 >999.9%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†            41.3    -0.00025 mg/L      0.000016    -0.00025 mg/L      0.000016   6.18%
   QC value within limits for Mn 257.610  Recovery = Not calculated
```

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Mo 202.031†	6.9	-0.00026 mg/L	0.000353	-0.00026 mg/L	0.000353	134.30%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	9.1	0.00012 mg/L	0.000396	0.00012 mg/L	0.000396	336.01%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	2.4	-0.00025 mg/L	0.000206	-0.00025 mg/L	0.000206	81.45%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	1.2	0.00063 mg/L	0.002542	0.00063 mg/L	0.002542	405.80%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-2.5	0.00247 mg/L	0.007632	0.00247 mg/L	0.007632	308.75%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	24.3	-0.00075 mg/L	0.000679	-0.00075 mg/L	0.000679	90.48%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-76.6	-0.0114 mg/L	0.00025	-0.0114 mg/L	0.00025	2.19%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-42.6	-0.00022 mg/L	0.000165	-0.00022 mg/L	0.000165	73.82%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.6	-0.00205 mg/L	0.002641	-0.00205 mg/L	0.002641	128.82%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	55.7	-0.00096 mg/L	0.000544	-0.00096 mg/L	0.000544	56.97%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	-209.1	-0.00671 mg/L	0.000147	-0.00671 mg/L	0.000147	2.19%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	127.9	0.0707 mg/L	0.04706	0.0707 mg/L	0.04706	66.52%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	1403.2	0.107 mg/L	0.0099	0.107 mg/L	0.0099	9.27%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	183.9	-0.00045 mg/L	0.000324	-0.00045 mg/L	0.000324	71.57%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	120.6	0.00005 mg/L	0.000373	0.00005 mg/L	0.000373	780.48%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 36 **Autosampler Location: 88**
Sample ID: PBW 04 WG357204-02 **Date Collected: 2/23/2011 6:48:33 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 04 WG357204-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: PBW 04 WG357204-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5182960.4						70862.82	1.37%
YRADIAL	296568.3						1887.33	0.64%
Ga 417.206	1312191.9						20197.06	1.54%
GaRADIAL	64735.3						1061.78	1.64%
Ag 328.068†	-125.6	-0.00134	mg/L	0.000711	-0.00134	mg/L	0.000711	52.94%
Al 396.153†	37.4	-0.00385	mg/L	0.008840	-0.00385	mg/L	0.008840	229.90%
As 188.979†	-1.0	-0.00051	mg/L	0.003414	-0.00051	mg/L	0.003414	665.83%
Ba 233.527†	238.3	0.00352	mg/L	0.000122	0.00352	mg/L	0.000122	3.48%
Be 234.861†	-44.7	-0.00008	mg/L	0.000021	-0.00008	mg/L	0.000021	28.00%
B 249.677†	122.5	0.00583	mg/L	0.000756	0.00583	mg/L	0.000756	12.96%
Ca 227.546†	-3.2	-0.0628	mg/L	0.03276	-0.0628	mg/L	0.03276	52.20%
Cd 228.802†	1.6	0.00016	mg/L	0.000165	0.00016	mg/L	0.000165	103.02%
Co 228.616†	-3.1	0.00027	mg/L	0.000146	0.00027	mg/L	0.000146	53.29%
Cr 267.716†	27.0	0.00001	mg/L	0.000103	0.00001	mg/L	0.000103	>999.9%
Cu 327.393†	171.5	0.00124	mg/L	0.000572	0.00124	mg/L	0.000572	46.17%
Fe 239.562†	3.5	0.00626	mg/L	0.005004	0.00626	mg/L	0.005004	79.97%
Mg 279.077†	4.5	-0.00142	mg/L	0.003414	-0.00142	mg/L	0.003414	240.42%
Mn 257.610†	-4.0	-0.00035	mg/L	0.000018	-0.00035	mg/L	0.000018	5.08%
Mo 202.031†	-2.8	-0.00098	mg/L	0.000189	-0.00098	mg/L	0.000189	19.33%
Ni 231.604†	-1.0	-0.00017	mg/L	0.000323	-0.00017	mg/L	0.000323	186.58%
Pb 220.353†	4.6	0.00009	mg/L	0.000576	0.00009	mg/L	0.000576	620.09%
Sb 206.836†	2.8	0.00158	mg/L	0.002422	0.00158	mg/L	0.002422	153.39%
Se 196.026†	-0.2	0.00408	mg/L	0.003772	0.00408	mg/L	0.003772	92.51%
Si 251.611†	39.9	-0.00029	mg/L	0.000439	-0.00029	mg/L	0.000439	152.81%
Sn 189.927†	-56.4	-0.00796	mg/L	0.000462	-0.00796	mg/L	0.000462	5.80%

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Ti 334.940†	-55.2	-0.00024 mg/L	0.000161	-0.00024 mg/L	0.000161	66.83%
Tl 190.801†	-2.6	-0.00449 mg/L	0.003157	-0.00449 mg/L	0.003157	70.30%
V 290.880†	-29.8	-0.00153 mg/L	0.000348	-0.00153 mg/L	0.000348	22.78%
Zn 206.200†	-139.6	-0.00463 mg/L	0.000129	-0.00463 mg/L	0.000129	2.80%
K 766.490†	48.0	0.0389 mg/L	0.02252	0.0389 mg/L	0.02252	57.90%
Na 589.592†	898.1	0.0686 mg/L	0.00695	0.0686 mg/L	0.00695	10.14%
Sr 407.771†	75.6	-0.00056 mg/L	0.000112	-0.00056 mg/L	0.000112	20.08%
Li 670.784†	-107.1	-0.00295 mg/L	0.002101	-0.00295 mg/L	0.002101	71.19%

Sequence No.: 37 **Autosampler Location: 89**
Sample ID: LCSW 04 WG357204-03 **Date Collected: 2/23/2011 6:55:13 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 04 WG357204-03

Analyte	Back Pressure	Flow
All	165.0 kPa	0.50 L/min

Mean Data: LCSW 04 WG357204-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4985131.7						15041.26	0.30%
YRADIAL	284305.8						4209.60	1.48%
Ga 417.206	1281517.4						6760.66	0.53%
GaRADIAL	62103.2						1568.42	2.53%
Ag 328.068†	37991.7	0.192	mg/L	0.0016	0.192	mg/L	0.0016	0.86%
Al 396.153†	22578.6	4.79	mg/L	0.026	4.79	mg/L	0.026	0.55%
As 188.979†	200.9	0.182	mg/L	0.0021	0.182	mg/L	0.0021	1.16%
Ba 233.527†	28176.6	0.478	mg/L	0.0016	0.478	mg/L	0.0016	0.33%
Be 234.861†	13211.8	0.0232	mg/L	0.00015	0.0232	mg/L	0.00015	0.64%
B 249.677†	48520.2	0.925	mg/L	0.0071	0.925	mg/L	0.0071	0.77%
Ca 227.546†	479.6	4.66	mg/L	0.065	4.66	mg/L	0.065	1.40%
Cd 228.802†	422.9	0.0238	mg/L	0.00025	0.0238	mg/L	0.00025	1.05%
Co 228.616†	1867.9	0.0931	mg/L	0.00044	0.0931	mg/L	0.00044	0.47%
Cr 267.716†	27526.9	0.237	mg/L	0.0008	0.237	mg/L	0.0008	0.33%
Cu 327.393†	34678.5	0.238	mg/L	0.0009	0.238	mg/L	0.0009	0.38%
Fe 239.562†	806.4	1.91	mg/L	0.050	1.91	mg/L	0.050	2.64%
Mg 279.077†	3795.5	4.87	mg/L	0.124	4.87	mg/L	0.124	2.54%
Mn 257.610†	108833.9	0.244	mg/L	0.0006	0.244	mg/L	0.0006	0.23%
Mo 202.031†	6465.5	0.477	mg/L	0.0000	0.477	mg/L	0.0000	0.01%
Ni 231.604†	8296.9	0.239	mg/L	0.0015	0.239	mg/L	0.0015	0.63%
Pb 220.353†	1433.1	0.239	mg/L	0.0012	0.239	mg/L	0.0012	0.50%
Sb 206.836†	907.2	0.567	mg/L	0.0070	0.567	mg/L	0.0070	1.24%
Se 196.026†	259.4	0.186	mg/L	0.0018	0.186	mg/L	0.0018	0.99%
Si 251.611†	83497.3	2.42	mg/L	0.022	2.42	mg/L	0.022	0.90%
Sn 189.927†	-53.1	-0.00738	mg/L	0.000814	-0.00738	mg/L	0.000814	11.02%
Ti 334.940†	348324.6	0.480	mg/L	0.0032	0.480	mg/L	0.0032	0.66%
Tl 190.801†	406.2	0.239	mg/L	0.0027	0.239	mg/L	0.0027	1.14%
V 290.880†	71558.3	0.477	mg/L	0.0010	0.477	mg/L	0.0010	0.20%
Zn 206.200†	15504.4	0.466	mg/L	0.0012	0.466	mg/L	0.0012	0.26%
K 766.490†	59259.4	23.8	mg/L	0.23	23.8	mg/L	0.23	0.95%
Na 589.592†	315492.6	24.1	mg/L	0.88	24.1	mg/L	0.88	3.65%
Sr 407.771†	515398.3	0.508	mg/L	0.0226	0.508	mg/L	0.0226	4.45%
Li 670.784†	36448.9	0.478	mg/L	0.0052	0.478	mg/L	0.0052	1.09%

Sequence No.: 38 **Autosampler Location: 90**
Sample ID: FBLK WG357124-01 **Date Collected: 2/23/2011 7:01:56 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG357124-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: FBLK WG357124-01

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Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4944305.7						57395.27	1.16%
YRADIAL	290411.9						3722.78	1.28%
Ga 417.206	1253405.1						8071.86	0.64%
GaRADIAL	61723.1						571.86	0.93%
Ag 328.068†	-152.2	-0.00148	mg/L	0.000369	-0.00148	mg/L	0.000369	24.89%
Al 396.153†	258.4	0.0432	mg/L	0.00849	0.0432	mg/L	0.00849	19.64%
As 188.979†	-4.2	-0.00344	mg/L	0.001187	-0.00344	mg/L	0.001187	34.47%
Ba 233.527†	185.6	0.00263	mg/L	0.000047	0.00263	mg/L	0.000047	1.80%
Be 234.861†	-52.1	-0.00011	mg/L	0.000019	-0.00011	mg/L	0.000019	16.77%
B 249.677†	356.6	0.0108	mg/L	0.00127	0.0108	mg/L	0.00127	11.78%
Ca 227.546†	9.4	0.0572	mg/L	0.00837	0.0572	mg/L	0.00837	14.65%
Cd 228.802†	-0.1	0.00008	mg/L	0.000132	0.00008	mg/L	0.000132	157.00%
Co 228.616†	-6.6	0.00009	mg/L	0.000275	0.00009	mg/L	0.000275	309.70%
Cr 267.716†	63.7	0.00032	mg/L	0.000112	0.00032	mg/L	0.000112	34.66%
Cu 327.393†	208.9	0.00151	mg/L	0.000593	0.00151	mg/L	0.000593	39.31%
Fe 239.562†	53.6	0.125	mg/L	0.0102	0.125	mg/L	0.0102	8.15%
Mg 279.077†	56.6	0.0654	mg/L	0.00165	0.0654	mg/L	0.00165	2.53%
Mn 257.610†	814.9	0.00280	mg/L	0.000077	0.00280	mg/L	0.000077	2.76%
Mo 202.031†	-1.5	-0.00088	mg/L	0.000366	-0.00088	mg/L	0.000366	41.56%
Ni 231.604†	21.0	0.00046	mg/L	0.000103	0.00046	mg/L	0.000103	22.19%
Pb 220.353†	11.1	0.00117	mg/L	0.000682	0.00117	mg/L	0.000682	58.09%
Sb 206.836†	3.3	0.00192	mg/L	0.001486	0.00192	mg/L	0.001486	77.60%
Se 196.026†	4.5	0.00740	mg/L	0.005641	0.00740	mg/L	0.005641	76.24%
Si 251.611†	2549.3	0.0726	mg/L	0.00063	0.0726	mg/L	0.00063	0.86%
Sn 189.927†	-58.1	-0.00825	mg/L	0.000645	-0.00825	mg/L	0.000645	7.81%
Ti 334.940†	1289.4	0.00161	mg/L	0.000011	0.00161	mg/L	0.000011	0.67%
Tl 190.801†	-0.8	-0.00338	mg/L	0.002981	-0.00338	mg/L	0.002981	88.28%
V 290.880†	184.1	-0.00009	mg/L	0.000562	-0.00009	mg/L	0.000562	648.89%
Zn 206.200†	-28.7	-0.00130	mg/L	0.000130	-0.00130	mg/L	0.000130	9.99%
K 766.490†	528.3	0.0878	mg/L	0.02039	0.0878	mg/L	0.02039	23.23%
Na 589.592†	1759051.7	143	mg/L	1.6	143	mg/L	1.6	1.10%
Sr 407.771†	623.2	-0.00003	mg/L	0.000108	-0.00003	mg/L	0.000108	321.88%
Li 670.784†	168.4	0.00068	mg/L	0.001251	0.00068	mg/L	0.001251	184.97%

Sequence No.: 39 **Autosampler Location: 91**
Sample ID: FBLK WG357124-02 **Date Collected: 2/23/2011 7:08:41 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG357124-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: FBLK WG357124-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5190652.7						12978.50	0.25%
YRADIAL	302553.8						5481.96	1.81%
Ga 417.206	1314630.7						2446.88	0.19%
GaRADIAL	65440.3						1048.88	1.60%
Ag 328.068†	-111.4	-0.00128	mg/L	0.000660	-0.00128	mg/L	0.000660	51.49%
Al 396.153†	633.6	0.123	mg/L	0.0198	0.123	mg/L	0.0198	16.07%
As 188.979†	-1.4	-0.00084	mg/L	0.000830	-0.00084	mg/L	0.000830	98.34%
Ba 233.527†	73.5	0.00073	mg/L	0.000040	0.00073	mg/L	0.000040	5.54%
Be 234.861†	-17.9	-0.00007	mg/L	0.000050	-0.00007	mg/L	0.000050	68.60%
B 249.677†	69.9	0.00563	mg/L	0.000062	0.00563	mg/L	0.000062	1.11%
Ca 227.546†	14.6	0.106	mg/L	0.0448	0.106	mg/L	0.0448	42.35%
Cd 228.802†	-0.3	0.00005	mg/L	0.000073	0.00005	mg/L	0.000073	141.81%
Co 228.616†	-8.4	-0.00001	mg/L	0.000220	-0.00001	mg/L	0.000220	>999.9%
Cr 267.716†	66.4	0.00034	mg/L	0.000056	0.00034	mg/L	0.000056	16.32%
Cu 327.393†	220.5	0.00160	mg/L	0.000438	0.00160	mg/L	0.000438	27.37%
Fe 239.562†	87.9	0.206	mg/L	0.0045	0.206	mg/L	0.0045	2.18%
Mg 279.077†	68.6	0.0808	mg/L	0.00385	0.0808	mg/L	0.00385	4.77%
Mn 257.610†	1962.8	0.00404	mg/L	0.000032	0.00404	mg/L	0.000032	0.80%
Mo 202.031†	-5.5	-0.00117	mg/L	0.000048	-0.00117	mg/L	0.000048	4.13%
Ni 231.604†	6.6	0.00005	mg/L	0.000352	0.00005	mg/L	0.000352	736.74%
Pb 220.353†	13.2	0.00151	mg/L	0.001526	0.00151	mg/L	0.001526	100.80%

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Sb 206.836†	2.1	0.00118 mg/L	0.002644	0.00118 mg/L	0.002644	224.31%
Se 196.026†	2.7	0.00621 mg/L	0.002156	0.00621 mg/L	0.002156	34.73%
Si 251.611†	2092.3	0.0593 mg/L	0.00028	0.0593 mg/L	0.00028	0.47%
Sn 189.927†	-58.8	-0.00837 mg/L	0.001192	-0.00837 mg/L	0.001192	14.25%
Ti 334.940†	2793.6	0.00369 mg/L	0.000086	0.00369 mg/L	0.000086	2.32%
Tl 190.801†	-7.9	-0.00753 mg/L	0.002068	-0.00753 mg/L	0.002068	27.48%
V 290.880†	-80.4	-0.00185 mg/L	0.000743	-0.00185 mg/L	0.000743	40.20%
Zn 206.200†	-26.8	-0.00125 mg/L	0.000076	-0.00125 mg/L	0.000076	6.12%
K 766.490†	46.4	0.0382 mg/L	0.02379	0.0382 mg/L	0.02379	62.22%
Na 589.592†	1238.5	0.0943 mg/L	0.01124	0.0943 mg/L	0.01124	11.92%
Sr 407.771†	362.3	-0.00030 mg/L	0.000064	-0.00030 mg/L	0.000064	21.11%
Li 670.784†	-55.8	-0.00228 mg/L	0.000858	-0.00228 mg/L	0.000858	37.70%

Sequence No.: 40 **Autosampler Location: 92**
Sample ID: L1102049201 **Date Collected: 2/23/2011 7:15:22 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049201

Analyte	Back Pressure	Flow
All	165.0 kPa	0.50 L/min

Mean Data: L1102049201

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5086040.0						54206.07	1.07%
YRADIAL	291401.5						2676.50	0.92%
Ga 417.206	1333226.0						4051.95	0.30%
GaRADIAL	63785.1						1850.12	2.90%
Ag 328.068†	-194.5	-0.00170	mg/L	0.000239	-0.00170	mg/L	0.000239	14.03%
Al 396.153†	399.0	0.0731	mg/L	0.02033	0.0731	mg/L	0.02033	27.79%
As 188.979†	0.1	0.00045	mg/L	0.000973	0.00045	mg/L	0.000973	214.87%
Ba 233.527†	58.0	0.00047	mg/L	0.000094	0.00047	mg/L	0.000094	20.00%
Be 234.861†	-27.8	-0.00007	mg/L	0.000001	-0.00007	mg/L	0.000001	1.92%
B 249.677†	70.2	0.00543	mg/L	0.001262	0.00543	mg/L	0.001262	23.23%
Ca 227.546†	120.3	1.10	mg/L	0.015	1.10	mg/L	0.015	1.40%
Cd 228.802†	4.6	0.00032	mg/L	0.000126	0.00032	mg/L	0.000126	39.23%
Co 228.616†	-12.2	-0.00021	mg/L	0.000403	-0.00021	mg/L	0.000403	192.24%
Cr 267.716†	129.0	0.00088	mg/L	0.000100	0.00088	mg/L	0.000100	11.39%
Cu 327.393†	943.7	0.00654	mg/L	0.000344	0.00654	mg/L	0.000344	5.26%
Fe 239.562†	64.4	0.150	mg/L	0.0033	0.150	mg/L	0.0033	2.22%
Mg 279.077†	426.7	0.541	mg/L	0.0130	0.541	mg/L	0.0130	2.41%
Mn 257.610†	9428.1	0.0207	mg/L	0.00036	0.0207	mg/L	0.00036	1.72%
Mo 202.031†	53.3	0.00317	mg/L	0.000620	0.00317	mg/L	0.000620	19.57%
Ni 231.604†	11.1	0.00018	mg/L	0.000172	0.00018	mg/L	0.000172	97.36%
Pb 220.353†	11.8	0.00136	mg/L	0.001045	0.00136	mg/L	0.001045	76.83%
Sb 206.836†	8.3	0.00507	mg/L	0.000544	0.00507	mg/L	0.000544	10.72%
Se 196.026†	-10.5	-0.00280	mg/L	0.004666	-0.00280	mg/L	0.004666	166.72%
Si 251.611†	14162.5	0.410	mg/L	0.0059	0.410	mg/L	0.0059	1.45%
Sn 189.927†	-51.4	-0.00710	mg/L	0.000342	-0.00710	mg/L	0.000342	4.81%
Ti 334.940†	7279.9	0.00988	mg/L	0.000212	0.00988	mg/L	0.000212	2.14%
Tl 190.801†	-1.3	-0.00368	mg/L	0.002785	-0.00368	mg/L	0.002785	75.73%
V 290.880†	34.8	-0.00109	mg/L	0.000631	-0.00109	mg/L	0.000631	58.11%
Zn 206.200†	1267.2	0.0376	mg/L	0.00057	0.0376	mg/L	0.00057	1.53%
K 766.490†	1146.1	0.477	mg/L	0.0382	0.477	mg/L	0.0382	8.02%
Na 589.592†	8984.9	0.679	mg/L	0.0196	0.679	mg/L	0.0196	2.89%
Sr 407.771†	3791.5	0.00309	mg/L	0.000228	0.00309	mg/L	0.000228	7.37%
Li 670.784†	-20.9	-0.00182	mg/L	0.001272	-0.00182	mg/L	0.001272	70.05%

Sequence No.: 41 **Autosampler Location: 93**
Sample ID: L1102049201PS WG357223-03 **Date Collected: 2/23/2011 7:22:02 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049201PS WG357223-03

Analyte	Back Pressure	Flow

Approved: February 24, 2011

Pierre Morris

All 166.0 kPa 0.50 L/min

Mean Data: L1102049201PS WG357223-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5029293.1						56657.47	1.13%
YRADIAL	300901.5						1953.38	0.65%
Ga 417.206	1298590.6						16906.44	1.30%
GaRADIAL	65479.5						831.21	1.27%
Ag 328.068†	38131.5	0.192	mg/L	0.0043	0.192	mg/L	0.0043	2.24%
Al 396.153†	22169.7	4.70	mg/L	0.039	4.70	mg/L	0.039	0.83%
As 188.979†	201.9	0.183	mg/L	0.0015	0.183	mg/L	0.0015	0.83%
Ba 233.527†	28298.6	0.480	mg/L	0.0059	0.480	mg/L	0.0059	1.22%
Be 234.861†	13266.6	0.0233	mg/L	0.00012	0.0233	mg/L	0.00012	0.51%
B 249.677†	48878.2	0.932	mg/L	0.0167	0.932	mg/L	0.0167	1.79%
Ca 227.546†	606.9	5.87	mg/L	0.111	5.87	mg/L	0.111	1.90%
Cd 228.802†	418.3	0.0235	mg/L	0.00039	0.0235	mg/L	0.00039	1.67%
Co 228.616†	1847.6	0.0921	mg/L	0.00119	0.0921	mg/L	0.00119	1.30%
Cr 267.716†	27702.9	0.239	mg/L	0.0026	0.239	mg/L	0.0026	1.09%
Cu 327.393†	35636.5	0.244	mg/L	0.0056	0.244	mg/L	0.0056	2.29%
Fe 239.562†	816.0	1.93	mg/L	0.014	1.93	mg/L	0.014	0.74%
Mg 279.077†	3968.5	5.09	mg/L	0.036	5.09	mg/L	0.036	0.70%
Mn 257.610†	117489.9	0.264	mg/L	0.0030	0.264	mg/L	0.0030	1.14%
Mo 202.031†	6573.0	0.485	mg/L	0.0045	0.485	mg/L	0.0045	0.92%
Ni 231.604†	8272.5	0.239	mg/L	0.0029	0.239	mg/L	0.0029	1.19%
Pb 220.353†	1421.1	0.237	mg/L	0.0033	0.237	mg/L	0.0033	1.41%
Sb 206.836†	910.5	0.569	mg/L	0.0074	0.569	mg/L	0.0074	1.30%
Se 196.026†	254.0	0.183	mg/L	0.0024	0.183	mg/L	0.0024	1.32%
Si 251.611†	96713.1	2.80	mg/L	0.052	2.80	mg/L	0.052	1.85%
Sn 189.927†	-58.8	-0.00837	mg/L	0.000459	-0.00837	mg/L	0.000459	5.49%
Ti 334.940†	345816.9	0.477	mg/L	0.0017	0.477	mg/L	0.0017	0.36%
Tl 190.801†	401.1	0.236	mg/L	0.0049	0.236	mg/L	0.0049	2.08%
V 290.880†	71936.2	0.480	mg/L	0.0054	0.480	mg/L	0.0054	1.12%
Zn 206.200†	16706.9	0.502	mg/L	0.0024	0.502	mg/L	0.0024	0.48%
K 766.490†	58099.0	23.3	mg/L	0.11	23.3	mg/L	0.11	0.46%
Na 589.592†	306173.9	23.4	mg/L	0.27	23.4	mg/L	0.27	1.14%
Sr 407.771†	487491.6	0.481	mg/L	0.0288	0.481	mg/L	0.0288	6.00%
Li 670.784†	35143.9	0.461	mg/L	0.0031	0.461	mg/L	0.0031	0.68%

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Sequence No.: 42 **Autosampler Location: 94**
Sample ID: L1102049201DL WG357223-04 **Date Collected: 2/23/2011 7:28:45 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049201DL WG357223-04

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102049201DL WG357223-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5023350.2						33797.58	0.67%
YRADIAL	292417.6						5121.95	1.75%
Ga 417.206	1294429.5						15809.09	1.22%
GaRADIAL	63177.1						1748.64	2.77%
Ag 328.068†	-96.9	-0.00120	mg/L	0.000508	-0.00120	mg/L	0.000508	42.37%
Al 396.153†	94.7	0.00833	mg/L	0.014209	0.00833	mg/L	0.014209	170.55%
As 188.979†	1.2	0.00151	mg/L	0.001145	0.00151	mg/L	0.001145	76.02%
Ba 233.527†	12.2	-0.00030	mg/L	0.000095	-0.00030	mg/L	0.000095	31.35%
Be 234.861†	-3.8	-0.00001	mg/L	0.000033	-0.00001	mg/L	0.000033	362.77%
B 249.677†	253.1	0.00842	mg/L	0.000523	0.00842	mg/L	0.000523	6.21%
Ca 227.546†	20.1	0.157	mg/L	0.0552	0.157	mg/L	0.0552	35.07%
Cd 228.802†	-1.0	0.00000	mg/L	0.000065	0.00000	mg/L	0.000065	>999.9%
Co 228.616†	-6.5	0.00010	mg/L	0.000321	0.00010	mg/L	0.000321	323.55%
Cr 267.716†	28.2	0.00002	mg/L	0.000143	0.00002	mg/L	0.000143	767.88%
Cu 327.393†	211.3	0.00152	mg/L	0.000660	0.00152	mg/L	0.000660	43.52%
Fe 239.562†	14.4	0.0321	mg/L	0.00611	0.0321	mg/L	0.00611	19.06%
Mg 279.077†	91.1	0.110	mg/L	0.0058	0.110	mg/L	0.0058	5.30%

Approved: February 24, 2011

Pierre Morris

Mn 257.610†	1938.3	0.00399	mg/L	0.000017	0.00399	mg/L	0.000017 0.43%
Mo 202.031†	11.3	0.00006	mg/L	0.000334	0.00006	mg/L	0.000334 550.50%
Ni 231.604†	7.0	0.00005	mg/L	0.000395	0.00005	mg/L	0.000395 728.20%
Pb 220.353†	3.0	-0.00015	mg/L	0.000445	-0.00015	mg/L	0.000445 297.94%
Sb 206.836†	-0.1	-0.00017	mg/L	0.002043	-0.00017	mg/L	0.002043 >999.9%
Se 196.026†	-4.0	0.00145	mg/L	0.001444	0.00145	mg/L	0.001444 99.46%
Si 251.611†	2955.1	0.0843	mg/L	0.00347	0.0843	mg/L	0.00347 4.11%
Sn 189.927†	-65.6	-0.00953	mg/L	0.000260	-0.00953	mg/L	0.000260 2.73%
Ti 334.940†	1386.3	0.00175	mg/L	0.000138	0.00175	mg/L	0.000138 7.87%
Tl 190.801†	4.0	-0.00059	mg/L	0.003577	-0.00059	mg/L	0.003577 606.10%
V 290.880†	127.2	-0.00048	mg/L	0.001655	-0.00048	mg/L	0.001655 348.16%
Zn 206.200†	153.5	0.00417	mg/L	0.000145	0.00417	mg/L	0.000145 3.47%
K 766.490†	173.9	0.0891	mg/L	0.02023	0.0891	mg/L	0.02023 22.72%
Na 589.592†	2268.2	0.172	mg/L	0.0078	0.172	mg/L	0.0078 4.51%
Sr 407.771†	1135.5	0.00048	mg/L	0.000159	0.00048	mg/L	0.000159 32.91%
Li 670.784†	75.1	-0.00055	mg/L	0.000403	-0.00055	mg/L	0.000403 73.18%

Sequence No.: 43 **Autosampler Location: 95**
Sample ID: L1102053501 WG357204-01 **Date Collected: 2/23/2011 7:35:23 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053501 WG357204-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102053501 WG357204-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4893055.3						36665.86	0.75%
YRADIAL	287517.0						3074.40	1.07%
Ga 417.206	1290817.0						6423.19	0.50%
GaRADIAL	62707.2						1166.08	1.86%
Ag 328.068†	781.1	0.00322	mg/L	0.000220	0.00322	mg/L	0.000220	6.85%
Al 396.153†	25.8	-0.00633	mg/L	0.006347	-0.00633	mg/L	0.006347	100.22%
As 188.979†	12.2	0.00748	mg/L	0.000676	0.00748	mg/L	0.000676	9.04%
Ba 233.527†	3227.9	0.0541	mg/L	0.00041	0.0541	mg/L	0.00041	0.76%
Be 234.861†	-30.7	-0.00006	mg/L	0.000018	-0.00006	mg/L	0.000018	28.81%
B 249.677†	1302.9	0.0284	mg/L	0.00010	0.0284	mg/L	0.00010	0.34%
Ca 227.546†	21211.0	201	mg/L	3.3	201	mg/L	3.3	1.65%
Cd 228.802†	-1.8	-0.00012	mg/L	0.000176	-0.00012	mg/L	0.000176	149.73%
Co 228.616†	-11.1	-0.00015	mg/L	0.000132	-0.00015	mg/L	0.000132	86.75%
Cr 267.716†	28.9	0.00002	mg/L	0.000111	0.00002	mg/L	0.000111	452.95%
Cu 327.393†	-606.5	-0.00406	mg/L	0.000831	-0.00406	mg/L	0.000831	20.47%
Fe 239.562†	22.2	0.0504	mg/L	0.00197	0.0504	mg/L	0.00197	3.91%
Mg 279.077†	1467.2	1.88	mg/L	0.023	1.88	mg/L	0.023	1.23%
Mn 257.610†	2450.1	0.00522	mg/L	0.000034	0.00522	mg/L	0.000034	0.64%
Mo 202.031†	-4.6	-0.00111	mg/L	0.000119	-0.00111	mg/L	0.000119	10.73%
Ni 231.604†	25.1	0.00053	mg/L	0.000255	0.00053	mg/L	0.000255	48.01%
Pb 220.353†	-22.5	0.00524	mg/L	0.000821	0.00524	mg/L	0.000821	15.68%
Sb 206.836†	22.0	0.0136	mg/L	0.00333	0.0136	mg/L	0.00333	24.52%
Se 196.026†	-43.3	0.0242	mg/L	0.00081	0.0242	mg/L	0.00081	3.35%
Si 251.611†	10965.7	0.317	mg/L	0.0057	0.317	mg/L	0.0057	1.80%
Sn 189.927†	-65.9	-0.00957	mg/L	0.001061	-0.00957	mg/L	0.001061	11.09%
Ti 334.940†	568.4	0.00263	mg/L	0.000305	0.00263	mg/L	0.000305	11.62%
Tl 190.801†	132.4	0.0561	mg/L	0.00138	0.0561	mg/L	0.00138	2.46%
V 290.880†	54.0	-0.00097	mg/L	0.000300	-0.00097	mg/L	0.000300	31.00%
Zn 206.200†	334.8	0.00961	mg/L	0.000217	0.00961	mg/L	0.000217	2.26%
K 766.490†	530.9	0.230	mg/L	0.0517	0.230	mg/L	0.0517	22.49%
Na 589.592†	21281.9	1.61	mg/L	0.010	1.61	mg/L	0.010	0.62%
Sr 407.771†	68739.1	0.0673	mg/L	0.00451	0.0673	mg/L	0.00451	6.70%
Li 670.784†	33.3	-0.00110	mg/L	0.001001	-0.00110	mg/L	0.001001	90.83%

Sequence No.: 44 **Autosampler Location: 96**
Sample ID: L1102053501S WG357204-04 **Date Collected: 2/23/2011 7:42:02 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

Pierre Morris

Nebulizer Parameters: L1102053501S WG357204-04

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102053501S WG357204-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4875605.7						37606.54	0.77%
YRADIAL	285493.4						5604.60	1.96%
Ga 417.206	1311874.9						9888.72	0.75%
GaRADIAL	62883.4						953.49	1.52%
Ag 328.068†	37271.6	0.188	mg/L	0.0021	0.188	mg/L	0.0021	1.12%
Al 396.153†	23082.1	4.90	mg/L	0.040	4.90	mg/L	0.040	0.81%
As 188.979†	205.0	0.182	mg/L	0.0026	0.182	mg/L	0.0026	1.44%
Ba 233.527†	29980.1	0.508	mg/L	0.0061	0.508	mg/L	0.0061	1.21%
Be 234.861†	12778.7	0.0225	mg/L	0.00038	0.0225	mg/L	0.00038	1.68%
B 249.677†	47613.2	0.908	mg/L	0.0155	0.908	mg/L	0.0155	1.71%
Ca 227.546†	20981.7	199	mg/L	3.3	199	mg/L	3.3	1.66%
Cd 228.802†	399.0	0.0224	mg/L	0.00029	0.0224	mg/L	0.00029	1.28%
Co 228.616†	1793.5	0.0894	mg/L	0.00043	0.0894	mg/L	0.00043	0.48%
Cr 267.716†	26691.5	0.230	mg/L	0.0022	0.230	mg/L	0.0022	0.96%
Cu 327.393†	31888.4	0.219	mg/L	0.0033	0.219	mg/L	0.0033	1.53%
Fe 239.562†	832.5	1.97	mg/L	0.027	1.97	mg/L	0.027	1.39%
Mg 279.077†	5111.7	6.56	mg/L	0.088	6.56	mg/L	0.088	1.33%
Mn 257.610†	107530.3	0.241	mg/L	0.0031	0.241	mg/L	0.0031	1.29%
Mo 202.031†	6532.5	0.482	mg/L	0.0039	0.482	mg/L	0.0039	0.82%
Ni 231.604†	8002.8	0.231	mg/L	0.0014	0.231	mg/L	0.0014	0.63%
Pb 220.353†	1351.2	0.235	mg/L	0.0032	0.235	mg/L	0.0032	1.36%
Sb 206.836†	886.7	0.554	mg/L	0.0052	0.554	mg/L	0.0052	0.95%
Se 196.026†	216.8	0.205	mg/L	0.0044	0.205	mg/L	0.0044	2.15%
Si 251.611†	101032.5	2.92	mg/L	0.041	2.92	mg/L	0.041	1.39%
Sn 189.927†	-57.8	-0.00819	mg/L	0.000520	-0.00819	mg/L	0.000520	6.34%
Ti 334.940†	345096.7	0.478	mg/L	0.0057	0.478	mg/L	0.0057	1.20%
Tl 190.801†	514.3	0.284	mg/L	0.0015	0.284	mg/L	0.0015	0.54%
V 290.880†	70694.3	0.471	mg/L	0.0079	0.471	mg/L	0.0079	1.68%
Zn 206.200†	15300.8	0.460	mg/L	0.0080	0.460	mg/L	0.0080	1.74%
K 766.490†	59215.3	23.7	mg/L	0.13	23.7	mg/L	0.13	0.55%
Na 589.592†	325014.0	24.8	mg/L	0.26	24.8	mg/L	0.26	1.03%
Sr 407.771†	556866.8	0.549	mg/L	0.0402	0.549	mg/L	0.0402	7.33%
Li 670.784†	36066.4	0.473	mg/L	0.0070	0.473	mg/L	0.0070	1.49%

Sequence No.: 45 WG357204-05 **Autosampler Location: 97**
Sample ID: L1102053501SD ~~**WG357204-01**~~ **Date Collected: 2/23/2011 7:48:44 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

WG357204-05

Nebulizer Parameters: L1102053501SD ~~**WG357204-01**~~

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

WG357204-05

Mean Data: L1102053501SD ~~**WG357204-01**~~

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4815209.8						55642.88	1.16%
YRADIAL	279414.6						3645.97	1.30%
Ga 417.206	1279424.1						20276.81	1.58%
GaRADIAL	62162.7						661.89	1.06%
Ag 328.068†	38574.1	0.194	mg/L	0.0032	0.194	mg/L	0.0032	1.67%
Al 396.153†	23393.4	4.97	mg/L	0.055	4.97	mg/L	0.055	1.11%
As 188.979†	213.8	0.190	mg/L	0.0046	0.190	mg/L	0.0046	2.42%
Ba 233.527†	30856.6	0.523	mg/L	0.0038	0.523	mg/L	0.0038	0.72%
Be 234.861†	13366.3	0.0234	mg/L	0.00046	0.0234	mg/L	0.00046	1.94%
B 249.677†	49972.8	0.954	mg/L	0.0109	0.954	mg/L	0.0109	1.14%
Ca 227.546†	21900.4	207	mg/L	2.4	207	mg/L	2.4	1.14%
Cd 228.802†	406.9	0.0228	mg/L	0.00048	0.0228	mg/L	0.00048	2.12%
Co 228.616†	1823.3	0.0908	mg/L	0.00167	0.0908	mg/L	0.00167	1.84%

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Cr 267.716†	27487.4	0.237 mg/L	0.0014	0.237 mg/L	0.0014	0.59%
Cu 327.393†	33663.9	0.231 mg/L	0.0038	0.231 mg/L	0.0038	1.66%
Fe 239.562†	945.8	2.23 mg/L	0.027	2.23 mg/L	0.027	1.22%
Mg 279.077†	5284.0	6.78 mg/L	0.061	6.78 mg/L	0.061	0.90%
Mn 257.610†	111680.3	0.251 mg/L	0.0017	0.251 mg/L	0.0017	0.70%
Mo 202.031†	6630.5	0.489 mg/L	0.0087	0.489 mg/L	0.0087	1.77%
Ni 231.604†	8167.8	0.236 mg/L	0.0037	0.236 mg/L	0.0037	1.55%
Pb 220.353†	1382.7	0.240 mg/L	0.0045	0.240 mg/L	0.0045	1.87%
Sb 206.836†	913.1	0.570 mg/L	0.0139	0.570 mg/L	0.0139	2.44%
Se 196.026†	219.9	0.210 mg/L	0.0041	0.210 mg/L	0.0041	1.97%
Si 251.611†	95439.9	2.76 mg/L	0.037	2.76 mg/L	0.037	1.34%
Sn 189.927†	-68.8	-0.0101 mg/L	0.00027	-0.0101 mg/L	0.00027	2.69%
Ti 334.940†	351907.9	0.487 mg/L	0.0003	0.487 mg/L	0.0003	0.05%
Tl 190.801†	520.0	0.287 mg/L	0.0040	0.287 mg/L	0.0040	1.40%
V 290.880†	72732.4	0.485 mg/L	0.0041	0.485 mg/L	0.0041	0.84%
Zn 206.200†	15633.6	0.470 mg/L	0.0036	0.470 mg/L	0.0036	0.76%
K 766.490†	60322.8	24.2 mg/L	0.12	24.2 mg/L	0.12	0.48%
Na 589.592†	346159.6	26.5 mg/L	0.45	26.5 mg/L	0.45	1.68%
Sr 407.771†	612959.1	0.605 mg/L	0.0495	0.605 mg/L	0.0495	8.20%
Li 670.784†	36220.2	0.475 mg/L	0.0061	0.475 mg/L	0.0061	1.29%

Sequence No.: 46 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 7:55:29 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4798492.4						90367.37	1.88%
YRADIAL	286549.2						4208.19	1.47%
Ga 417.206	1265121.6						26332.56	2.08%
GaRADIAL	61912.2						1369.86	2.21%
Ag 328.068†	77614.5	0.392	mg/L	0.0109	0.392	mg/L	0.0109	2.77%
QC value within limits for Ag 328.068 Recovery = 98.00%								
Al 396.153†	46589.3	9.90	mg/L	0.042	9.90	mg/L	0.042	0.43%
QC value within limits for Al 396.153 Recovery = 99.00%								
As 188.979†	423.1	0.383	mg/L	0.0122	0.383	mg/L	0.0122	3.18%
QC value within limits for As 188.979 Recovery = 95.81%								
Ba 233.527†	57959.6	0.983	mg/L	0.0196	0.983	mg/L	0.0196	2.00%
QC value within limits for Ba 233.527 Recovery = 98.30%								
Be 234.861†	27840.2	0.0489	mg/L	0.00135	0.0489	mg/L	0.00135	2.76%
QC value within limits for Be 234.861 Recovery = 97.83%								
B 249.677†	25837.8	0.498	mg/L	0.0140	0.498	mg/L	0.0140	2.81%
QC value within limits for B 249.677 Recovery = 99.64%								
Ca 227.546†	1028.8	10.0	mg/L	0.28	10.0	mg/L	0.28	2.81%
QC value within limits for Ca 227.546 Recovery = 100.28%								
Cd 228.802†	870.8	0.0488	mg/L	0.00113	0.0488	mg/L	0.00113	2.32%
QC value within limits for Cd 228.802 Recovery = 97.59%								
Co 228.616†	3822.0	0.190	mg/L	0.0038	0.190	mg/L	0.0038	2.02%
QC value within limits for Co 228.616 Recovery = 95.06%								
Cr 267.716†	56512.6	0.487	mg/L	0.0090	0.487	mg/L	0.0090	1.85%
QC value within limits for Cr 267.716 Recovery = 97.44%								
Cu 327.393†	69825.3	0.479	mg/L	0.0155	0.479	mg/L	0.0155	3.23%
QC value within limits for Cu 327.393 Recovery = 95.75%								
Fe 239.562†	1610.3	3.81	mg/L	0.084	3.81	mg/L	0.084	2.20%
QC value within limits for Fe 239.562 Recovery = 95.16%								
Mg 279.077†	7498.8	9.62	mg/L	0.151	9.62	mg/L	0.151	1.57%
QC value within limits for Mg 279.077 Recovery = 96.24%								
Mn 257.610†	220360.9	0.495	mg/L	0.0110	0.495	mg/L	0.0110	2.22%
QC value within limits for Mn 257.610 Recovery = 98.97%								
Mo 202.031†	13224.7	0.976	mg/L	0.0148	0.976	mg/L	0.0148	1.51%
QC value within limits for Mo 202.031 Recovery = 97.64%								
Ni 231.604†	17000.7	0.491	mg/L	0.0074	0.491	mg/L	0.0074	1.52%
QC value within limits for Ni 231.604 Recovery = 98.13%								

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Pb 220.353†	2940.2	0.491 mg/L	0.0114	0.491 mg/L	0.0114	2.33%
QC value within limits for Pb 220.353 Recovery = 98.15%						
Sb 206.836†	1848.1	1.15 mg/L	0.030	1.15 mg/L	0.030	2.58%
QC value within limits for Sb 206.836 Recovery = 96.19%						
Se 196.026†	549.2	0.390 mg/L	0.0128	0.390 mg/L	0.0128	3.29%
QC value within limits for Se 196.026 Recovery = 97.44%						
Si 251.611†	166046.2	4.80 mg/L	0.129	4.80 mg/L	0.129	2.68%
QC value within limits for Si 251.611 Recovery = 96.09%						
Sn 189.927†	5764.3	0.986 mg/L	0.0190	0.986 mg/L	0.0190	1.93%
QC value within limits for Sn 189.927 Recovery = 98.55%						
Ti 334.940†	705060.6	0.972 mg/L	0.0045	0.972 mg/L	0.0045	0.47%
QC value within limits for Ti 334.940 Recovery = 97.19%						
Tl 190.801†	838.7	0.496 mg/L	0.0137	0.496 mg/L	0.0137	2.76%
QC value within limits for Tl 190.801 Recovery = 99.27%						
V 290.880†	146334.8	0.977 mg/L	0.0215	0.977 mg/L	0.0215	2.20%
QC value within limits for V 290.880 Recovery = 97.68%						
Zn 206.200†	32714.3	0.984 mg/L	0.0174	0.984 mg/L	0.0174	1.77%
QC value within limits for Zn 206.200 Recovery = 98.36%						
K 766.490†	121032.3	48.7 mg/L	0.27	48.7 mg/L	0.27	0.55%
QC value within limits for K 766.490 Recovery = 97.47%						
Na 589.592†	629910.3	48.7 mg/L	0.64	48.7 mg/L	0.64	1.31%
QC value within limits for Na 589.592 Recovery = 97.42%						
Sr 407.771†	1031242.8	1.02 mg/L	0.070	1.02 mg/L	0.070	6.92%
QC value within limits for Sr 407.771 Recovery = 101.75%						
Li 670.784†	74500.8	0.979 mg/L	0.0021	0.979 mg/L	0.0021	0.22%
QC value within limits for Li 670.784 Recovery = 97.94%						

All analyte(s) passed QC.

Sequence No.: 47 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 8:02:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5088294.6						69015.74	1.36%
YRADIAL	291320.9						5396.92	1.85%
Ga 417.206	1338868.4						20447.95	1.53%
GaRADIAL	62905.2						1811.86	2.88%
Ag 328.068†	-104.4	-0.00123	mg/L	0.000060	-0.00123	mg/L	0.000060	4.89%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	10.5	-0.00959	mg/L	0.001719	-0.00959	mg/L	0.001719	17.92%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-2.7	-0.00207	mg/L	0.000331	-0.00207	mg/L	0.000331	15.97%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	1.6	-0.00049	mg/L	0.000028	-0.00049	mg/L	0.000028	5.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	39.5	0.00007	mg/L	0.000045	0.00007	mg/L	0.000045	62.73%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	536.3	0.0137	mg/L	0.00051	0.0137	mg/L	0.00051	3.75%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	0.9	-0.0246	mg/L	0.04721	-0.0246	mg/L	0.04721	191.87%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-1.2	0.00001	mg/L	0.000032	0.00001	mg/L	0.000032	301.86%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-5.5	0.00015	mg/L	0.000184	0.00015	mg/L	0.000184	120.35%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	14.5	-0.00010	mg/L	0.000042	-0.00010	mg/L	0.000042	43.24%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-12.3	-0.00002	mg/L	0.000283	-0.00002	mg/L	0.000283	>999.9%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	1.5	0.00157	mg/L	0.002810	0.00157	mg/L	0.002810	178.73%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	1.2	-0.00561	mg/L	0.007465	-0.00561	mg/L	0.007465	133.07%

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QC value within limits for Mg 279.077 Recovery = Not calculated

Mn 257.610†	32.2	-0.00027 mg/L	0.000008	-0.00027 mg/L	0.000008	2.91%
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.7	-0.00050 mg/L	0.000326	-0.00050 mg/L	0.000326	65.27%
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	1.5	-0.00010 mg/L	0.000152	-0.00010 mg/L	0.000152	150.38%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	3.1	-0.00015 mg/L	0.000168	-0.00015 mg/L	0.000168	115.74%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	-0.7	-0.00057 mg/L	0.001910	-0.00057 mg/L	0.001910	333.70%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-3.0	0.00210 mg/L	0.004363	0.00210 mg/L	0.004363	207.37%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-39.6	-0.00260 mg/L	0.000351	-0.00260 mg/L	0.000351	13.48%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-71.5	-0.0105 mg/L	0.00033	-0.0105 mg/L	0.00033	3.09%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-133.1	-0.00035 mg/L	0.000124	-0.00035 mg/L	0.000124	35.51%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-2.6	-0.00446 mg/L	0.003525	-0.00446 mg/L	0.003525	79.09%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	79.3	-0.00080 mg/L	0.000458	-0.00080 mg/L	0.000458	57.43%
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-197.4	-0.00636 mg/L	0.000038	-0.00636 mg/L	0.000038	0.59%
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	84.8	0.0536 mg/L	0.02698	0.0536 mg/L	0.02698	50.31%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	201.6	0.0160 mg/L	0.01498	0.0160 mg/L	0.01498	93.56%
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	304.3	-0.00033 mg/L	0.000308	-0.00033 mg/L	0.000308	92.38%
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	71.1	-0.00060 mg/L	0.000449	-0.00060 mg/L	0.000449	74.33%
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 48 **Autosampler Location: 98**
Sample ID: PBW 82 WG357047-02 **Date Collected: 2/23/2011 8:08:50 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 82 WG357047-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: PBW 82 WG357047-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5138099.9						27391.78	0.53%
YRADIAL	299398.2						6288.19	2.10%
Ga 417.206	1394895.1						24961.86	1.79%
GaRADIAL	64916.3						1713.08	2.64%
Ag 328.068†	-76.1	-0.00109	mg/L	0.000423	-0.00109	mg/L	0.000423	38.69%
Al 396.153†	99.7	0.00941	mg/L	0.017179	0.00941	mg/L	0.017179	182.58%
As 188.979†	-0.9	-0.00043	mg/L	0.001824	-0.00043	mg/L	0.001824	422.42%
Ba 233.527†	23.3	-0.00012	mg/L	0.000137	-0.00012	mg/L	0.000137	115.91%
Be 234.861†	63.7	0.00011	mg/L	0.000031	0.00011	mg/L	0.000031	27.99%
B 249.677†	273.2	0.00868	mg/L	0.001218	0.00868	mg/L	0.001218	14.04%
Ca 227.546†	9.3	0.0548	mg/L	0.05379	0.0548	mg/L	0.05379	98.19%
Cd 228.802†	-3.5	-0.00013	mg/L	0.000145	-0.00013	mg/L	0.000145	111.13%
Co 228.616†	-2.9	0.00028	mg/L	0.000157	0.00028	mg/L	0.000157	55.27%
Cr 267.716†	3.2	-0.00020	mg/L	0.000090	-0.00020	mg/L	0.000090	45.69%
Cu 327.393†	83.6	0.00064	mg/L	0.000727	0.00064	mg/L	0.000727	113.74%
Fe 239.562†	3.3	0.00585	mg/L	0.002931	0.00585	mg/L	0.002931	50.12%
Mg 279.077†	8.9	0.00430	mg/L	0.002954	0.00430	mg/L	0.002954	68.67%
Mn 257.610†	67.0	-0.00020	mg/L	0.000018	-0.00020	mg/L	0.000018	9.42%
Mo 202.031†	1.2	-0.00069	mg/L	0.000720	-0.00069	mg/L	0.000720	104.52%
Ni 231.604†	8.1	0.00009	mg/L	0.000041	0.00009	mg/L	0.000041	46.24%
Pb 220.353†	8.7	0.00078	mg/L	0.000645	0.00078	mg/L	0.000645	82.59%
Sb 206.836†	-1.9	-0.00132	mg/L	0.003869	-0.00132	mg/L	0.003869	292.07%

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Se 196.026†	-4.7	0.00094 mg/L	0.002234	0.00094 mg/L	0.002234	238.74%
Si 251.611†	250.4	0.00582 mg/L	0.000536	0.00582 mg/L	0.000536	9.21%
Sn 189.927†	-79.6	-0.0119 mg/L	0.00015	-0.0119 mg/L	0.00015	1.23%
Ti 334.940†	161.8	0.00006 mg/L	0.000063	0.00006 mg/L	0.000063	106.18%
Tl 190.801†	2.1	-0.00176 mg/L	0.002966	-0.00176 mg/L	0.002966	168.99%
V 290.880†	89.2	-0.00073 mg/L	0.000573	-0.00073 mg/L	0.000573	78.42%
Zn 206.200†	-119.3	-0.00402 mg/L	0.000148	-0.00402 mg/L	0.000148	3.69%
K 766.490†	-66.6	-0.00676 mg/L	0.036373	-0.00676 mg/L	0.036373	537.94%
Na 589.592†	64.9	0.00570 mg/L	0.011680	0.00570 mg/L	0.011680	205.01%
Sr 407.771†	134.6	-0.00050 mg/L	0.000047	-0.00050 mg/L	0.000047	9.38%
Li 670.784†	72.1	-0.00059 mg/L	0.001198	-0.00059 mg/L	0.001198	202.60%

Sequence No.: 49 **Autosampler Location: 99**
Sample ID: LCSW 82 WG357047-03 **Date Collected: 2/23/2011 8:15:32 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 82 WG357047-03

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: LCSW 82 WG357047-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4970087.1						3057.09	0.06%
YRADIAL	296481.5						4527.21	1.53%
Ga 417.206	1345079.1						3921.06	0.29%
GaRADIAL	64408.4						753.78	1.17%
Ag 328.068†	38494.1	0.194	mg/L	0.0019	0.194	mg/L	0.0019	0.96%
Al 396.153†	23170.8	4.92	mg/L	0.026	4.92	mg/L	0.026	0.53%
As 188.979†	200.4	0.182	mg/L	0.0008	0.182	mg/L	0.0008	0.43%
Ba 233.527†	29227.9	0.495	mg/L	0.0058	0.495	mg/L	0.0058	1.17%
Be 234.861†	13688.9	0.0241	mg/L	0.00035	0.0241	mg/L	0.00035	1.47%
B 249.677†	52200.5	0.994	mg/L	0.0069	0.994	mg/L	0.0069	0.69%
Ca 227.546†	492.3	4.79	mg/L	0.065	4.79	mg/L	0.065	1.36%
Cd 228.802†	411.6	0.0231	mg/L	0.00005	0.0231	mg/L	0.00005	0.22%
Co 228.616†	1894.7	0.0944	mg/L	0.00019	0.0944	mg/L	0.00019	0.20%
Cr 267.716†	28291.8	0.244	mg/L	0.0021	0.244	mg/L	0.0021	0.88%
Cu 327.393†	34637.5	0.238	mg/L	0.0024	0.238	mg/L	0.0024	0.99%
Fe 239.562†	791.4	1.87	mg/L	0.031	1.87	mg/L	0.031	1.64%
Mg 279.077†	3737.8	4.79	mg/L	0.082	4.79	mg/L	0.082	1.71%
Mn 257.610†	111477.6	0.250	mg/L	0.0025	0.250	mg/L	0.0025	1.01%
Mo 202.031†	6648.6	0.490	mg/L	0.0079	0.490	mg/L	0.0079	1.60%
Ni 231.604†	8655.7	0.250	mg/L	0.0030	0.250	mg/L	0.0030	1.21%
Pb 220.353†	1455.4	0.243	mg/L	0.0009	0.243	mg/L	0.0009	0.36%
Sb 206.836†	893.4	0.558	mg/L	0.0027	0.558	mg/L	0.0027	0.49%
Se 196.026†	261.7	0.188	mg/L	0.0019	0.188	mg/L	0.0019	0.99%
Si 251.611†	84237.3	2.44	mg/L	0.027	2.44	mg/L	0.027	1.11%
Sn 189.927†	2974.0	0.509	mg/L	0.0019	0.509	mg/L	0.0019	0.37%
Ti 334.940†	357867.1	0.493	mg/L	0.0066	0.493	mg/L	0.0066	1.34%
Tl 190.801†	423.5	0.249	mg/L	0.0014	0.249	mg/L	0.0014	0.57%
V 290.880†	73629.0	0.491	mg/L	0.0044	0.491	mg/L	0.0044	0.89%
Zn 206.200†	16155.6	0.486	mg/L	0.0069	0.486	mg/L	0.0069	1.42%
K 766.490†	60386.5	24.2	mg/L	0.08	24.2	mg/L	0.08	0.31%
Na 589.592†	312419.8	23.9	mg/L	0.38	23.9	mg/L	0.38	1.59%
Sr 407.771†	513633.0	0.506	mg/L	0.0335	0.506	mg/L	0.0335	6.62%
Li 670.784†	37298.6	0.490	mg/L	0.0028	0.490	mg/L	0.0028	0.57%

Sequence No.: 50 **Autosampler Location: 100**
Sample ID: L1102048607 WG357047-01 **Date Collected: 2/23/2011 8:22:15 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048607 WG357047-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Approved: February 24, 2011

Pierre Morris

Mean Data: L1102048607 WG357047-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5141914.8						46761.96	0.91%
YRADIAL	296170.4						6430.85	2.17%
Ga 417.206	1404746.1						9026.38	0.64%
GaRADIAL	64889.1						446.01	0.69%
Ag 328.068†	64.5	-0.00042	mg/L	0.000325	-0.00042	mg/L	0.000325	77.84%
Al 396.153†	3081.8	0.645	mg/L	0.0251	0.645	mg/L	0.0251	3.89%
As 188.979†	-0.2	0.00024	mg/L	0.002603	0.00024	mg/L	0.002603	>999.9%
Ba 233.527†	1343.7	0.0222	mg/L	0.00030	0.0222	mg/L	0.00030	1.37%
Be 234.861†	129.9	0.00010	mg/L	0.000034	0.00010	mg/L	0.000034	33.92%
B 249.677†	472.0	0.0146	mg/L	0.00069	0.0146	mg/L	0.00069	4.74%
Ca 227.546†	94.9	0.852	mg/L	0.0696	0.852	mg/L	0.0696	8.17%
Cd 228.802†	-3.0	-0.00010	mg/L	0.000010	-0.00010	mg/L	0.000010	10.14%
Co 228.616†	4.9	0.00064	mg/L	0.000274	0.00064	mg/L	0.000274	43.07%
Cr 267.716†	353.7	0.00280	mg/L	0.000005	0.00280	mg/L	0.000005	0.20%
Cu 327.393†	127.1	0.00101	mg/L	0.000496	0.00101	mg/L	0.000496	49.05%
Fe 239.562†	260.2	0.613	mg/L	0.0088	0.613	mg/L	0.0088	1.43%
Mg 279.077†	517.9	0.657	mg/L	0.0100	0.657	mg/L	0.0100	1.52%
Mn 257.610†	9665.9	0.0224	mg/L	0.00022	0.0224	mg/L	0.00022	0.98%
Mo 202.031†	9.8	-0.00002	mg/L	0.000308	-0.00002	mg/L	0.000308	>999.9%
Ni 231.604†	99.4	0.00272	mg/L	0.000260	0.00272	mg/L	0.000260	9.54%
Pb 220.353†	8.5	0.00079	mg/L	0.001087	0.00079	mg/L	0.001087	137.86%
Sb 206.836†	0.1	-0.00010	mg/L	0.000920	-0.00010	mg/L	0.000920	879.36%
Se 196.026†	-5.9	0.00045	mg/L	0.004843	0.00045	mg/L	0.004843	>999.9%
Si 251.611†	225992.7	6.56	mg/L	0.087	6.56	mg/L	0.087	1.33%
Sn 189.927†	-78.2	-0.0117	mg/L	0.00058	-0.0117	mg/L	0.00058	4.94%
Ti 334.940†	4606.1	0.00619	mg/L	0.000203	0.00619	mg/L	0.000203	3.27%
Tl 190.801†	7.2	0.00127	mg/L	0.001971	0.00127	mg/L	0.001971	155.35%
V 290.880†	83.1	-0.00073	mg/L	0.000939	-0.00073	mg/L	0.000939	129.26%
Zn 206.200†	-0.0	-0.00044	mg/L	0.000033	-0.00044	mg/L	0.000033	7.44%
K 766.490†	1739.9	0.713	mg/L	0.0149	0.713	mg/L	0.0149	2.10%
Na 589.592†	23013.1	1.74	mg/L	0.028	1.74	mg/L	0.028	1.59%
Sr 407.771†	8016.5	0.00721	mg/L	0.000443	0.00721	mg/L	0.000443	6.14%
Li 670.784†	132.5	0.00020	mg/L	0.001319	0.00020	mg/L	0.001319	644.25%

Sequence No.: 51 **Autosampler Location: 101**
Sample ID: L1102048608S WG357047-04 **Date Collected: 2/23/2011 8:28:54 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048608S WG357047-04

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102048608S WG357047-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4919127.6						53715.14	1.09%
YRADIAL	292788.8						7390.81	2.52%
Ga 417.206	1328288.8						18006.98	1.36%
GaRADIAL	64056.2						1766.37	2.76%
Ag 328.068†	38759.9	0.195	mg/L	0.0041	0.195	mg/L	0.0041	2.10%
Al 396.153†	26484.9	5.62	mg/L	0.058	5.62	mg/L	0.058	1.03%
As 188.979†	209.8	0.190	mg/L	0.0040	0.190	mg/L	0.0040	2.12%
Ba 233.527†	30567.7	0.518	mg/L	0.0037	0.518	mg/L	0.0037	0.72%
Be 234.861†	14024.1	0.0245	mg/L	0.00037	0.0245	mg/L	0.00037	1.52%
B 249.677†	51106.8	0.977	mg/L	0.0189	0.977	mg/L	0.0189	1.94%
Ca 227.546†	597.0	5.77	mg/L	0.116	5.77	mg/L	0.116	2.01%
Cd 228.802†	431.0	0.0242	mg/L	0.00048	0.0242	mg/L	0.00048	1.98%
Co 228.616†	1957.4	0.0975	mg/L	0.00145	0.0975	mg/L	0.00145	1.49%
Cr 267.716†	29048.2	0.250	mg/L	0.0034	0.250	mg/L	0.0034	1.37%
Cu 327.393†	34740.9	0.238	mg/L	0.0054	0.238	mg/L	0.0054	2.25%
Fe 239.562†	1188.3	2.81	mg/L	0.097	2.81	mg/L	0.097	3.45%
Mg 279.077†	4410.4	5.66	mg/L	0.168	5.66	mg/L	0.168	2.96%
Mn 257.610†	126231.1	0.284	mg/L	0.0027	0.284	mg/L	0.0027	0.94%

Approved: February 24, 2011

Pierre Morris

Mo 202.031†	6696.5	0.494 mg/L	0.0082	0.494 mg/L	0.0082	1.65%
Ni 231.604†	8739.0	0.252 mg/L	0.0036	0.252 mg/L	0.0036	1.42%
Pb 220.353†	1489.3	0.248 mg/L	0.0024	0.248 mg/L	0.0024	0.96%
Sb 206.836†	914.4	0.571 mg/L	0.0125	0.571 mg/L	0.0125	2.18%
Se 196.026†	268.1	0.193 mg/L	0.0057	0.193 mg/L	0.0057	2.97%
Si 251.611†	325515.9	9.44 mg/L	0.179	9.44 mg/L	0.179	1.89%
Sn 189.927†	3041.4	0.521 mg/L	0.0047	0.521 mg/L	0.0047	0.90%
Ti 334.940†	361532.2	0.498 mg/L	0.0065	0.498 mg/L	0.0065	1.31%
Tl 190.801†	427.8	0.252 mg/L	0.0055	0.252 mg/L	0.0055	2.19%
V 290.880†	74242.6	0.495 mg/L	0.0056	0.495 mg/L	0.0056	1.13%
Zn 206.200†	16423.3	0.494 mg/L	0.0031	0.494 mg/L	0.0031	0.63%
K 766.490†	62364.1	25.0 mg/L	0.15	25.0 mg/L	0.15	0.59%
Na 589.592†	343777.1	26.3 mg/L	0.92	26.3 mg/L	0.92	3.52%
Sr 407.771†	549818.6	0.542 mg/L	0.0311	0.542 mg/L	0.0311	5.74%
Li 670.784†	37885.6	0.497 mg/L	0.0017	0.497 mg/L	0.0017	0.35%

Sequence No.: 52 **Autosampler Location: 102**
Sample ID: L1102048609SD WG357047-05 **Date Collected: 2/23/2011 8:35:41 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048609SD WG357047-05

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102048609SD WG357047-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4950376.9						48379.76	0.98%
YRADIAL	290368.7						7626.45	2.63%
Ga 417.206	1330687.9						20763.19	1.56%
GaRADIAL	63153.1						1888.28	2.99%
Ag 328.068†	38643.1	0.195	mg/L	0.0056	0.195	mg/L	0.0056	2.89%
Al 396.153†	27085.6	5.75	mg/L	0.036	5.75	mg/L	0.036	0.63%
As 188.979†	207.4	0.188	mg/L	0.0015	0.188	mg/L	0.0015	0.79%
Ba 233.527†	30352.9	0.514	mg/L	0.0099	0.514	mg/L	0.0099	1.92%
Be 234.861†	13931.0	0.0243	mg/L	0.00044	0.0243	mg/L	0.00044	1.83%
B 249.677†	50991.6	0.975	mg/L	0.0310	0.975	mg/L	0.0310	3.18%
Ca 227.546†	601.4	5.81	mg/L	0.064	5.81	mg/L	0.064	1.11%
Cd 228.802†	423.3	0.0238	mg/L	0.00032	0.0238	mg/L	0.00032	1.36%
Co 228.616†	1946.9	0.0970	mg/L	0.00080	0.0970	mg/L	0.00080	0.83%
Cr 267.716†	28776.8	0.248	mg/L	0.0046	0.248	mg/L	0.0046	1.87%
Cu 327.393†	34586.7	0.237	mg/L	0.0072	0.237	mg/L	0.0072	3.04%
Fe 239.562†	1189.5	2.81	mg/L	0.096	2.81	mg/L	0.096	3.41%
Mg 279.077†	4419.2	5.67	mg/L	0.171	5.67	mg/L	0.171	3.02%
Mn 257.610†	127230.4	0.287	mg/L	0.0056	0.287	mg/L	0.0056	1.95%
Mo 202.031†	6647.3	0.490	mg/L	0.0087	0.490	mg/L	0.0087	1.77%
Ni 231.604†	8722.5	0.252	mg/L	0.0052	0.252	mg/L	0.0052	2.06%
Pb 220.353†	1490.0	0.248	mg/L	0.0028	0.248	mg/L	0.0028	1.14%
Sb 206.836†	912.6	0.570	mg/L	0.0070	0.570	mg/L	0.0070	1.24%
Se 196.026†	265.7	0.191	mg/L	0.0054	0.191	mg/L	0.0054	2.84%
Si 251.611†	326619.0	9.47	mg/L	0.082	9.47	mg/L	0.082	0.87%
Sn 189.927†	3030.5	0.519	mg/L	0.0037	0.519	mg/L	0.0037	0.71%
Ti 334.940†	360120.3	0.496	mg/L	0.0029	0.496	mg/L	0.0029	0.58%
Tl 190.801†	429.1	0.252	mg/L	0.0011	0.252	mg/L	0.0011	0.43%
V 290.880†	73616.2	0.491	mg/L	0.0103	0.491	mg/L	0.0103	2.10%
Zn 206.200†	16331.0	0.491	mg/L	0.0051	0.491	mg/L	0.0051	1.04%
K 766.490†	62450.3	25.0	mg/L	0.12	25.0	mg/L	0.12	0.47%
Na 589.592†	344198.2	26.3	mg/L	0.40	26.3	mg/L	0.40	1.52%
Sr 407.771†	540589.3	0.533	mg/L	0.0329	0.533	mg/L	0.0329	6.17%
Li 670.784†	38383.0	0.504	mg/L	0.0016	0.504	mg/L	0.0016	0.31%

Sequence No.: 53 **Autosampler Location: 103**
Sample ID: L1102047501 **Date Collected: 2/23/2011 8:42:21 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

Pierre Morris

Nebulizer Parameters: L1102047501

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102047501

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4967445.1						10422.69	0.21%
YRADIAL	290828.9						2866.38	0.99%
Ga 417.206	1343032.4						11887.18	0.89%
GaRADIAL	63147.8						1433.46	2.27%
Ag 328.068†	-134.1	-0.00138	mg/L	0.000262	-0.00138	mg/L	0.000262	18.95%
Al 396.153†	21.8	-0.00719	mg/L	0.013745	-0.00719	mg/L	0.013745	191.09%
As 188.979†	-0.0	0.00033	mg/L	0.002201	0.00033	mg/L	0.002201	659.24%
Ba 233.527†	5.8	-0.00041	mg/L	0.000082	-0.00041	mg/L	0.000082	19.75%
Be 234.861†	38.6	0.00007	mg/L	0.000047	0.00007	mg/L	0.000047	66.95%
B 249.677†	3023.7	0.0607	mg/L	0.00157	0.0607	mg/L	0.00157	2.58%
Ca 227.546†	9.2	0.0538	mg/L	0.03641	0.0538	mg/L	0.03641	67.63%
Cd 228.802†	-3.4	-0.00013	mg/L	0.000054	-0.00013	mg/L	0.000054	42.45%
Co 228.616†	-4.7	0.00019	mg/L	0.000033	0.00019	mg/L	0.000033	16.74%
Cr 267.716†	15.8	-0.00009	mg/L	0.000127	-0.00009	mg/L	0.000127	147.73%
Cu 327.393†	-4.0	0.00004	mg/L	0.000525	0.00004	mg/L	0.000525	>999.9%
Fe 239.562†	1.5	0.00146	mg/L	0.003760	0.00146	mg/L	0.003760	257.90%
Mg 279.077†	6.2	0.00082	mg/L	0.000578	0.00082	mg/L	0.000578	70.87%
Mn 257.610†	-34.4	-0.00040	mg/L	0.000015	-0.00040	mg/L	0.000015	3.79%
Mo 202.031†	4.0	-0.00048	mg/L	0.000445	-0.00048	mg/L	0.000445	93.64%
Ni 231.604†	6.6	0.00005	mg/L	0.000236	0.00005	mg/L	0.000236	515.46%
Pb 220.353†	3.4	-0.00009	mg/L	0.000604	-0.00009	mg/L	0.000604	688.46%
Sb 206.836†	0.3	0.00008	mg/L	0.000627	0.00008	mg/L	0.000627	743.39%
Se 196.026†	-1.2	0.00337	mg/L	0.002710	0.00337	mg/L	0.002710	80.52%
Si 251.611†	2099.4	0.0595	mg/L	0.00224	0.0595	mg/L	0.00224	3.77%
Sn 189.927†	-78.8	-0.0118	mg/L	0.00048	-0.0118	mg/L	0.00048	4.11%
Ti 334.940†	-42.4	-0.00022	mg/L	0.000120	-0.00022	mg/L	0.000120	54.13%
Tl 190.801†	-1.4	-0.00376	mg/L	0.003042	-0.00376	mg/L	0.003042	80.82%
V 290.880†	172.9	-0.00017	mg/L	0.000239	-0.00017	mg/L	0.000239	139.55%
Zn 206.200†	-148.9	-0.00491	mg/L	0.000121	-0.00491	mg/L	0.000121	2.46%
K 766.490†	-31.1	0.00708	mg/L	0.043582	0.00708	mg/L	0.043582	615.40%
Na 589.592†	4250.8	0.322	mg/L	0.0126	0.322	mg/L	0.0126	3.91%
Sr 407.771†	208.3	-0.00043	mg/L	0.000095	-0.00043	mg/L	0.000095	22.24%
Li 670.784†	22.6	-0.00124	mg/L	0.001880	-0.00124	mg/L	0.001880	151.28%

Sequence No.: 54 **Autosampler Location: 104**
Sample ID: L1102049202 **Date Collected: 2/23/2011 8:49:50 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049202

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102049202

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5059389.2						66538.58	1.32%
YRADIAL	300908.6						3235.58	1.08%
Ga 417.206	1395428.1						24254.16	1.74%
GaRADIAL	65600.9						644.53	0.98%
Ag 328.068†	78.2	-0.00040	mg/L	0.000932	-0.00040	mg/L	0.000932	234.45%
Al 396.153†	575.6	0.110	mg/L	0.0021	0.110	mg/L	0.0021	1.87%
As 188.979†	9.1	0.00838	mg/L	0.000844	0.00838	mg/L	0.000844	10.07%
Ba 233.527†	539.0	0.00864	mg/L	0.000120	0.00864	mg/L	0.000120	1.39%
Be 234.861†	160.6	0.00018	mg/L	0.000017	0.00018	mg/L	0.000017	9.46%
B 249.677†	1301.4	0.0322	mg/L	0.00082	0.0322	mg/L	0.00082	2.56%
Ca 227.546†	1119.3	10.6	mg/L	0.23	10.6	mg/L	0.23	2.19%
Cd 228.802†	41.6	0.00236	mg/L	0.000046	0.00236	mg/L	0.000046	1.97%
Co 228.616†	11.4	0.00097	mg/L	0.000147	0.00097	mg/L	0.000147	15.13%
Cr 267.716†	900.9	0.00746	mg/L	0.000422	0.00746	mg/L	0.000422	5.66%

Approved: February 24, 2011

Pierce Morris

Cu 327.393†	7366.7	0.0505	mg/L	0.00085	0.0505	mg/L	0.00085	1.68%
Fe 239.562†	382.2	0.902	mg/L	0.0116	0.902	mg/L	0.0116	1.29%
Mg 279.077†	3804.3	4.88	mg/L	0.037	4.88	mg/L	0.037	0.77%
Mn 257.610†	108307.4	0.241	mg/L	0.0030	0.241	mg/L	0.0030	1.26%
Mo 202.031†	579.2	0.0421	mg/L	0.00033	0.0421	mg/L	0.00033	0.80%
Ni 231.604†	63.1	0.00167	mg/L	0.000364	0.00167	mg/L	0.000364	21.83%
Pb 220.353†	38.9	0.00639	mg/L	0.001871	0.00639	mg/L	0.001871	29.25%
Sb 206.836†	43.7	0.0273	mg/L	0.00277	0.0273	mg/L	0.00277	10.15%
Se 196.026†	-13.5	-0.00235	mg/L	0.002316	-0.00235	mg/L	0.002316	98.68%
Si 251.611†	56059.5	1.63	mg/L	0.035	1.63	mg/L	0.035	2.15%
Sn 189.927†	-78.4	-0.0117	mg/L	0.00048	-0.0117	mg/L	0.00048	4.11%
Ti 334.940†	2334.3	0.00316	mg/L	0.000019	0.00316	mg/L	0.000019	0.62%
Tl 190.801†	26.8	0.0120	mg/L	0.00416	0.0120	mg/L	0.00416	34.57%
V 290.880†	677.5	0.00324	mg/L	0.000714	0.00324	mg/L	0.000714	22.01%
Zn 206.200†	14968.1	0.449	mg/L	0.0050	0.449	mg/L	0.0050	1.11%
K 766.490†	11031.1	4.42	mg/L	0.052	4.42	mg/L	0.052	1.18%
Na 589.592†	61125.5	4.62	mg/L	0.035	4.62	mg/L	0.035	0.75%
Sr 407.771†	34202.8	0.0330	mg/L	0.00231	0.0330	mg/L	0.00231	7.00%
Li 670.784†	64.3	-0.00069	mg/L	0.001618	-0.00069	mg/L	0.001618	233.33%

Sequence No.: 55 **Autosampler Location: 105**
Sample ID: L1102049202PS WG357117-03 **Date Collected: 2/23/2011 8:56:34 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049202PS WG357117-03

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102049202PS WG357117-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4900145.0						46779.10	0.95%
YRADIAL	290611.1						1932.24	0.66%
Ga 417.206	1346541.4						22451.51	1.67%
GaRADIAL	63693.8						938.79	1.47%
Ag 328.068†	37788.2	0.190	mg/L	0.0023	0.190	mg/L	0.0023	1.21%
Al 396.153†	23842.2	5.06	mg/L	0.011	5.06	mg/L	0.011	0.21%
As 188.979†	208.2	0.188	mg/L	0.0030	0.188	mg/L	0.0030	1.61%
Ba 233.527†	29415.9	0.499	mg/L	0.0043	0.499	mg/L	0.0043	0.86%
Be 234.861†	13626.2	0.0239	mg/L	0.00028	0.0239	mg/L	0.00028	1.18%
B 249.677†	50574.6	0.967	mg/L	0.0094	0.967	mg/L	0.0094	0.97%
Ca 227.546†	1538.9	14.7	mg/L	0.36	14.7	mg/L	0.36	2.44%
Cd 228.802†	454.1	0.0255	mg/L	0.00057	0.0255	mg/L	0.00057	2.22%
Co 228.616†	1938.1	0.0966	mg/L	0.00150	0.0966	mg/L	0.00150	1.55%
Cr 267.716†	28909.7	0.249	mg/L	0.0024	0.249	mg/L	0.0024	0.97%
Cu 327.393†	40699.3	0.279	mg/L	0.0038	0.279	mg/L	0.0038	1.38%
Fe 239.562†	1158.5	2.74	mg/L	0.034	2.74	mg/L	0.034	1.23%
Mg 279.077†	7243.2	9.29	mg/L	0.090	9.29	mg/L	0.090	0.97%
Mn 257.610†	206799.4	0.463	mg/L	0.0033	0.463	mg/L	0.0033	0.70%
Mo 202.031†	7163.3	0.529	mg/L	0.0043	0.529	mg/L	0.0043	0.82%
Ni 231.604†	8583.3	0.248	mg/L	0.0012	0.248	mg/L	0.0012	0.49%
Pb 220.353†	1505.2	0.251	mg/L	0.0044	0.251	mg/L	0.0044	1.76%
Sb 206.836†	935.4	0.584	mg/L	0.0127	0.584	mg/L	0.0127	2.17%
Se 196.026†	255.3	0.186	mg/L	0.0045	0.186	mg/L	0.0045	2.44%
Si 251.611†	133782.6	3.87	mg/L	0.058	3.87	mg/L	0.058	1.49%
Sn 189.927†	-88.9	-0.0135	mg/L	0.00076	-0.0135	mg/L	0.00076	5.61%
Ti 334.940†	359240.1	0.495	mg/L	0.0042	0.495	mg/L	0.0042	0.85%
Tl 190.801†	444.8	0.261	mg/L	0.0008	0.261	mg/L	0.0008	0.30%
V 290.880†	73944.4	0.493	mg/L	0.0027	0.493	mg/L	0.0027	0.54%
Zn 206.200†	29826.6	0.896	mg/L	0.0035	0.896	mg/L	0.0035	0.39%
K 766.490†	69688.2	28.0	mg/L	0.12	28.0	mg/L	0.12	0.43%
Na 589.592†	366342.0	28.0	mg/L	0.39	28.0	mg/L	0.39	1.39%
Sr 407.771†	545327.0	0.538	mg/L	0.0439	0.538	mg/L	0.0439	8.16%
Li 670.784†	37323.0	0.490	mg/L	0.0015	0.490	mg/L	0.0015	0.31%

Sequence No.: 56 WG357117-04 **Autosampler Location: 106**
Sample ID: L1102049202DL ~~**WG357047-04**~~ **Date Collected: 2/23/2011 9:03:14 PM**

Approved: February 24, 2011

Pierre Morris

Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

WG357117-04

Nebulizer Parameters: L1102049202DL ~~WG357047-04~~

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

WG357117-04

Mean Data: L1102049202DL ~~WG357047-04~~

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5010862.7						21053.18	0.42%
YRADIAL	289316.3						7858.36	2.72%
Ga 417.206	1345263.6						22610.46	1.68%
GaRADIAL	63075.4						2239.50	3.55%
Ag 328.068†	-176.3	-0.00162	mg/L	0.000440	-0.00162	mg/L	0.000440	27.24%
Al 396.153†	130.0	0.0158	mg/L	0.01278	0.0158	mg/L	0.01278	81.02%
As 188.979†	1.6	0.00177	mg/L	0.001025	0.00177	mg/L	0.001025	57.91%
Ba 233.527†	105.9	0.00128	mg/L	0.000073	0.00128	mg/L	0.000073	5.67%
Be 234.861†	68.9	0.00010	mg/L	0.000033	0.00010	mg/L	0.000033	32.48%
B 249.677†	769.9	0.0189	mg/L	0.00070	0.0189	mg/L	0.00070	3.69%
Ca 227.546†	227.8	2.12	mg/L	0.041	2.12	mg/L	0.041	1.93%
Cd 228.802†	6.1	0.00040	mg/L	0.000251	0.00040	mg/L	0.000251	63.30%
Co 228.616†	-3.8	0.00023	mg/L	0.000148	0.00023	mg/L	0.000148	64.36%
Cr 267.716†	178.3	0.00130	mg/L	0.000071	0.00130	mg/L	0.000071	5.48%
Cu 327.393†	1533.4	0.0106	mg/L	0.00024	0.0106	mg/L	0.00024	2.25%
Fe 239.562†	81.2	0.190	mg/L	0.0080	0.190	mg/L	0.0080	4.20%
Mg 279.077†	808.3	1.03	mg/L	0.036	1.03	mg/L	0.036	3.46%
Mn 257.610†	21535.8	0.0477	mg/L	0.00059	0.0477	mg/L	0.00059	1.23%
Mo 202.031†	116.6	0.00786	mg/L	0.000417	0.00786	mg/L	0.000417	5.31%
Ni 231.604†	25.5	0.00059	mg/L	0.000135	0.00059	mg/L	0.000135	23.01%
Pb 220.353†	12.4	0.00151	mg/L	0.000732	0.00151	mg/L	0.000732	48.34%
Sb 206.836†	10.1	0.00623	mg/L	0.001675	0.00623	mg/L	0.001675	26.88%
Se 196.026†	-11.1	-0.00292	mg/L	0.002149	-0.00292	mg/L	0.002149	73.53%
Si 251.611†	11540.5	0.333	mg/L	0.0073	0.333	mg/L	0.0073	2.18%
Sn 189.927†	-77.2	-0.0115	mg/L	0.00085	-0.0115	mg/L	0.00085	7.37%
Ti 334.940†	496.1	0.00054	mg/L	0.000159	0.00054	mg/L	0.000159	29.39%
Tl 190.801†	4.6	-0.00042	mg/L	0.004892	-0.00042	mg/L	0.004892	>999.9%
V 290.880†	125.0	-0.00048	mg/L	0.000066	-0.00048	mg/L	0.000066	13.71%
Zn 206.200†	2936.6	0.0877	mg/L	0.00018	0.0877	mg/L	0.00018	0.21%
K 766.490†	2232.0	0.910	mg/L	0.0333	0.910	mg/L	0.0333	3.67%
Na 589.592†	12649.1	0.956	mg/L	0.0178	0.956	mg/L	0.0178	1.86%
Sr 407.771†	7266.1	0.00652	mg/L	0.000802	0.00652	mg/L	0.000802	12.30%
Li 670.784†	61.6	-0.00073	mg/L	0.000464	-0.00073	mg/L	0.000464	63.61%

Sequence No.: 57 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 9:09:56 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4758270.1						54463.98	1.14%
YRADIAL	282901.8						6257.05	2.21%
Ga 417.206	1247909.0						15555.55	1.25%
GaRADIAL	61472.1						277.64	0.45%
Ag 328.068†	80185.2	0.405	mg/L	0.0036	0.405	mg/L	0.0036	0.89%
QC value within limits for Ag 328.068 Recovery = 101.25%								
Al 396.153†	47753.1	10.1	mg/L	0.09	10.1	mg/L	0.09	0.85%
QC value within limits for Al 396.153 Recovery = 101.48%								
As 188.979†	436.2	0.395	mg/L	0.0064	0.395	mg/L	0.0064	1.63%
QC value within limits for As 188.979 Recovery = 98.76%								

Approved: February 24, 2011

Pierre Morris

Ba 233.527†	59324.2	1.01 mg/L	0.002	1.01 mg/L	0.002	0.24%
QC value within limits for Ba 233.527 Recovery = 100.62%						
Be 234.861†	28640.3	0.0503 mg/L	0.00029	0.0503 mg/L	0.00029	0.59%
QC value within limits for Be 234.861 Recovery = 100.63%						
B 249.677†	26668.4	0.514 mg/L	0.0037	0.514 mg/L	0.0037	0.72%
QC value within limits for B 249.677 Recovery = 102.81%						
Ca 227.546†	1050.5	10.2 mg/L	0.16	10.2 mg/L	0.16	1.53%
QC value within limits for Ca 227.546 Recovery = 102.38%						
Cd 228.802†	895.7	0.0502 mg/L	0.00044	0.0502 mg/L	0.00044	0.88%
QC value within limits for Cd 228.802 Recovery = 100.35%						
Co 228.616†	3913.9	0.195 mg/L	0.0020	0.195 mg/L	0.0020	1.05%
QC value within limits for Co 228.616 Recovery = 97.33%						
Cr 267.716†	57728.0	0.498 mg/L	0.0016	0.498 mg/L	0.0016	0.31%
QC value within limits for Cr 267.716 Recovery = 99.54%						
Cu 327.393†	72101.9	0.494 mg/L	0.0048	0.494 mg/L	0.0048	0.98%
QC value within limits for Cu 327.393 Recovery = 98.87%						
Fe 239.562†	1649.5	3.90 mg/L	0.039	3.90 mg/L	0.039	1.00%
QC value within limits for Fe 239.562 Recovery = 97.48%						
Mg 279.077†	7675.1	9.85 mg/L	0.149	9.85 mg/L	0.149	1.51%
QC value within limits for Mg 279.077 Recovery = 98.50%						
Mn 257.610†	225766.6	0.507 mg/L	0.0005	0.507 mg/L	0.0005	0.10%
QC value within limits for Mn 257.610 Recovery = 101.40%						
Mo 202.031†	13490.5	0.996 mg/L	0.0058	0.996 mg/L	0.0058	0.58%
QC value within limits for Mo 202.031 Recovery = 99.60%						
Ni 231.604†	17329.9	0.500 mg/L	0.0012	0.500 mg/L	0.0012	0.23%
QC value within limits for Ni 231.604 Recovery = 100.03%						
Pb 220.353†	3001.6	0.501 mg/L	0.0040	0.501 mg/L	0.0040	0.79%
QC value within limits for Pb 220.353 Recovery = 100.20%						
Sb 206.836†	1909.4	1.19 mg/L	0.015	1.19 mg/L	0.015	1.26%
QC value within limits for Sb 206.836 Recovery = 99.37%						
Se 196.026†	568.2	0.403 mg/L	0.0058	0.403 mg/L	0.0058	1.45%
QC value within limits for Se 196.026 Recovery = 100.76%						
Si 251.611†	171777.7	4.97 mg/L	0.026	4.97 mg/L	0.026	0.53%
QC value within limits for Si 251.611 Recovery = 99.41%						
Sn 189.927†	5891.7	1.01 mg/L	0.010	1.01 mg/L	0.010	0.98%
QC value within limits for Sn 189.927 Recovery = 100.73%						
Ti 334.940†	725667.0	1.00 mg/L	0.004	1.00 mg/L	0.004	0.40%
QC value within limits for Ti 334.940 Recovery = 100.03%						
Tl 190.801†	860.1	0.509 mg/L	0.0036	0.509 mg/L	0.0036	0.71%
QC value within limits for Tl 190.801 Recovery = 101.83%						
V 290.880†	150165.4	1.00 mg/L	0.001	1.00 mg/L	0.001	0.12%
QC value within limits for V 290.880 Recovery = 100.24%						
Zn 206.200†	33334.7	1.00 mg/L	0.004	1.00 mg/L	0.004	0.42%
QC value within limits for Zn 206.200 Recovery = 100.22%						
K 766.490†	124175.7	50.0 mg/L	0.61	50.0 mg/L	0.61	1.22%
QC value within limits for K 766.490 Recovery = 100.03%						
Na 589.592†	643625.1	49.8 mg/L	0.37	49.8 mg/L	0.37	0.75%
QC value within limits for Na 589.592 Recovery = 99.60%						
Sr 407.771†	1072730.1	1.06 mg/L	0.078	1.06 mg/L	0.078	7.35%
QC value within limits for Sr 407.771 Recovery = 105.84%						
Li 670.784†	76439.9	1.00 mg/L	0.005	1.00 mg/L	0.005	0.51%
QC value within limits for Li 670.784 Recovery = 100.49%						

All analyte(s) passed QC.

Sequence No.: 58 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 9:16:34 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	5021927.7				24881.61	0.50%
YRADIAL	287592.2				10871.16	3.78%
Ga 417.206	1326874.0				21333.48	1.61%

Approved: February 24, 2011

Pierre Morris

GaRADIAL	62465.3					1610.47	2.58%
Ag 328.068†	-180.9	-0.00162 mg/L	0.000371	-0.00162 mg/L	0.000371	22.88%	
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153†	-7.1	-0.0133 mg/L	0.00760	-0.0133 mg/L	0.00760	57.03%	
QC value within limits for Al 396.153 Recovery = Not calculated							
As 188.979†	1.0	0.00133 mg/L	0.001178	0.00133 mg/L	0.001178	88.82%	
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	2.0	-0.00048 mg/L	0.000071	-0.00048 mg/L	0.000071	14.88%	
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 234.861†	50.0	0.00009 mg/L	0.000026	0.00009 mg/L	0.000026	29.46%	
QC value within limits for Be 234.861 Recovery = Not calculated							
B 249.677†	540.7	0.0137 mg/L	0.00056	0.0137 mg/L	0.00056	4.08%	
QC value within limits for B 249.677 Recovery = Not calculated							
Ca 227.546†	5.9	0.0228 mg/L	0.02259	0.0228 mg/L	0.02259	98.89%	
QC value within limits for Ca 227.546 Recovery = Not calculated							
Cd 228.802†	-0.2	0.00005 mg/L	0.000088	0.00005 mg/L	0.000088	184.86%	
QC value within limits for Cd 228.802 Recovery = Not calculated							
Co 228.616†	-4.9	0.00018 mg/L	0.000089	0.00018 mg/L	0.000089	49.42%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	18.3	-0.00007 mg/L	0.000066	-0.00007 mg/L	0.000066	100.64%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 327.393†	75.3	0.00058 mg/L	0.000371	0.00058 mg/L	0.000371	63.81%	
QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe 239.562†	1.7	0.00195 mg/L	0.003128	0.00195 mg/L	0.003128	160.59%	
QC value within limits for Fe 239.562 Recovery = Not calculated							
Mg 279.077†	-0.2	-0.00737 mg/L	0.007519	-0.00737 mg/L	0.007519	102.04%	
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	19.0	-0.00030 mg/L	0.000023	-0.00030 mg/L	0.000023	7.58%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-5.1	-0.00115 mg/L	0.000181	-0.00115 mg/L	0.000181	15.72%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	4.5	-0.00002 mg/L	0.000258	-0.00002 mg/L	0.000258	>999.9%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	3.5	-0.00009 mg/L	0.001152	-0.00009 mg/L	0.001152	>999.9%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	1.9	0.00104 mg/L	0.001042	0.00104 mg/L	0.001042	100.59%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-8.6	-0.00178 mg/L	0.001448	-0.00178 mg/L	0.001448	81.55%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-50.7	-0.00291 mg/L	0.000394	-0.00291 mg/L	0.000394	13.54%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-74.6	-0.0111 mg/L	0.00029	-0.0111 mg/L	0.00029	2.63%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-10.9	-0.00018 mg/L	0.000289	-0.00018 mg/L	0.000289	161.36%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	4.2	-0.00049 mg/L	0.001746	-0.00049 mg/L	0.001746	355.33%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	42.5	-0.00104 mg/L	0.001142	-0.00104 mg/L	0.001142	109.49%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-216.5	-0.00693 mg/L	0.000210	-0.00693 mg/L	0.000210	3.02%	
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	-4.2	0.0181 mg/L	0.02625	0.0181 mg/L	0.02625	144.82%	
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	-47.2	-0.00276 mg/L	0.005493	-0.00276 mg/L	0.005493	199.24%	
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	218.0	-0.00042 mg/L	0.000306	-0.00042 mg/L	0.000306	72.95%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	31.9	-0.00112 mg/L	0.000997	-0.00112 mg/L	0.000997	89.03%	
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 59 **Autosampler Location: 107**
Sample ID: L1102051701 DL0.2 **Date Collected: 2/23/2011 9:23:11 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051701 DL0.2

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Approved: February 24, 2011

Pierre Morris

Mean Data: L1102051701 DL0.2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4864940.4						48941.96	1.01%
YRADIAL	286943.8						5331.82	1.86%
Ga 417.206	1333046.9						29123.21	2.18%
GaRADIAL	62712.4						1212.86	1.93%
Ag 328.068†	-12.8	-0.00242	mg/L	0.000653	-0.00242	mg/L	0.000653	27.04%
Al 396.153†	66604.4	14.2	mg/L	0.03	14.2	mg/L	0.03	0.21%
As 188.979†	12.9	0.0152	mg/L	0.00119	0.0152	mg/L	0.00119	7.84%
Ba 233.527†	254894.4	4.31	mg/L	0.019	4.31	mg/L	0.019	0.45%
Be 234.861†	4528.9	0.00121	mg/L	0.000090	0.00121	mg/L	0.000090	7.44%
B 249.677†	-2266.0	0.0911	mg/L	0.00162	0.0911	mg/L	0.00162	1.77%
Ca 227.546†	2292.7	21.8	mg/L	0.44	21.8	mg/L	0.44	2.02%
Cd 228.802†	11.5	0.00075	mg/L	0.000145	0.00075	mg/L	0.000145	19.29%
Co 228.616†	268.0	0.0112	mg/L	0.00027	0.0112	mg/L	0.00027	2.43%
Cr 267.716†	3300.9	0.0277	mg/L	0.00086	0.0277	mg/L	0.00086	3.09%
Cu 327.393†	28263.4	0.197	mg/L	0.0057	0.197	mg/L	0.0057	2.90%
Fe 239.562†	13292.5	31.4	mg/L	0.52	31.4	mg/L	0.52	1.66%
Mg 279.077†	2267.7	2.89	mg/L	0.055	2.89	mg/L	0.055	1.90%
Mn 257.610†	266377.9	0.598	mg/L	0.0015	0.598	mg/L	0.0015	0.25%
Mo 202.031†	86.8	0.00731	mg/L	0.000372	0.00731	mg/L	0.000372	5.09%
Ni 231.604†	1318.9	0.0379	mg/L	0.00024	0.0379	mg/L	0.00024	0.65%
Pb 220.353†	1042.0	0.172	mg/L	0.0017	0.172	mg/L	0.0017	1.01%
Sb 206.836†	10.7	0.00638	mg/L	0.002631	0.00638	mg/L	0.002631	41.27%
Se 196.026†	-35.1	-0.00503	mg/L	0.003632	-0.00503	mg/L	0.003632	72.15%
Si 251.611†	466875.9	13.6	mg/L	0.16	13.6	mg/L	0.16	1.20%
Sn 189.927†	-59.6	-0.00851	mg/L	0.000907	-0.00851	mg/L	0.000907	10.66%
Ti 334.940†	150306.2	0.207	mg/L	0.0011	0.207	mg/L	0.0011	0.51%
Tl 190.801†	40.8	0.0222	mg/L	0.00169	0.0222	mg/L	0.00169	7.59%
V 290.880†	4782.4	0.0329	mg/L	0.00122	0.0329	mg/L	0.00122	3.70%
Zn 206.200†	6133.3	0.183	mg/L	0.0014	0.183	mg/L	0.0014	0.78%
K 766.490†	11332.9	4.53	mg/L	0.027	4.53	mg/L	0.027	0.59%
Na 589.592†	227530.4	17.3	mg/L	0.12	17.3	mg/L	0.12	0.70%
Sr 407.771†	194342.3	0.188	mg/L	0.0107	0.188	mg/L	0.0107	5.72%
Li 670.784†	1367.8	0.0165	mg/L	0.00152	0.0165	mg/L	0.00152	9.20%

Sequence No.: 60 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 2/23/2011 9:29:58 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4514516.5						90231.41	2.00%
YRADIAL	275538.3						752.07	0.27%
Ga 417.206	1213135.8						40895.70	3.37%
GaRADIAL	61308.5						661.41	1.08%
Ag 328.068†	586.3	-0.00263	mg/L	0.000846	-0.00263	mg/L	0.000846	32.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1183699.1	252	mg/L	0.7	252	mg/L	0.7	0.28%
QC value within limits for Al 396.153 Recovery = 100.87%								
As 188.979†	7.2	-0.00274	mg/L	0.004211	-0.00274	mg/L	0.004211	153.95%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	135.2	-0.00059	mg/L	0.000303	-0.00059	mg/L	0.000303	51.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	11577.9	-0.00085	mg/L	0.000786	-0.00085	mg/L	0.000786	91.92%
QC value less than the lower limit for Be 234.861 Recovery = Not calculated								
B 249.677†	-10278.6	-0.0177	mg/L	0.00624	-0.0177	mg/L	0.00624	35.34%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	29977.0	284	mg/L	8.3	284	mg/L	8.3	2.92%
QC value within limits for Ca 227.546 Recovery = 113.56%								
Cd 228.802†	1.0	-0.00004	mg/L	0.000069	-0.00004	mg/L	0.000069	173.93%

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   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†              18.0    -0.00122 mg/L      0.000260    -0.00122 mg/L      0.000260  21.27%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             619.1    -0.00111 mg/L      0.000133    -0.00111 mg/L      0.000133  11.97%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†           -1594.2     0.00042 mg/L      0.000285     0.00042 mg/L      0.000285  67.64%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†           41347.4        97.8 mg/L          0.25        97.8 mg/L          0.25   0.26%
   QC value within limits for Fe 239.562  Recovery = 97.81%
Mg 279.077†          196420.9         252 mg/L           0.9         252 mg/L           0.9   0.36%
   QC value within limits for Mg 279.077  Recovery = 100.85%
Mn 257.610†            -219.3    -0.00009 mg/L      0.000420    -0.00009 mg/L      0.000420 482.77%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†             -15.0     0.00295 mg/L      0.001024     0.00295 mg/L      0.001024  34.71%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†             -59.6    -0.00192 mg/L      0.000493    -0.00192 mg/L      0.000493  25.62%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†             -83.8     0.00314 mg/L      0.001700     0.00314 mg/L      0.001700  54.22%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†              16.0     0.00978 mg/L      0.002396     0.00978 mg/L      0.002396  24.50%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -113.3     0.00425 mg/L      0.002593     0.00425 mg/L      0.002593  61.01%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†            1226.3      0.0342 mg/L       0.00173      0.0342 mg/L       0.00173   5.06%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†            -124.0     -0.0195 mg/L       0.00157     -0.0195 mg/L       0.00157   8.07%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†           -2058.8    -0.00017 mg/L      0.000477    -0.00017 mg/L      0.000477 281.44%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             155.0      0.0617 mg/L       0.00840      0.0617 mg/L       0.00840  13.61%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              -876.9     0.00032 mg/L      0.003343     0.00032 mg/L      0.003343 >999.9%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†             -53.2    -0.00427 mg/L      0.000363    -0.00427 mg/L      0.000363   8.51%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†                1.1      0.0202 mg/L       0.01656      0.0202 mg/L       0.01656  81.80%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             348.2      0.0271 mg/L       0.00526      0.0271 mg/L       0.00526  19.42%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†           14720.3     0.00217 mg/L      0.000359     0.00217 mg/L      0.000359  16.58%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†             158.9     0.00055 mg/L      0.000307     0.00055 mg/L      0.000307  55.65%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.

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Sequence No.: 61                                  Autosampler Location: 8
Sample ID: ICSAB                                  Date Collected: 2/23/2011 9:35:40 PM
Analyst:                                          Data Type: Original
Initial Sample Wt:                                Initial Sample Vol:
Dilution:                                         Sample Prep Vol:

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Nebulizer Parameters: ICSAB
Analyte                 Back Pressure    Flow
All                    166.0 kPa         0.50 L/min

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Mean Data: ICSAB
                  Mean Corrected          Calib.                              Sample
Analyte              Intensity      Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029          4548963.8                                                     52629.24   1.16%
YRADIAL             269620.9                                                      5769.68   2.14%
Ga 417.206         1215556.0                                                     13179.16   1.08%
GaRADIAL             59719.2                                                      1128.16   1.89%
Ag 328.068†          104761.6       0.524 mg/L        0.0062       0.524 mg/L        0.0062   1.18%
   QC value within limits for Ag 328.068  Recovery = 104.71%
Al 396.153†         1189716.9         253 mg/L           4.9         253 mg/L           4.9   1.93%
   QC value within limits for Al 396.153  Recovery = 101.38%
As 188.979†           281.6       0.249 mg/L        0.0066       0.249 mg/L        0.0066   2.66%
   QC value within limits for As 188.979  Recovery = 99.56%
Ba 233.527†         15001.6       0.252 mg/L        0.0036       0.252 mg/L        0.0036   1.45%
   QC value within limits for Ba 233.527  Recovery = 100.62%
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Be 234.861†	160489.9	0.257 mg/L	0.0052	0.257 mg/L	0.0052	2.03%
QC value within limits for Be 234.861 Recovery = 102.90%						
B 249.677†	-10266.1	-0.0421 mg/L	0.01346	-0.0421 mg/L	0.01346	31.93%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	29521.6	280 mg/L	1.4	280 mg/L	1.4	0.49%
QC value within limits for Ca 227.546 Recovery = 111.97%						
Cd 228.802†	8451.4	0.478 mg/L	0.0072	0.478 mg/L	0.0072	1.51%
QC value within limits for Cd 228.802 Recovery = 95.55%						
Co 228.616†	4651.6	0.232 mg/L	0.0027	0.232 mg/L	0.0027	1.15%
QC value within limits for Co 228.616 Recovery = 92.65%						
Cr 267.716†	29505.0	0.248 mg/L	0.0032	0.248 mg/L	0.0032	1.29%
QC value within limits for Cr 267.716 Recovery = 99.19%						
Cu 327.393†	35505.2	0.253 mg/L	0.0024	0.253 mg/L	0.0024	0.96%
QC value within limits for Cu 327.393 Recovery = 101.37%						
Fe 239.562†	40435.4	95.6 mg/L	0.35	95.6 mg/L	0.35	0.37%
QC value within limits for Fe 239.562 Recovery = 95.65%						
Mg 279.077†	193206.9	248 mg/L	0.7	248 mg/L	0.7	0.28%
QC value within limits for Mg 279.077 Recovery = 99.20%						
Mn 257.610†	112469.1	0.252 mg/L	0.0027	0.252 mg/L	0.0027	1.06%
QC value within limits for Mn 257.610 Recovery = 100.76%						
Mo 202.031†	-10.4	0.00325 mg/L	0.000569	0.00325 mg/L	0.000569	17.50%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	16390.2	0.473 mg/L	0.0059	0.473 mg/L	0.0059	1.25%
QC value within limits for Ni 231.604 Recovery = 94.59%						
Pb 220.353†	2870.2	0.491 mg/L	0.0071	0.491 mg/L	0.0071	1.44%
QC value within limits for Pb 220.353 Recovery = 98.30%						
Sb 206.836†	840.0	0.521 mg/L	0.0048	0.521 mg/L	0.0048	0.91%
QC value within limits for Sb 206.836 Recovery = 104.20%						
Se 196.026†	250.0	0.256 mg/L	0.0085	0.256 mg/L	0.0085	3.34%
QC value within limits for Se 196.026 Recovery = 102.25%						
Si 251.611†	237.4	0.00546 mg/L	0.001126	0.00546 mg/L	0.001126	20.65%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-117.2	-0.0183 mg/L	0.00147	-0.0183 mg/L	0.00147	8.03%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-2137.2	-0.00039 mg/L	0.000041	-0.00039 mg/L	0.000041	10.48%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	995.9	0.552 mg/L	0.0109	0.552 mg/L	0.0109	1.98%
QC value within limits for Tl 190.801 Recovery = 110.31%						
V 290.880†	36852.1	0.252 mg/L	0.0010	0.252 mg/L	0.0010	0.38%
QC value within limits for V 290.880 Recovery = 100.96%						
Zn 206.200†	15532.3	0.465 mg/L	0.0077	0.465 mg/L	0.0077	1.66%
QC value within limits for Zn 206.200 Recovery = 92.96%						
K 766.490†	13008.1	5.21 mg/L	0.032	5.21 mg/L	0.032	0.61%
QC value within limits for K 766.490 Recovery = 104.25%						
Na 589.592†	66824.0	5.06 mg/L	0.023	5.06 mg/L	0.023	0.45%
QC value within limits for Na 589.592 Recovery = 101.11%						
Sr 407.771†	14333.2	0.00204 mg/L	0.000264	0.00204 mg/L	0.000264	12.93%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	225.1	0.00142 mg/L	0.001319	0.00142 mg/L	0.001319	92.64%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 62 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 9:41:25 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4886068.0						23311.73	0.48%
YRADIAL	279426.7						9619.22	3.44%
Ga 417.206	1283463.3						9807.08	0.76%
GaRADIAL	60921.2						3227.31	5.30%
Ag 328.068†	77849.2	0.393	mg/L	0.0015	0.393	mg/L	0.0015	0.39%

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QC value within limits for Ag 328.068 Recovery = 98.29%

Al 396.153†	48352.1	10.3 mg/L	0.48	10.3 mg/L	0.48	4.63%
QC value within limits for Al 396.153 Recovery = 102.76%						
As 188.979†	419.1	0.380 mg/L	0.0031	0.380 mg/L	0.0031	0.81%
QC value within limits for As 188.979 Recovery = 94.89%						
Ba 233.527†	57471.0	0.975 mg/L	0.0033	0.975 mg/L	0.0033	0.33%
QC value within limits for Ba 233.527 Recovery = 97.47%						
Be 234.861†	27867.9	0.0489 mg/L	0.00011	0.0489 mg/L	0.00011	0.23%
QC value within limits for Be 234.861 Recovery = 97.85%						
B 249.677†	25350.6	0.489 mg/L	0.0044	0.489 mg/L	0.0044	0.91%
QC value within limits for B 249.677 Recovery = 97.85%						
Ca 227.546†	1037.6	10.1 mg/L	0.11	10.1 mg/L	0.11	1.14%
QC value within limits for Ca 227.546 Recovery = 101.07%						
Cd 228.802†	865.0	0.0485 mg/L	0.00033	0.0485 mg/L	0.00033	0.68%
QC value within limits for Cd 228.802 Recovery = 96.98%						
Co 228.616†	3813.6	0.190 mg/L	0.0012	0.190 mg/L	0.0012	0.64%
QC value within limits for Co 228.616 Recovery = 94.84%						
Cr 267.716†	56070.0	0.483 mg/L	0.0032	0.483 mg/L	0.0032	0.66%
QC value within limits for Cr 267.716 Recovery = 96.68%						
Cu 327.393†	70222.6	0.481 mg/L	0.0032	0.481 mg/L	0.0032	0.65%
QC value within limits for Cu 327.393 Recovery = 96.30%						
Fe 239.562†	1674.0	3.96 mg/L	0.210	3.96 mg/L	0.210	5.30%
QC value within limits for Fe 239.562 Recovery = 98.93%						
Mg 279.077†	7822.8	10.0 mg/L	0.50	10.0 mg/L	0.50	4.97%
QC value within limits for Mg 279.077 Recovery = 100.40%						
Mn 257.610†	219210.0	0.492 mg/L	0.0027	0.492 mg/L	0.0027	0.55%
QC value within limits for Mn 257.610 Recovery = 98.47%						
Mo 202.031†	13144.5	0.970 mg/L	0.0054	0.970 mg/L	0.0054	0.56%
QC value within limits for Mo 202.031 Recovery = 97.05%						
Ni 231.604†	16826.9	0.486 mg/L	0.0007	0.486 mg/L	0.0007	0.15%
QC value within limits for Ni 231.604 Recovery = 97.12%						
Pb 220.353†	2917.6	0.487 mg/L	0.0032	0.487 mg/L	0.0032	0.66%
QC value within limits for Pb 220.353 Recovery = 97.40%						
Sb 206.836†	1854.3	1.16 mg/L	0.011	1.16 mg/L	0.011	0.97%
QC value within limits for Sb 206.836 Recovery = 96.51%						
Se 196.026†	558.5	0.396 mg/L	0.0009	0.396 mg/L	0.0009	0.23%
QC value within limits for Se 196.026 Recovery = 99.07%						
Si 251.611†	166339.5	4.81 mg/L	0.020	4.81 mg/L	0.020	0.42%
QC value within limits for Si 251.611 Recovery = 96.26%						
Sn 189.927†	5713.9	0.977 mg/L	0.0048	0.977 mg/L	0.0048	0.49%
QC value within limits for Sn 189.927 Recovery = 97.69%						
Ti 334.940†	710250.8	0.979 mg/L	0.0039	0.979 mg/L	0.0039	0.40%
QC value within limits for Ti 334.940 Recovery = 97.90%						
Tl 190.801†	841.3	0.498 mg/L	0.0048	0.498 mg/L	0.0048	0.96%
QC value within limits for Tl 190.801 Recovery = 99.58%						
V 290.880†	145964.7	0.974 mg/L	0.0065	0.974 mg/L	0.0065	0.66%
QC value within limits for V 290.880 Recovery = 97.44%						
Zn 206.200†	32285.5	0.971 mg/L	0.0025	0.971 mg/L	0.0025	0.26%
QC value within limits for Zn 206.200 Recovery = 97.07%						
K 766.490†	125406.0	50.5 mg/L	2.03	50.5 mg/L	2.03	4.01%
QC value within limits for K 766.490 Recovery = 101.03%						
Na 589.592†	648208.5	50.2 mg/L	2.91	50.2 mg/L	2.91	5.81%
QC value within limits for Na 589.592 Recovery = 100.33%						
Sr 407.771†	1079231.1	1.06 mg/L	0.027	1.06 mg/L	0.027	2.58%
QC value within limits for Sr 407.771 Recovery = 106.48%						
Li 670.784†	77316.8	1.02 mg/L	0.051	1.02 mg/L	0.051	5.05%
QC value within limits for Li 670.784 Recovery = 101.64%						

All analyte(s) passed QC.

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Sequence No.: 63 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 9:48:05 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Approved: February 24, 2011

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Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4962282.1						38397.60	0.77%
YRADIAL	291121.2						10020.66	3.44%
Ga 417.206	1312799.5						4859.76	0.37%
GaRADIAL	62969.2						2205.14	3.50%
Ag 328.068†	-136.8	-0.00140	mg/L	0.000852	-0.00140	mg/L	0.000852	60.89%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-33.4	-0.0189	mg/L	0.00710	-0.0189	mg/L	0.00710	37.47%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.3	-0.00082	mg/L	0.002344	-0.00082	mg/L	0.002344	284.17%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-2.2	-0.00055	mg/L	0.000048	-0.00055	mg/L	0.000048	8.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	48.7	0.00009	mg/L	0.000025	0.00009	mg/L	0.000025	28.67%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	81.6	0.00505	mg/L	0.000212	0.00505	mg/L	0.000212	4.20%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	5.0	0.0151	mg/L	0.04225	0.0151	mg/L	0.04225	280.62%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-3.8	-0.00014	mg/L	0.000117	-0.00014	mg/L	0.000117	81.41%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-4.0	0.00023	mg/L	0.000077	0.00023	mg/L	0.000077	33.71%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	6.8	-0.00016	mg/L	0.000024	-0.00016	mg/L	0.000024	14.47%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	65.5	0.00051	mg/L	0.001222	0.00051	mg/L	0.001222	238.01%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.7	-0.00033	mg/L	0.004435	-0.00033	mg/L	0.004435	>999.9%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	2.8	-0.00358	mg/L	0.006050	-0.00358	mg/L	0.006050	168.96%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	46.3	-0.00024	mg/L	0.000011	-0.00024	mg/L	0.000011	4.61%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.8	-0.00072	mg/L	0.000213	-0.00072	mg/L	0.000213	29.67%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	8.4	0.00009	mg/L	0.000324	0.00009	mg/L	0.000324	342.93%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	4.4	0.00007	mg/L	0.001138	0.00007	mg/L	0.001138	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.4	0.00135	mg/L	0.000479	0.00135	mg/L	0.000479	35.41%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-2.4	0.00257	mg/L	0.005370	0.00257	mg/L	0.005370	208.91%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-24.8	-0.00217	mg/L	0.000746	-0.00217	mg/L	0.000746	34.39%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-77.9	-0.0116	mg/L	0.00067	-0.0116	mg/L	0.00067	5.75%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-124.3	-0.00034	mg/L	0.000102	-0.00034	mg/L	0.000102	30.26%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	3.9	-0.00068	mg/L	0.002441	-0.00068	mg/L	0.002441	359.77%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	25.0	-0.00116	mg/L	0.000216	-0.00116	mg/L	0.000216	18.64%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-213.3	-0.00684	mg/L	0.000120	-0.00684	mg/L	0.000120	1.75%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	-24.5	0.0100	mg/L	0.02688	0.0100	mg/L	0.02688	267.56%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	-37.0	-0.00199	mg/L	0.014544	-0.00199	mg/L	0.014544	729.76%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	289.2	-0.00035	mg/L	0.000026	-0.00035	mg/L	0.000026	7.33%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	162.9	0.00060	mg/L	0.001093	0.00060	mg/L	0.001093	180.93%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Approved: February 24, 2011

Pierre Morris

2.2.2 Metals ICP-MS Data

2.2.2.1 Summary Data

Login Number: L11020492

Department: Metals

Analyst: Ji Hu
Analyst #2: Erin Long

METHOD

Preparation: SW-846 3015

Analysis: SW-846 6020

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

Low Level Check: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG357188 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 21923
Approved By: Sheri Pfalzgraf

LABORATORY REPORT

L11020492

03/03/11 15:59

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-POND-21711-W	L11020492-02	6020	1	18-FEB-11

Microbac Laboratories Inc.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number:	**L11020492-02**	PrePrep Method:	**NONE**	Instrument:	**ELAN-ICP**
Client ID:	**SWMU-57-POND-21711-W**	Prep Method:	**3015**	Prep Date:	**02/21/2011 06:07**
Matrix:	**Water**	Analytical Method:	**6020**	Cal Date:	**02/22/2011 09:56**
Workgroup Number:	**WG357188**	Analyst:	**JYH**	Run Date:	**02/22/2011 12:40**
Collect Date:	**02/17/2011 14:45**	Dilution:	**1**	File ID:	**EL.022211.124055**
Sample Tag:	**01**	Units:	**mg/L**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Antimony, Total	**7440-36-0**	**0.0264**		**0.00100**	**0.000500**
Selenium, Total	**7782-49-2**		**U**	**0.00100**	**0.000500**
Thallium, Total	**7440-28-0**		**U**	**0.000200**	**0.000100**

U Analyte was not detected. The concentration is below the reported LOD.

2.2.2.2 QC Summary Data

Example 6020 Calculations
Perkin Elmer ELAN 6100

1.0 Initial Calibration (ICAL) Parameters
The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Final volume	100
Vi = Initial volume	40
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in (ug/L)	0.25

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Final volume	200
Vi = Initial volume	0.5
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in (ug/kg)	40

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:	**Example:**
Cx = Concentration calculated as received (wet basis)	40
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (ug/kg)	50

50 ug/kg = 0.050 mg/kg

Perkin Elmer ELAN ICP/MS

STANDARDS KEY

QC Std 1 - ICV
QC Std 2 - ICB
QC Std 3 - LLICV
QC Std 4 - ICSA
QC Std 5 - ICSAB
QC Std 6 - CCV
QC Std 7 - CCB
QC Std 8 - LLCCV

Calibration Solutions

Analyte	Stock Conc. (mg/L)	S1 (mg/L)	S2 (mg/L)	S3 (mg/L)	S4 (mg/L)
Al	10	0	0.0004	0.05	0.1
Sb	10	0	0.0004	0.05	0.1
As	10	0	0.0004	0.05	0.1
Ba	10	0	0.0004	0.05	0.1
Be	10	0	0.0004	0.05	0.1
Ca	1000	0	0.04	5	10
Cd	10	0	0.0004	0.05	0.1
Cr	10	0	0.0004	0.05	0.1
Co	10	0	0.0004	0.05	0.1
Cu	10	0	0.0004	0.05	0.1
Fe	1000	0	0.04	5	10
Pb	10	0	0.0004	0.05	0.1
Mg	1000	0	0.04	5	10
Mn	10	0	0.0004	0.05	0.1
Ni	10	0	0.0004	0.05	0.1
K	1000	0	0.04	5	10
Se	10	0	0.0004	0.05	0.1
Ag	10	0	0.0004	0.05	0.1
Na	1000	0	0.04	5	10
Tl	10	0	0.0004	0.05	0.1
V	10	0	0.0004	0.05	0.1
U	1000	0	0.0004	0.05	0.1
Zn	10	0	0.0004	0.05	0.1

Microbac Laboratories Inc.
Microwave Digestion Log

Workgroup: WG357046
Analyst: VC
Spike Analyst: VC
Run Date: 02/21/2011 06:07
Method: 3015

SOP: ME407 Revison 11
Spike Solution: STD41894
Spike Witness: REK
HNO3 Lot #: COA15168
Digestion Tubes Lot #: COA15251
ICP-MS;WG353543 Lot #: COA15150

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG357046-02	BLANK	1	40 mL	100 mL	206.958 g	206.944 g		
2	WG357046-03	LCS	1	40 mL	100 mL	204.817 g	204.809 g	.25 mL	
3	L11020275-01	SAMP	1	40 mL	100 mL	207.198 g	207.196 g		02/22/11
4	L11020275-02	SAMP	1	40 mL	100 mL	208.986 g	208.987 g		02/22/11
5	L11020275-03	SAMP	1	40 mL	100 mL	206.136 g	206.131 g		02/22/11
6	L11020275-04	SAMP	1	40 mL	100 mL	206.481 g	206.475 g		02/22/11
7	L11020275-05	SAMP	1	40 mL	100 mL	210.066 g	210.06 g		02/22/11
8	L11020298-01	SAMP	1	40 mL	100 mL	204.594 g	204.589 g		02/22/11
9	L11020486-02	SAMP	1	40 mL	100 mL	206.106 g	206.096 g		03/04/11
10	WG357046-01	REF	1	40 mL	100 mL	207.318 g	207.302 g		
11	L11020486-07	RS02	1	40 mL	100 mL	207.318 g	207.302 g		03/04/11
12	WG357046-04	MS	1	40 mL	100 mL	209.392 g	209.384 g	.25 mL	
13	L11020486-08	MS02	1	40 mL	100 mL	209.392 g	209.384 g	.25 mL	03/04/11
14	WG357046-05	MSD	1	40 mL	100 mL	209.33 g	209.322 g	.25 mL	
15	L11020486-09	SD02	1	40 mL	100 mL	209.33 g	209.322 g	.25 mL	03/04/11
16	L11020486-14	SAMP	1	40 mL	100 mL	207.53 g	207.522 g		03/04/11
17	L11020486-17	SAMP	1	40 mL	100 mL	206.295 g	206.295 g		03/04/11
18	L11020486-20	SAMP	1	40 mL	100 mL	206.499 g	206.496 g		03/04/11
19	L11020486-23	SAMP	1	40 mL	100 mL	205.642 g	205.633 g		03/04/11
20	L11020486-26	SAMP	1	40 mL	100 mL	205.465 g	205.456 g		03/04/11
21	L11020486-29	SAMP	1	40 mL	100 mL	207.634 g	207.625 g		03/04/11
22	L11020492-02	SAMP	1	40 mL	100 mL	208.109 g	208.095 g		02/25/11

L11020486-14	filtered w/ coa15150
L11020486-20	filtered w/ coa15150

Analyst: Vicki Collins

Reviewer:

MW_DIG - Modified 09/30/2009
PDF ID: 1924253
Report generated: 02/21/2011 09:19

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 022211A.REP
Analyst1: EDL Analyst2: JYH
Method: 6020 SOP: ME700 Rev: 6
Maintenance Log ID: 36515

Calibration Std: STD43845 ICV Std: STD43557 Post Spike: STD42704
ICSA: STD43561 ICSAB: STD44048 Int. Std: STD43721
CCV: STD43914 LLCCV: STD44016

Workgroups: 357188, 356974, 357217, 357249, 355427

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	EL.022211.092949	Blank	Blank		1		02/22/11 09:29
2	EL.022211.093634	WG357212-01	Calibration Point		1		02/22/11 09:36
3	EL.022211.094318	WG357212-02	Calibration Point		1		02/22/11 09:43
4	EL.022211.095004	WG357212-03	Calibration Point		1		02/22/11 09:50
5	EL.022211.095650	WG357212-04	Calibration Point		1		02/22/11 09:56
6	EL.022211.100335	WG357212-05	Initial Calibration Verification		1		02/22/11 10:03
7	EL.022211.101059	WG357212-06	Initial Calib Blank		1		02/22/11 10:10
8	EL.022211.101747	WG357212-07	Low Level Initial Calibration V		1		02/22/11 10:17
9	EL.022211.102435	WG357212-18	Interference Check		1		02/22/11 10:24
10	EL.022211.103123	WG357212-19	Interference Check		1		02/22/11 10:31
11	EL.022211.103811	WG357212-10	CCV		1		02/22/11 10:38
12	EL.022211.104527	WG357212-11	CCB		1		02/22/11 10:45
13	EL.022211.105211	WG357046-02	Method/Prep Blank	40/100	1		02/22/11 10:52
14	EL.022211.105856	WG357046-03	Laboratory Control S	40/100	1		02/22/11 10:58
15	EL.022211.110541	L11020486-02	MW2A.258.14	40/100	1		02/22/11 11:05
16	EL.022211.111226	WG357046-01	Reference Sample		1	L11020486-07	02/22/11 11:12
17	EL.022211.111912	WG357046-04	Matrix Spike	40/100	1	L11020486-07	02/22/11 11:19
18	EL.022211.112557	WG357046-05	Matrix Spike Duplica	40/100	1	L11020486-07	02/22/11 11:25
19	EL.022211.113244	L11020486-14	MW4A.258.14	40/100	1		02/22/11 11:32
20	EL.022211.113930	L11020486-17	MW5A.258.14	40/100	1		02/22/11 11:39
21	EL.022211.114617	WG357188-01	Post Digestion Spike		1	L11020486-17	02/22/11 11:46
22	EL.022211.115305	WG357188-02	Serial Dilution		5	L11020486-17	02/22/11 11:53
23	EL.022211.115952	WG357212-12	CCV		1		02/22/11 11:59
24	EL.022211.120707	WG357212-13	CCB		1		02/22/11 12:07
25	EL.022211.121353	L11020486-20	OW1A.258.14	40/100	1		02/22/11 12:13
26	EL.022211.122040	L11020486-23	OW1A2.258.14	40/100	1		02/22/11 12:20
27	EL.022211.122724	L11020486-26	OW2A.258.14	40/100	1		02/22/11 12:27
28	EL.022211.123410	L11020486-29	OW3A.258.14	40/100	1		02/22/11 12:34
29	EL.022211.124055	L11020492-02	SWMU-57-POND-21711-W	40/100	1		02/22/11 12:40
30	EL.022211.124741	WG357212-14	CCV		1		02/22/11 12:47
31	EL.022211.125457	WG357212-15	CCB		1		02/22/11 12:54
33	EL.022211.130828	L11020275-02	MNPL-MPL-MPL-103-0211	40/100	1		02/22/11 13:08
34	EL.022211.131515	L11020275-03	MNPL-MPL-MPL-023-0211	40/100	1		02/22/11 13:15
35	EL.022211.132201	L11020275-04	MNPL-MPL-MPL-123-0211	40/100	1		02/22/11 13:22

Page: 1 Approved: February 23, 2011

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 022211A.REP
Analyst1: EDL Analyst2: JYH
Method: 6020 SOP: ME700 Rev: 6
Maintenance Log ID: 36515

Calibration Std: STD43845 ICV Std: STD43557 Post Spike: STD42704
ICSA: STD43561 ICSAB: STD44048 Int. Std: STD43721
CCV: STD43914 LLCCV: STD44016

Workgroups: 357188, 356974, 357217, 357249, 355427

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
36	EL.022211.132849	L11020275-05	MNPL-MPL-MPL-025-0211	40/100	1		02/22/11 13:28
37	EL.022211.133536	L11020298-01	MNPL-MPL-MPL-003-0211	40/100	1		02/22/11 13:35
38	EL.022211.134224	F BLANK	F BLANK		1		02/22/11 13:42
39	EL.022211.134911	WG357212-16	CCV		1		02/22/11 13:49
40	EL.022211.135627	WG357212-17	CCB		1		02/22/11 13:56
41	EL.022211.142915	WG356896-04	Method/Prep Blank	40/100	1		02/22/11 14:29
42	EL.022211.143602	WG356896-05	Laboratory Control S	40/100	1		02/22/11 14:36
43	EL.022211.144247	L11020402-02	SW1A.258.14	40/100	1		02/22/11 14:42
44	EL.022211.144932	WG356896-01	Reference Sample		1	L11020402-07	02/22/11 14:49
45	EL.022211.145618	WG356896-06	Matrix Spike	40/100	1	L11020402-07	02/22/11 14:56
46	EL.022211.150304	WG356896-07	Matrix Spike Duplica	40/100	1	L11020402-07	02/22/11 15:03
47	EL.022211.150950	L11020402-14	SW3A.258.14	40/100	1		02/22/11 15:09
48	EL.022211.151637	L11020402-17	SW3B.258.14	40/100	1		02/22/11 15:16
49	EL.022211.152324	WG356974-01	Post Digestion Spike		1	L11020402-17	02/22/11 15:23
50	EL.022211.153011	WG356974-02	Serial Dilution		5	L11020402-17	02/22/11 15:30
51	EL.022211.153659	WG357212-20	CCV		1		02/22/11 15:36
52	EL.022211.154414	WG357212-21	CCB		1		02/22/11 15:44
53	EL.022211.155100	L11020402-20	SW4A.258.14	40/100	1		02/22/11 15:51
54	EL.022211.155749	L11020402-23	SW5A.258.14	40/100	1		02/22/11 15:57
55	EL.022211.160437	L11020434-01	01SYS-EFF-021411	40/100	1		02/22/11 16:04
56	EL.022211.161124	WG356896-02	Reference Sample		1	L11020443-01	02/22/11 16:11
57	EL.022211.161809	WG356896-08	Matrix Spike	40/100	1	L11020443-01	02/22/11 16:18
58	EL.022211.162455	L11020447-05	SITE \#1-2-16-11-FB	40/100	1		02/22/11 16:24
59	EL.022211.163141	L11020450-01	OUTFALL 003	40/100	1		02/22/11 16:31
60	EL.022211.163828	WG356896-03	Reference Sample		1	L11020450-02	02/22/11 16:38
61	EL.022211.164515	WG356896-09	Duplicate	40/100	1	L11020450-02	02/22/11 16:45
62	EL.022211.165202	WG357212-22	CCV		1		02/22/11 16:52
63	EL.022211.165917	WG357212-23	CCB		1		02/22/11 16:59
64	EL.022211.170603	WG357168-02	Method/Prep Blank	40/100	1		02/22/11 17:06
66	EL.022211.171938	L11020517-01	PSO2-GW-021811	40/100	1		02/22/11 17:19
67	EL.022211.172627	L11020533-01	LH18/24-SP650-6443-GRAB	40/100	1		02/22/11 17:26
68	EL.022211.173315	WG357168-01	Reference Sample		1	L11020533-02	02/22/11 17:33
69	EL.022211.174004	WG357168-04	Matrix Spike	40/100	1	L11020533-02	02/22/11 17:40
70	EL.022211.174651	WG357168-05	Matrix Spike Duplica	40/100	1	L11020533-02	02/22/11 17:46

Page: 2 Approved: February 23, 2011

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 022211A.REP
Analyst1: EDL Analyst2: JYH
Method: 6020 SOP: ME700 Rev: 6
Maintenance Log ID: 36515

Calibration Std: STD43845 ICV Std: STD43557 Post Spike: STD42704
ICSA: STD43561 ICSAB: STD44048 Int. Std: STD43721
CCV: STD43914 LLCCV: STD44016

Workgroups: 357188, 356974, 357217, 357249, 355427

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
71	EL.022211.175337	L11020545-13	GB-57-1-EQ	40/100	1		02/22/11 17:53
72	EL.022211.180023	WG357217-01	Post Digestion Spike		1	L11020545-13	02/22/11 18:00
73	EL.022211.180710	WG357217-02	Serial Dilution		5	L11020545-13	02/22/11 18:07
74	EL.022211.181356	WG357212-24	CCV		1		02/22/11 18:13
75	EL.022211.182112	WG357212-25	CCB		1		02/22/11 18:21
76	EL.022211.182758	L11020547-12	GB-68-1.5-EQ	40/100	1		02/22/11 18:27
77	EL.022211.183445	F BLANK	F BLANK		1		02/22/11 18:34
78	EL.022211.184132	WG357212-26	Interference Check		1		02/22/11 18:41
79	EL.022211.184820	WG357212-27	Interference Check		1		02/22/11 18:48
80	EL.022211.185508	WG357212-28	CCV		1		02/22/11 18:55
81	EL.022211.190224	WG357212-29	CCB		1		02/22/11 19:02
82	EL.022211.190910	WG357212-30	Low Level Continuing Calibra		1		02/22/11 19:09
83	EL.022211.191559	WG356440-01	Method/Prep Blank	.5/200	1		02/22/11 19:15
84	EL.022211.192247	L11020002-37	VICKI/JI 1	.5/200	1		02/22/11 19:22
85	EL.022211.192935	L11020002-38	VICKI/JI 2	.5/200	1		02/22/11 19:29
86	EL.022211.193624	L11020002-39	VICKI/JI 3	.5/200	1		02/22/11 19:36
87	EL.022211.194312	L11020002-40	VICKI/JI 4	.5/200	1		02/22/11 19:43
88	EL.022211.195002	L11010707-08	D073-540	.507/200	25		02/22/11 19:50
89	EL.022211.195650	WG357212-31	CCV		1		02/22/11 19:56
90	EL.022211.200405	WG357212-32	CCB		1		02/22/11 20:04
91	EL.022211.130142	L11020575-01	VMP1-GW-022111	40/100	1		02/22/11 13:01
92	EL.022211.171250	WG357468-03	LCSW 73 WG357468-03	40/100	1		02/22/11 17:12
93	EL.022311.081951	WG357212-33	QC Std 5		1		02/23/11 08:19
94	EL.022311.082640	WG357212-34	QC Std 5		1		02/23/11 08:26

  Approved: February 23, 2011

Maren Berry

Microbac Laboratories Inc.

Data Checklist

Date: 22-FEB-2011
Analyst: EDL
Analyst: JYH
Method: 6020
Instrument: ELAN-ICP
Curve Workgroup: 357212
Runlog ID: 39143
Analytical Workgroups: 357188, 356896, 357217, 357249, 355427

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	X
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	275, 298, 492, 434, 447, 517, 533
Case Narrative (Continued)	545, 547
Client Forms	X
Level X	
Level 3	517, 533, 545, 547
Level 4	275, 298, 492, 434, 447
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	EDL
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
23-FEB-2011
Erin D. Long

Secondary Reviewer:
24-FEB-2011
Maren Beery

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-24-2011 10:25:58

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method 6020 AAB#: WG357188

Login Number: L11020492

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-POND-21711-W	02	02/17/11					02/21/11	3.6	180		02/22/11	4.9	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1925773
Report generated 02/22/2011 14:50

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L11020492	Work Group:	WG357188
Blank File ID:	EL.022211.105211	Blank Sample ID:	WG357046-02
Prep Date:	02/21/11 06:07	Instrument ID:	ELAN-ICP
Analyzed Date:	02/22/11 10:52	Method:	6020
Analyst:	JYH		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357046-03	EL.022211.105856	02/22/11 10:58	01
SWMU-57-POND-21711-W	L11020492-02	EL.022211.124055	02/22/11 12:40	01

Report Name: BLANK_SUMMARY
PDF File ID: 1925774
Report generated 02/22/2011 14:50

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11020492 Prep Date: 02/21/11 06:07 Sample ID: WG357046-02
Instrument ID: ELAN-ICP Run Date: 02/22/11 10:52 Prep Method: 3015
File ID: EL.022211.105211 Analyst: JYH Method: 6020
Workgroup (AAB#): WG357188 Matrix: Water Units: mg/L
Contract #: Cal ID: ELAN-I-22-FEB-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Antimony, Total	0.000500	0.00100	0.000500	1	U
Selenium, Total	0.000500	0.00100	0.000500	1	U
Thallium, Total	0.000100	0.000200	0.000100	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1925775
22-FEB-2011 14:50

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357046-03
Instrument ID: ELAN-ICP Run Time: 10:58 Prep Method: 3015
File ID: EL.022211.105856 Analyst: JYH Method: 6020
Workgroup (AAB#): WG357188 Matrix: Water Units: mg/L
QC Key: DOD4 Lot#: STD41894 Cal ID: ELAN-I-22-FEB-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0614	98.3	80 - 120	
Selenium, Total	0.0625	0.0564	90.2	80 - 120	
Thallium, Total	0.0625	0.0644	103	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1925776
Report generated: 02/22/2011 14:50

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11020492 Cal ID:ELAN-ICP- Worknum:WG357188
Instrument ID:ELAN-ICP Contract #: Method:6020
Parent ID:WG357046-01 File ID:EL.022211.111226 Dil:1 Matrix:WATER
Sample ID:WG357046-04 MS File ID:EL.022211.111912 Dil:1 Units:mg/L
Sample ID:WG357046-05 MSD File ID:EL.022211.112557 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony	ND	0.0625	0.0573	91.7	0.0625	0.0580	92.8	1.25	80 - 120	20	
Selenium	ND	0.0625	0.0553	88.5	0.0625	0.0567	90.7	2.50	80 - 120	20	
Thallium	ND	0.0625	0.0661	106	0.0625	0.0665	106	0.521	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008
PDF File ID:1925777
Report generated 02/22/2011 14:50

Microbac Laboratories Inc.
Serial Dilution Report

Login: L11020492 **Worknum:** WG357188
Instrument: ELAN-ICP **Method:** 6020
Serial Dil: WG357188-02 **File ID:** EL.022211.115305 **Dil:** 5 **Units:** ug/L
Sample: L11020486-17 **File ID:** EL.022211.113930 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	ND	U		
Selenium	ND	U	ND	U		
Thallium	ND	U	ND	U		

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 100 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 100 times the MDL.

SERIAL_DIL - Modified 09/22/2008
PDF File ID: 1925771
02/22/2011 14:50

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11020492 **Worknum:** WG357188
Instrument ID: ELAN-ICP **Method:** 6020
Post Spike ID: WG357188-01 **File ID:** EL.022211.114617 **Dil:** 1 **Units:** ug/L
Sample ID: L11020486-17 **File ID:** EL.022211.113930 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	50.3		0	U	50	100.7	75 - 125	
SELENIUM	44.3		0	U	50	88.6	75 - 125	
THALLIUM	53.4		0	U	50	106.8	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1925772
Report generated: 02/22/2011 14:50

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L11020492**	Workgroup (AAB#):	**WG357188**
Analytical Method:	**6020**	Instrument ID:	**ELAN-ICP**
ICAL Worknum:	**WG357212**	Initial Calibration Date:	**22-FEB-2011 09:56**

	WG357212-01		WG357212-02		WG357212-03		WG357212-04			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ANTIMONY	0	36.6	.4	1640	50	194000	100	372000	.999969	
SELENIUM	0	-0.145	.4	39.5	50	5020	100	9430	.999929	
THALLIUM	0	19.3	.4	2790	50	327000	100	646000	.999954	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

INT_CAL_ICP - Modified 03/06/2008
PDF File ID 1925780
Report generated: 22-FEB-2011 14:50

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357212-06
Instrument ID: ELAN-ICP Run Time: 10:10 Method: 6020
File ID: EL.022211.101059 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG357188 Cal ID: ELAN-ICP - 22-FEB-11
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ANTIMONY	.2	.4	.2	U
SELENIUM	.2	.4	.2	U
THALLIUM	.04	.08	.04	U

U = Result is less than 2 x MDL
F = Result is between MDL and 2 x MDL
* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1925782
Report generated 02/22/2011 14:50

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020492	Run Date:	02/22/2011	Sample ID:	WG357212-11
Instrument ID:	ELAN-ICP	Run Time:	10:45	Method:	6020
File ID:	EL.022211.104527	Analyst:	JYH	Units:	ug/L
Workgroup (AAB#):	WG357188	Cal ID:	ELAN-I - 22-FEB-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1925785
Report generated 02/22/2011 14:50

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357212-13
Instrument ID: ELAN-ICP Run Time: 12:07 Method: 6020
File ID: EL.022211.120707 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG357188 Cal ID: ELAN-I - 22-FEB-11
Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1925785
Report generated 02/22/2011 14:50

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357212-15

Instrument ID: ELAN-ICP Run Time: 12:54 Method: 6020

File ID: EL.022211.125457 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG357188 Cal ID: ELAN-I - 22-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1925785
Report generated 02/22/2011 14:50

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357212-05

Instrument ID: ELAN-ICP Run Time: 10:03 Method: 6020

File ID: EL.022211.100335 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG357188 Cal ID: ELAN-I - 22-FEB-11

QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	49.3	98.6	90 - 110	
Selenium		50	52.2	104	90 - 110	
Thallium		50	50.4	101	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008

PDF File ID: 1925781

Report generated 02/22/2011 14:50

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357212-10

Instrument ID: ELAN-ICP Run Time: 10:38 Method: 6020

File ID: EL.022211.103811 Analyst: JYH QC Key: DOD4

Workgroup (AAB#): WG357188 Cal ID: ELAN-I - 22-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	49.4	ug/L	98.8	90 - 110		
Selenium		50.0	49.7	ug/L	99.4	90 - 110		
Thallium		50.0	48.3	ug/L	96.5	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1925784

Report generated 02/22/2011 14:50

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357212-12

Instrument ID: ELAN-ICP Run Time: 11:59 Method: 6020

File ID: EL.022211.115952 Analyst: JYH QC Key: DOD4

Workgroup (AAB#): WG357188 Cal ID: ELAN-I - 22-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	48.6	ug/L	97.1	90 - 110		
Selenium		50.0	48.6	ug/L	97.3	90 - 110		
Thallium		50.0	50.0	ug/L	100	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1925784

Report generated 02/22/2011 14:50

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357212-14

Instrument ID: ELAN-ICP Run Time: 12:47 Method: 6020

File ID: EL.022211.124741 Analyst: JYH QC Key: DOD4

Workgroup (AAB#): WG357188 Cal ID: ELAN-I - 22-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.5	ug/L	101	90 - 110		
Selenium		50.0	49.8	ug/L	99.7	90 - 110		
Thallium		50.0	52.4	ug/L	105	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1925784

Report generated 02/22/2011 14:50

Microbac Laboratories Inc.

LOW LEVEL CALIBRATION VERIFICATION

Login Number: L11020492 Run Date: 02/22/2011 Sample ID: WG357212-07

Instrument ID: ELAN-ICP Run Time: 10:17 Method: 6020

File ID: EL.022211.101747 Analyst: JYH QC Key: DOD4

Workgroup (AAB#): WG357188 Cal ID: ELAN-I - 22-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		0.400	0.431	ug/L	108	80 - 120		
Selenium		0.400	0.336	ug/L	84.0	80 - 120		
Thallium		0.0800	0.0868	ug/L	109	80 - 120		

* Exceeds LIMITS Criteria

LLCCV - Modified 1/7/2010

PDF File ID: 1925786

Report generated 02/22/2011 14:50

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11020492 **Workgroup (AAB#):** WG357188
Instrument ID: ELAN-ICP **Method:** 6020
Sol. A : WG357212-18 **File ID:** EL.022211.102435 **Units:** ug/L
Sol. AB : WG357212-19 **File ID:** EL.022211.103123 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0632	NS	100	99.4	99.4	
Selenium	NS	0.0317	NS	100	101	101	
Thallium	NS	0.0111	NS	100	102	102	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

Microbac Laboratories Inc.

INTERNAL STANDARD REPORT

Login: L11020492 **Analytical Method** 6020
Analytical Workgroup: WG357188 **Matrix:** 1
Instrument: ELAN-ICP **Analyst:** JYH
ICAL Date: 22-FEB-2011 09:36

			BISMUTH	GERMANIUM	INDIUM	TERBIUM
Sample	Type	Run Date	% Rec	% Rec	% Rec	% Rec
L11020486-17	SAMP	22-FEB-2011 11:39	101.92	91.527	97.569	102.308
L11020492-02	SAMP	22-FEB-2011 12:40	102.663	92.858	97.015	104.151
WG357046-01	REF	22-FEB-2011 11:12	106.658	93.349	101.189	106.043
WG357046-02	BLANK	22-FEB-2011 10:52	100.699	92.308	98.236	100.995
WG357046-03	LCS	22-FEB-2011 10:58	96.532	90.124	95.606	97.227
WG357046-04	MS	22-FEB-2011 11:19	106.193	93.137	100.629	105.096
WG357046-05	MSD	22-FEB-2011 11:25	101.758	91.234	97.829	102.929
WG357188-01	PSPK	22-FEB-2011 11:46	104.168	93.649	101.448	104.857
WG357188-02	SERIAL	22-FEB-2011 11:53	98.496	92.637	95.366	100.572
WG357212-05	ICV	22-FEB-2011 10:03	97.165	91.041	96.045	98.724
WG357212-06	ICB	22-FEB-2011 10:10	96.892	92.565	96.514	98.543
WG357212-07	LLICV	22-FEB-2011 10:17	95.563	92.282	96.406	96.682
WG357212-10	CCV	22-FEB-2011 10:38	94.469	90.232	93.097	94.495
WG357212-11	CCB	22-FEB-2011 10:45	93.134	89.749	93.462	95.501
WG357212-12	CCV	22-FEB-2011 11:59	96.13	95.176	97.199	99.99
WG357212-13	CCB	22-FEB-2011 12:07	99.271	94.3	97.9	99.188
WG357212-14	CCV	22-FEB-2011 12:47	92.889	92.289	94.121	96.818
WG357212-15	CCB	22-FEB-2011 12:54	97.192	93.646	95.645	100.885
WG357212-18	ICS	22-FEB-2011 10:24	93.355	89.803	91.832	93.68
WG357212-19	ICS	22-FEB-2011 10:31	90.956	88.238	92.024	92.359

Acceptance criteria: 30% - 120% Underlined recoveries are out of range
Acceptance criteria for CCVs and CCBs for method SW846-6020: 80% - 120%

INT_STD_ICPMS - Modified 07/28/2010
PDF File ID: 1925779
Report generated: 02/22/2011 14:50

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L11020492 **Date:** 12/07/2010
Insturment ID: ELAN-ICP **Method:** 6020

Analyte	Integration Time (Sec.)	Concentration (ug/L)
Antimony	1.00	100.0
Arsenic	1.00	100.0
Barium	1.00	100.0
Cadmium	1.00	100.0
Chromium	1.00	100.0
Cobalt	1.00	100.0
Copper	1.00	100.0
Lead	1.00	100.0
Manganese	1.00	100.0
Nickel	1.00	100.0
Selenium	1.00	100.0
Silver	1.00	100.0
Thallium	1.00	100.0
Uranium	1.00	100.0
Vanadium	1.00	100.0
Zinc	1.00	100.0

Comments:
All analytes passed acceptance criteria at the specified concentration.

LINEAR_RANGE - Modified 03/06/2008
PDF File ID: 1925778
Report generated: 02/22/2011 14:50

2.2.2.3 Raw Data

Instrument Tuning Report

File Name: 06302008.tun
File Path: C:\Elandata\Tuning\06302008.tun

Sample Information

Sample Date/Time: Tuesday, February 22, 2011 08:41:27

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	3.026	622	2060	0.710	
Li	7.016	7.029	1587	2060	0.701	
Co	58.933	58.878	14276	1972	0.712	
Ce	139.905	139.929	33999	2015	0.725	
Tl	204.975	205.027	49701	2255	0.718	

Relative Std. Dev.

Mass	Meas. Intens. RSD
2.000	0.503
3.000	2.633
4.000	27.633
5.000	12.925
6.000	1.565
7.000	0.968
8.000	17.391
9.000	3.096
58.000	5.656
59.000	1.043
60.000	14.320
139.000	2.565
140.000	0.669
141.000	4.992
204.000	2.328
205.000	1.717
206.000	2.286

Report Date/Time: Tuesday, February 22, 2011 08:42:39
Page 1

Approved: February 23, 2011

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, February 22, 2011 08:46:04
Sample Description:
Method File: C:\Elandata\Method\6020 DAILY.mth
Dataset File: C:\elandata\Dataset\021011\Sample.521
Tuning File: C:\Elandata\Tuning\06302008.tun
Optimization File: C:\Elandata\Optimize\Default.dac
Dual Detector Mode: Dual

Acq. Dead Time(ns): 50
Current Dead Time (ns): 50

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	60796.2	60796.178	863.879	1.4
	Rh	102.9	359273.2	359273.198	2440.129	0.7
	In	114.9	576966.3	576966.297	2299.713	0.4
	Pb	208.0	205269.0	205268.971	3237.049	1.6
	U	238.1	90.7	90.700	11.993	13.2
⌈>	Ba	137.9	292559.5	292559.492	1193.934	0.4
⌊	Ba++	69.0	4495.9	0.015	0.000	0.9
⌈>	Ce	139.9	366855.1	366855.071	2547.956	0.7
⌊	CeO	155.9	8309.6	0.023	0.000	1.0
	Bkgd	220.0	9.6	9.600	1.710	17.8
	Ar2	79.9	4901535.7	4901535.695	49625.474	1.0

Current Optimization File Data

Current Value	Description
0.95	Nebulizer Gas Flow
6.70	Lens Voltage
1500.00	ICP RF Power
-1834.38	Analog Stage Voltage
1000.00	Pulse Stage Voltage
20.00	Discriminator Threshold
-10.00	AC Rod Offset

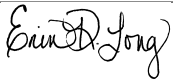
Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	33	7.5	4793.5
Co	59	33	8.0	129402.2
Rh	103	33	9.0	140311.8
Pb	208	33	11.3	172960.6

Sample ID: Sample
Report Date/Time: Tuesday, February 22, 2011 08:48:12
Page 1



Approved: February 23, 2011



Method 6020 - Summary Report

Sample ID: Blank

Sample Date/Time: Tuesday, February 22, 2011 09:29:49
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17766.034					ug/L
|	Be	9	3.333					ug/L
|	Al	27	2550.350					ug/L
|>	Sc	45	307387.203					ug/L
⌈	Ti	49	53.339					ug/L
|	V	51	2644.773					ug/L
|	Cr	52	8652.163					ug/L
|	Cr	53	236.693					ug/L
|	Mn	55	329.342					ug/L
|	Co	59	61.667					ug/L
|	Ni	60	49.667					ug/L
|	Cu	65	109.002					ug/L
|	Zn	66	446.348					ug/L
|>	Ge	72	522526.782					ug/L
|	As	75	-188.650					ug/L
|	Se	77	66.667					ug/L
|	Se	82	-5.861					ug/L
⌊	Rb	85	23.667					mg/L
	Y	89	347782.183					ug/L
	Rh	103	10.333					ug/L
⌈	Mo	98	16.169					ug/L
|	Ag	107	44.667					ug/L
|	Cd	114	4.796					ug/L
|>	In	115	392525.443					ug/L
|	Sn	118	84.134					ug/L
⌊	Sb	123	48.655					ug/L
⌈	Ba	135	16.000					ug/L
|	Ce	140	26.669					ug/L
⌊>	Tb	159	502905.525					ug/L
⌈	Ho	165	16.668					ug/L
|	Tl	203	15.667					ug/L
|	Tl	205	16.668					ug/L
|	Pb	206	391.012					ug/L
|	Pb	207	334.342					ug/L
|	Pb	208	1553.396					ug/L
|	U	238	17.334					ug/L
⌊>	Bi	209	496287.267					ug/L

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⌈	Na	23	20155.659	mg/L
|	Mg	24	296.701	mg/L
|	K	39	578006.105	mg/L
|	Ca	43	246.695	mg/L
|	Fe	54	49624.891	mg/L
|	Fe	57	8247.558	mg/L
⌊>	Sc-1	45	307387.203	mg/L
	Cl	35	19016.070	mg/L
	Kr	83	60.667	mg/L
	Br	81	8610.376	mg/L
	P	31	13395.903	mg/L
	S	34	187980.977	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Blank
Report Date/Time: Tuesday, February 22, 2011 09:32:00

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Tuesday, February 22, 2011 09:36:34
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	15962.911	-0.01				ug/L
|	Be	9	14.000	0.00				ug/L
|	Al	27	3700.700	0.00				ug/L
⌊>	Sc	45	326305.349	326305.35				ug/L
⌈	Ti	49	46.671	-0.00				ug/L
|	V	51	2622.721	-0.00				ug/L
|	Cr	52	8503.366	-0.00				ug/L
|	Cr	53	253.362	0.00				ug/L
|	Mn	55	321.342	-0.00				ug/L
|	Co	59	68.001	0.00				ug/L
|	Ni	60	50.001	0.00				ug/L
|	Cu	65	99.668	-0.00				ug/L
|	Zn	66	472.016	0.00				ug/L
|>	Ge	72	524106.425	524106.42				ug/L
|	As	75	-201.195	-0.00				ug/L
|	Se	77	66.667	-0.00				ug/L
|	Se	82	-0.145	0.00				ug/L
⌊	Rb	85	21.334	-0.00				mg/L
	Y	89	346744.687	-1037.50				ug/L
	Rh	103	11.333	1.00				ug/L
⌈	Mo	98	14.534	-0.00				ug/L
|	Ag	107	42.001	-0.00				ug/L
|	Cd	114	-0.778	-0.00				ug/L
|>	In	115	399117.039	399117.04				ug/L
|	Sn	118	80.134	-0.00				ug/L
⌊	Sb	123	36.574	-0.00				ug/L
⌈	Ba	135	15.667	-0.00				ug/L
|	Ce	140	3.334	-0.00				ug/L
⌊>	Tb	159	511401.754	511401.75				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	19.334	0.00				ug/L
|	Tl	205	30.003	0.00				ug/L
|	Pb	206	375.344	-0.00				ug/L
|	Pb	207	353.343	0.00				ug/L
|	Pb	208	1535.061	-0.00				ug/L
|	U	238	12.000	-0.00				ug/L
⌊>	Bi	209	493041.912	493041.91				ug/L

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⌈	Na	23	20272.579	-0.00		mg/L
|	Mg	24	293.367	-0.00		mg/L
|	K	39	560812.435	-0.16		mg/L
|	Ca	43	216.691	-0.00		mg/L
|	Fe	54	48479.926	-0.01		mg/L
|	Fe	57	7843.868	-0.00		mg/L
⌊>	Sc-1	45	326305.349	326305.35		mg/L
	Cl	35	18498.428	-517.64		mg/L
	Kr	83	55.001	-5.67		mg/L
	Br	81	8664.424	54.05		mg/L
	P	31	12641.331	-754.57		mg/L
	S	34	187869.773	-111.20		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 1
Report Date/Time: Tuesday, February 22, 2011 09:38:45

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Tuesday, February 22, 2011 09:43:18
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 2
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19569.295	0.01				ug/L
|	Be	9	122.001	0.00				ug/L
|	Al	27	5734.982	0.01				ug/L
⌊>	Sc	45	311913.696	311913.70				ug/L
⌈	Ti	49	556.738	0.00				ug/L
|	V	51	6621.715	0.01				ug/L
|	Cr	52	11969.947	0.01				ug/L
|	Cr	53	563.406	0.00				ug/L
|	Mn	55	5908.471	0.01				ug/L
|	Co	59	4374.000	0.01				ug/L
|	Ni	60	907.384	0.00				ug/L
|	Cu	65	1081.069	0.00				ug/L
|	Zn	66	1333.102	0.00				ug/L
|>	Ge	72	507089.463	507089.46				ug/L
|	As	75	278.199	0.00				ug/L
|	Se	77	111.334	0.00				ug/L
|	Se	82	39.531	0.00				ug/L
⌊	Rb	85	46.667	0.00				mg/L
	Y	89	337325.000	-10457.18				ug/L
	Rh	103	7.667	-2.67				ug/L
⌈	Mo	98	2067.810	0.01				ug/L
|	Ag	107	1987.217	0.00				ug/L
|	Cd	114	474.069	0.00				ug/L
|>	In	115	398034.376	398034.38				ug/L
|	Sn	118	1756.688	0.00				ug/L
⌊	Sb	123	1638.477	0.00				ug/L
⌈	Ba	135	662.362	0.00				ug/L
|	Ce	140	30.003	0.00				ug/L
⌊>	Tb	159	507236.997	507237.00				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	2788.083	0.01				ug/L
|	Tl	205	6706.252	0.01				ug/L
|	Pb	206	2643.376	0.00				ug/L
|	Pb	207	2407.314	0.00				ug/L
|	Pb	208	10911.132	0.02				ug/L
|	U	238	13950.530	0.03				ug/L
⌊>	Bi	209	493623.130	493623.13				ug/L

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⌈	Na	23	273549.101	0.81		mg/L
|	Mg	24	163102.428	0.52		mg/L
|	K	39	974222.894	1.25		mg/L
|	Ca	43	976.813	0.00		mg/L
|	Fe	54	72735.787	0.07		mg/L
|	Fe	57	18562.407	0.03		mg/L
⌊>	Sc-1	45	311913.696	311913.70		mg/L
	Cl	35	19139.638	123.57		mg/L
	Kr	83	54.001	-6.67		mg/L
	Br	81	8968.698	358.32		mg/L
	P	31	11863.046	-1532.86		mg/L
	S	34	201153.557	13172.58		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

Sample ID: Standard 2
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 2
Report Date/Time: Tuesday, February 22, 2011 09:45:30

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: Standard 3

Sample Date/Time: Tuesday, February 22, 2011 09:50:04
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 3
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	16163.198	-0.00				ug/L
|	Be	9	12941.039	0.04	50.0000	2.473	4.947	ug/L
|	Al	27	304067.842	1.02	50.0000	5.786	11.571	ug/L
⌊>	Sc	45	297019.032	297019.03				ug/L
⌈	Ti	49	63648.298	0.13	100.0000	2.417	2.417	ug/L
|	V	51	498325.084	1.01	50.0000	1.428	2.856	ug/L
|	Cr	52	432554.594	0.87	50.0000	1.186	2.372	ug/L
|	Cr	53	51303.069	0.10	50.0000	0.875	1.749	ug/L
|	Mn	55	647355.386	1.32	50.0000	1.139	2.279	ug/L
|	Co	59	521486.397	1.06	50.0000	0.535	1.069	ug/L
|	Ni	60	110561.401	0.23	50.0000	1.005	2.010	ug/L
|	Cu	65	113263.305	0.23	50.0000	0.541	1.082	ug/L
|	Zn	66	66813.796	0.14	50.0000	0.266	0.532	ug/L
|>	Ge	72	490636.247	490636.25				ug/L
|	As	75	54399.385	0.11	50.0000	0.486	0.973	ug/L
|	Se	77	3978.792	0.01	50.0000	2.319	4.637	ug/L
|	Se	82	5021.535	0.01	50.0000	0.874	1.748	ug/L
⌊	Rb	85	2165.256	0.00				mg/L
	Y	89	327857.759	-19924.42				ug/L
	Rh	103	32.000	21.67				ug/L
⌈	Mo	98	249441.241	0.66	100.0000	1.236	1.236	ug/L
|	Ag	107	236500.289	0.63	50.0000	0.405	0.811	ug/L
|	Cd	114	55505.152	0.15	50.0000	1.306	2.613	ug/L
|>	In	115	378064.151	378064.15				ug/L
|	Sn	118	200423.883	0.53	50.0000	0.749	1.497	ug/L
⌊	Sb	123	193693.498	0.51	50.0000	0.878	1.755	ug/L
⌈	Ba	135	82816.765	0.17	50.0000	0.628	1.256	ug/L
|	Ce	140	60.006	0.00				ug/L
⌊>	Tb	159	482664.117	482664.12				ug/L
⌈	Ho	165	13.335	-0.00				ug/L
|	Tl	203	326631.953	0.70	50.0000	0.907	1.814	ug/L
|	Tl	205	794719.494	1.69	50.0000	2.532	5.064	ug/L
|	Pb	206	267053.888	0.57	50.0000	2.619	5.239	ug/L
|	Pb	207	250003.183	0.53	50.0000	2.256	4.512	ug/L
|	Pb	208	1112788.769	2.37	50.0000	2.070	4.139	ug/L
|	U	238	1681334.994	3.58	50.0000	2.934	5.868	ug/L
⌊>	Bi	209	469653.931	469653.93				ug/L

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⌈	Na	23	28103773.621	94.75	5.0000	0.338	6.763	mg/L
|	Mg	24	17651996.081	59.51	5.0000	0.211	4.223	mg/L
|	K	39	41906570.402	139.41	5.0000	0.272	5.435	mg/L
|	Ca	43	93807.307	0.32	5.0000	0.285	5.700	mg/L
|	Fe	54	3166282.174	10.52	5.0000	0.378	7.566	mg/L
|	Fe	57	1310715.732	4.39	5.0000	0.220	4.403	mg/L
⌊>	Sc-1	45	297019.032	297019.03				mg/L
	Cl	35	20813.641	1797.57				mg/L
	Kr	83	54.001	-6.67				mg/L
	Br	81	8116.633	-493.74				mg/L
	P	31	10689.062	-2706.84				mg/L
	S	34	207867.049	19886.07				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

Sample ID: Standard 3
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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 3
Report Date/Time: Tuesday, February 22, 2011 09:52:15
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Method 6020 - Summary Report

Sample ID: Standard 4

Sample Date/Time: Tuesday, February 22, 2011 09:56:50
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 4
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	16463.642	-0.00				ug/L
|	Be	9	25119.582	0.08	98.4868	2.743	2.785	ug/L
|	Al	27	586145.764	1.97	98.3412	5.449	5.541	ug/L
⌊>	Sc	45	296864.452	296864.45				ug/L
⌈	Ti	49	124206.778	0.26	201.4975	8.646	4.291	ug/L
|	V	51	958294.984	2.03	100.1360	0.261	0.260	ug/L
|	Cr	52	810819.628	1.70	99.2068	0.721	0.727	ug/L
|	Cr	53	94571.208	0.20	97.9754	1.413	1.442	ug/L
|	Mn	55	1242713.775	2.63	99.9500	1.302	1.303	ug/L
|	Co	59	987630.323	2.09	99.2603	1.082	1.090	ug/L
|	Ni	60	203112.072	0.43	97.7404	0.991	1.013	ug/L
|	Cu	65	211247.809	0.45	98.5269	1.370	1.390	ug/L
|	Zn	66	125393.530	0.27	99.0854	0.577	0.582	ug/L
|>	Ge	72	471573.115	471573.11				ug/L
|	As	75	103155.786	0.22	99.2469	1.870	1.884	ug/L
|	Se	77	7430.095	0.02	99.0316	3.882	3.920	ug/L
|	Se	82	9427.784	0.02	98.8198	2.865	2.899	ug/L
⌊	Rb	85	4149.902	0.01				mg/L
	Y	89	319522.764	-28259.42				ug/L
	Rh	103	46.667	36.33				ug/L
⌈	Mo	98	482478.132	1.31	199.0799	5.896	2.962	ug/L
|	Ag	107	453039.372	1.23	99.0588	2.562	2.586	ug/L
|	Cd	114	107909.944	0.29	99.7980	1.800	1.804	ug/L
|>	In	115	369077.209	369077.21				ug/L
|	Sn	118	390868.748	1.06	99.9488	0.977	0.978	ug/L
⌊	Sb	123	372317.484	1.01	99.2248	1.363	1.373	ug/L
⌈	Ba	135	159346.462	0.33	98.3745	1.645	1.672	ug/L
|	Ce	140	43.338	0.00				ug/L
⌊>	Tb	159	479703.679	479703.68				ug/L
⌈	Ho	165	20.002	0.00				ug/L
|	Tl	203	645790.793	1.42	100.9527	3.075	3.046	ug/L
|	Tl	205	1622880.403	3.56	102.4906	0.774	0.756	ug/L
|	Pb	206	524070.253	1.15	100.5628	2.503	2.489	ug/L
|	Pb	207	495855.302	1.09	101.0902	2.052	2.030	ug/L
|	Pb	208	2197059.286	4.82	100.8667	2.291	2.271	ug/L
|	U	238	3148625.432	6.91	98.1813	4.690	4.777	ug/L
⌊>	Bi	209	455594.613	455594.61				ug/L

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⌈	Na	23	55470783.609	187.06	9.9371	0.536	5.393	mg/L
|	Mg	24	35205900.365	118.79	9.9928	0.555	5.553	mg/L
|	K	39	83234545.684	278.53	9.9972	0.057	0.568	mg/L
|	Ca	43	183934.117	0.62	9.8955	0.304	3.072	mg/L
|	Fe	54	6001462.786	20.06	9.7590	0.222	2.276	mg/L
|	Fe	57	2397070.062	8.06	9.5727	0.598	6.251	mg/L
⌊>	Sc-1	45	296864.452	296864.45				mg/L
	Cl	35	19444.219	428.15				mg/L
	Kr	83	54.334	-6.33				mg/L
	Br	81	7716.312	-894.06				mg/L
	P	31	10895.946	-2499.96				mg/L
	S	34	201083.966	13102.99				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Tuesday, February 22, 2011 10:03:35
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 11
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	16897.722	-0.00				ug/L
|	Be	9	12812.872	0.04	50.2075	1.550	3.087	ug/L
|	Al	27	308323.283	1.03	51.4145	3.575	6.954	ug/L
⌊>	Sc	45	297031.793	297031.79				ug/L
⌈	Ti	49	61410.847	0.13	98.7711	3.224	3.264	ug/L
|	V	51	493089.505	1.03	50.9609	1.309	2.568	ug/L
|	Cr	52	428641.875	0.88	51.5328	1.584	3.073	ug/L
|	Cr	53	50003.258	0.10	51.2964	3.058	5.962	ug/L
|	Mn	55	645615.980	1.36	51.4601	1.133	2.201	ug/L
|	Co	59	507472.488	1.07	50.5584	1.050	2.076	ug/L
|	Ni	60	107359.397	0.23	51.2167	1.304	2.545	ug/L
|	Cu	65	108406.903	0.23	50.0910	1.052	2.100	ug/L
|	Zn	66	64749.261	0.14	50.4355	0.524	1.039	ug/L
| >	Ge	72	475711.015	475711.01				ug/L
|	As	75	53631.634	0.11	51.2237	0.992	1.937	ug/L
|	Se	77	3974.790	0.01	52.0386	0.871	1.674	ug/L
|	Se	82	5026.171	0.01	52.2325	0.998	1.910	ug/L
⌊	Rb	85	2166.256	0.00				mg/L
	Y	89	323088.909	-24693.27				ug/L
	Rh	103	30.000	19.67				ug/L
⌈	Mo	98	247382.462	0.66	99.9239	1.341	1.342	ug/L
|	Ag	107	236573.860	0.63	50.6337	0.550	1.087	ug/L
|	Cd	114	53368.019	0.14	48.3033	0.984	2.037	ug/L
| >	In	115	376999.135	376999.14				ug/L
|	Sn	118	196896.185	0.52	49.2881	0.652	1.322	ug/L
⌊	Sb	123	188993.377	0.50	49.3035	0.228	0.462	ug/L
⌈	Ba	135	81011.740	0.16	48.3196	0.685	1.418	ug/L
|	Ce	140	113.345	0.00				ug/L
⌊>	Tb	159	496489.928	496489.93				ug/L
⌈	Ho	165	23.336	0.00				ug/L
|	Tl	203	341136.801	0.71	50.3583	1.121	2.226	ug/L
|	Tl	205	846877.428	1.76	50.5388	2.275	4.501	ug/L
|	Pb	206	281966.839	0.58	51.0666	0.338	0.662	ug/L
|	Pb	207	247863.249	0.51	47.7002	0.817	1.712	ug/L
|	Pb	208	1148300.889	2.38	49.7670	0.318	0.639	ug/L
|	U	238	1671521.003	3.47	49.2315	1.191	2.420	ug/L
⌊>	Bi	209	482217.348	482217.35				ug/L

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⌈	Na	23	28472155.438	95.84	5.0899	0.186	3.648	mg/L
|	Mg	24	17968908.039	60.51	5.0880	0.098	1.917	mg/L
|	K	39	44077168.257	146.58	5.2589	0.174	3.313	mg/L
|	Ca	43	95422.940	0.32	5.1330	0.228	4.445	mg/L
|	Fe	54	3203139.652	10.63	5.1721	0.210	4.056	mg/L
|	Fe	57	1321689.257	4.43	5.2548	0.259	4.935	mg/L
⌊>	Sc-1	45	297031.793	297031.79				mg/L
	Cl	35	20403.474	1387.40				mg/L
	Kr	83	58.001	-2.67				mg/L
	Br	81	7982.521	-627.85				mg/L
	P	31	12526.564	-869.34				mg/L
	S	34	221905.158	33924.18				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9	100.415				
|	Al	27	102.829				
⌊>	Sc	45					
⌈	Ti	49	98.771				
|	V	51	101.922				
|	Cr	52	103.066				
|	Cr	53					
|	Mn	55	102.920				
|	Co	59	101.117				
|	Ni	60	102.433				
|	Cu	65	100.182				
|	Zn	66	100.871				
|>	Ge	72		91.041			
|	As	75	102.447				
|	Se	77					
|	Se	82	104.465				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	101.267				
|	Cd	114	96.607				
|>	In	115		96.045			
|	Sn	118					
⌊	Sb	123	98.607				
⌈	Ba	135	96.639				
|	Ce	140					
⌊>	Tb	159		98.724			
⌈	Ho	165					
|	Tl	203	100.717				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	99.534				
|	U	238	98.463				
⌊>	Bi	209		97.165			
⌈	Na	23	101.798				

Sample ID: QC Std 1
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	Mg	24	101.760
	K	39	105.178
	Ca	43	102.659
	Fe	54	103.442
	Fe	57	105.096
>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 1
Report Date/Time: Tuesday, February 22, 2011 10:05:46
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Method 6020 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Tuesday, February 22, 2011 10:10:59
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	16864.384	-0.00				ug/L
|	Be	9	7.333	0.00	-0.0266	0.004	14.400	ug/L
|	Al	27	3150.501	0.00	0.0078	0.064	828.657	ug/L
⌊>	Sc	45	299040.574	299040.57				ug/L
⌈	Ti	49	80.008	0.00	0.0860	0.039	45.408	ug/L
|	V	51	2444.203	-0.00	0.0045	0.002	52.240	ug/L
|	Cr	52	8022.964	0.00	-0.0087	0.018	204.209	ug/L
|	Cr	53	220.025	0.00	0.0790	0.056	70.618	ug/L
|	Mn	55	314.675	0.00	-0.0175	0.001	6.574	ug/L
|	Co	59	69.668	0.00	-0.0021	0.001	46.177	ug/L
|	Ni	60	51.001	0.00	0.0178	0.006	32.399	ug/L
|	Cu	65	107.335	0.00	-0.0205	0.004	21.529	ug/L
|	Zn	66	439.347	0.00	-0.2452	0.016	6.501	ug/L
|>	Ge	72	483678.452	483678.45				ug/L
|	As	75	-148.637	0.00	0.0130	0.022	165.752	ug/L
|	Se	77	67.334	0.00	-0.1097	0.064	58.630	ug/L
|	Se	82	4.191	0.00	0.0596	0.022	36.528	ug/L
⌊	Rb	85	19.667	-0.00				mg/L
	Y	89	323720.941	-24061.24				ug/L
	Rh	103	11.000	0.67				ug/L
⌈	Mo	98	124.130	0.00	0.0588	0.005	8.490	ug/L
|	Ag	107	28.000	-0.00	0.0031	0.001	41.294	ug/L
|	Cd	114	0.888	-0.00	-0.0060	0.006	103.431	ug/L
|>	In	115	378843.387	378843.39				ug/L
|	Sn	118	251.336	0.00	0.0460	0.002	3.629	ug/L
⌊	Sb	123	409.714	0.00	0.1015	0.007	6.976	ug/L
⌈	Ba	135	14.667	-0.00	0.0221	0.002	7.622	ug/L
|	Ce	140	16.668	-0.00				ug/L
⌊>	Tb	159	495579.670	495579.67				ug/L
⌈	Ho	165	13.335	-0.00				ug/L
|	Tl	203	29.667	0.00	0.0022	0.001	50.448	ug/L
|	Tl	205	40.004	0.00	0.0114	0.001	10.861	ug/L
|	Pb	206	401.679	0.00	0.0043	0.004	89.606	ug/L
|	Pb	207	330.342	0.00	0.0104	0.003	24.607	ug/L
|	Pb	208	1553.063	0.00	0.0048	0.000	5.067	ug/L
|	U	238	78.334	0.00	0.0008	0.000	41.025	ug/L
⌊>	Bi	209	480862.887	480862.89				ug/L

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⌈	Na	23	21675.651	0.01	-0.0028	0.000	3.532	mg/L
|	Mg	24	536.735	0.00	-0.0039	0.000	0.420	mg/L
|	K	39	598780.704	0.12	-0.0004	0.002	423.783	mg/L
|	Ca	43	273.364	0.00	0.0043	0.002	55.468	mg/L
|	Fe	54	44447.608	-0.01	-0.0014	0.003	204.645	mg/L
|	Fe	57	7226.669	-0.00	-0.0020	0.002	99.983	mg/L
⌊>	Sc-1	45	299040.574	299040.57				mg/L
	Cl	35	19520.373	504.30				mg/L
	Kr	83	54.667	-6.00				mg/L
	Br	81	7911.132	-699.24				mg/L
	P	31	11371.813	-2024.09				mg/L
	S	34	209648.252	21667.27				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		92.565			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.514			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.543			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		96.892			
⌈	Na	23					

Sample ID: QC Std 2
Report Date/Time: Tuesday, February 22, 2011 10:13:10
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 2
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Method 6020 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Tuesday, February 22, 2011 10:17:47
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 9
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	16797.572	0.00				ug/L
|	Be	9	8.667	0.00	-0.0201	0.013	63.445	ug/L
|	Al	27	2250.254	-0.00	-0.1308	0.036	27.604	ug/L
⌊>	Sc	45	289738.010	289738.01				ug/L
⌈	Ti	49	80.008	0.00	0.0869	0.031	36.019	ug/L
|	V	51	6437.721	0.01	0.4143	0.024	5.691	ug/L
|	Cr	52	15232.413	0.02	0.8652	0.032	3.751	ug/L
|	Cr	53	986.814	0.00	0.8575	0.066	7.726	ug/L
|	Mn	55	7434.837	0.01	0.5429	0.001	0.245	ug/L
|	Co	59	4309.638	0.01	0.4147	0.003	0.660	ug/L
|	Ni	60	3744.406	0.01	1.7560	0.057	3.246	ug/L
|	Cu	65	1998.553	0.00	0.8429	0.005	0.584	ug/L
|	Zn	66	8809.967	0.02	6.2631	0.114	1.824	ug/L
|>	Ge	72	482196.898	482196.90				ug/L
|	As	75	263.566	0.00	0.3999	0.025	6.188	ug/L
|	Se	77	103.334	0.00	0.3673	0.356	96.952	ug/L
|	Se	82	31.134	0.00	0.3358	0.042	12.502	ug/L
⌊	Rb	85	24.000	0.00				mg/L
	Y	89	325030.054	-22752.13				ug/L
	Rh	103	7.333	-3.00				ug/L
⌈	Mo	98	61.832	0.00	0.0338	0.005	13.713	ug/L
|	Ag	107	1965.546	0.01	0.4162	0.007	1.771	ug/L
|	Cd	114	217.305	0.00	0.1893	0.006	3.323	ug/L
|>	In	115	378417.709	378417.71				ug/L
|	Sn	118	164.135	0.00	0.0243	0.001	5.801	ug/L
⌊	Sb	123	1677.398	0.00	0.4311	0.004	0.899	ug/L
⌈	Ba	135	1246.424	0.00	0.7726	0.028	3.631	ug/L
|	Ce	140	23.336	-0.00				ug/L
⌊>	Tb	159	486219.766	486219.77				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	593.024	0.00	0.0868	0.001	1.245	ug/L
|	Tl	205	1443.582	0.00	0.0967	0.008	8.336	ug/L
|	Pb	206	2634.373	0.00	0.4175	0.023	5.412	ug/L
|	Pb	207	2359.969	0.00	0.4092	0.011	2.740	ug/L
|	Pb	208	10806.089	0.02	0.4142	0.012	3.003	ug/L
|	U	238	13494.904	0.03	0.4027	0.007	1.738	ug/L
⌊>	Bi	209	474268.213	474268.21				ug/L

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⌈	Na	23	15593.724	-0.01	-0.0038	0.000	2.569	mg/L
|	Mg	24	423.385	0.00	-0.0039	0.000	0.698	mg/L
|	K	39	575425.600	0.11	-0.0010	0.001	66.359	mg/L
|	Ca	43	206.690	-0.00	0.0011	0.004	330.067	mg/L
|	Fe	54	44455.101	-0.01	0.0009	0.003	347.744	mg/L
|	Fe	57	7149.939	-0.00	-0.0014	0.001	97.468	mg/L
⌊>	Sc-1	45	289738.010	289738.01				mg/L
	Cl	35	17891.331	-1124.74				mg/L
	Kr	83	61.334	0.67				mg/L
	Br	81	7983.186	-627.19				mg/L
	P	31	9422.460	-3973.44				mg/L
	S	34	189971.534	1990.56				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	103.583				
|	Cr	52	108.154				
|	Cr	53					
|	Mn	55	108.576				
|	Co	59	103.685				
|	Ni	60	109.751				
|	Cu	65	105.366				
|	Zn	66	100.210				
|>	Ge	72		92.282			
|	As	75	99.983				
|	Se	77					
|	Se	82	83.952				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	104.062				
|	Cd	114	94.635				
|>	In	115		96.406			
|	Sn	118					
⌊	Sb	123	107.777				
⌈	Ba	135	103.007				
|	Ce	140					
⌊>	Tb	159		96.682			
⌈	Ho	165					
|	Tl	203	108.527				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	103.562				
|	U	238	100.673				
⌊>	Bi	209		95.563			
⌈	Na	23					

Sample ID: QC Std 3
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 3
Report Date/Time: Tuesday, February 22, 2011 10:20:00

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, February 22, 2011 10:24:35
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	16129.677	-0.00				ug/L
|	Be	9	9.333	0.00	-0.0174	0.018	102.874	ug/L
|	Al	27	25760075.617	88.51	4424.8547	97.818	2.211	ug/L
⌊>	Sc	45	291165.923	291165.92				ug/L
⌈	Ti	49	59747.246	0.13	97.4228	1.655	1.699	ug/L
|	V	51	2233.504	-0.00	-0.0100	0.024	241.743	ug/L
|	Cr	52	8240.811	0.00	0.0479	0.008	17.710	ug/L
|	Cr	53	1443.583	0.00	1.3618	0.187	13.733	ug/L
|	Mn	55	3994.171	0.01	0.2809	0.006	2.055	ug/L
|	Co	59	2002.554	0.00	0.1935	0.008	4.178	ug/L
|	Ni	60	1205.752	0.00	0.5777	0.057	9.938	ug/L
|	Cu	65	831.376	0.00	0.3210	0.033	10.236	ug/L
|	Zn	66	958.056	0.00	0.1805	0.058	32.132	ug/L
| >	Ge	72	469244.864	469244.86				ug/L
|	As	75	-158.463	0.00	-0.0012	0.047	3974.015	ug/L
|	Se	77	134.001	0.00	0.8153	0.437	53.660	ug/L
|	Se	82	1.478	0.00	0.0317	0.056	177.801	ug/L
⌊	Rb	85	1828.852	0.00				mg/L
	Y	89	296919.597	-50862.59				ug/L
	Rh	103	14.000	3.67				ug/L
⌈	Mo	98	236488.340	0.66	99.8934	0.458	0.459	ug/L
|	Ag	107	90.335	0.00	0.0173	0.000	0.860	ug/L
|	Cd	114	82.079	0.00	0.0709	0.031	43.037	ug/L
| >	In	115	360464.664	360464.66				ug/L
|	Sn	118	613.486	0.00	0.1440	0.022	15.291	ug/L
⌊	Sb	123	249.537	0.00	0.0632	0.006	8.712	ug/L
⌈	Ba	135	40.000	0.00	0.0385	0.002	5.441	ug/L
|	Ce	140	246.694	0.00				ug/L
⌊>	Tb	159	471123.419	471123.42				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	86.335	0.00	0.0111	0.001	9.113	ug/L
|	Tl	205	166.685	0.00	0.0193	0.002	9.349	ug/L
|	Pb	206	448.348	0.00	0.0157	0.006	39.648	ug/L
|	Pb	207	389.678	0.00	0.0249	0.005	19.345	ug/L
|	Pb	208	1775.746	0.00	0.0174	0.000	2.752	ug/L
|	U	238	30.334	0.00	-0.0006	0.000	43.102	ug/L
⌊>	Bi	209	463308.076	463308.08				ug/L

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⌈	Na	23	69941422.811	240.41	12.7719	0.566	4.433	mg/L
|	Mg	24	17418084.873	59.88	5.0352	0.182	3.621	mg/L
|	K	39	43032578.866	146.00	5.2381	0.121	2.309	mg/L
|	Ca	43	271014.674	0.93	14.9081	0.886	5.943	mg/L
|	Fe	54	7527019.302	25.72	12.5111	0.596	4.762	mg/L
|	Fe	57	2948750.718	10.11	12.0084	0.646	5.378	mg/L
⌊>	Sc-1	45	291165.923	291165.92				mg/L
	Cl	35	2031992.879	2012976.81				mg/L
	Kr	83	60.001	-0.67				mg/L
	Br	81	7355.374	-1255.00				mg/L
	P	31	1753326.040	1739930.14				mg/L
	S	34	362807.640	174826.66				mg/L

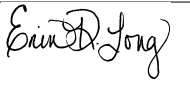
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		89.803			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		91.832			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		93.680			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		93.355			
⌈	Na	23					

Sample ID: QC Std 4
Report Date/Time: Tuesday, February 22, 2011 10:26:48



Approved: February 23, 2011



	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 4
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Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, February 22, 2011 10:31:23
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18767.620	0.01				ug/L
|	Be	9	26999.079	0.10	113.9327	8.418	7.389	ug/L
|	Al	27	25727955.822	93.26	4662.3066	383.295	8.221	ug/L
⌊>	Sc	45	276596.995	276596.99				ug/L
⌈	Ti	49	58151.135	0.13	96.4829	2.776	2.877	ug/L
|	V	51	939084.144	2.03	100.3671	1.353	1.348	ug/L
|	Cr	52	808186.789	1.74	101.1588	1.843	1.821	ug/L
|	Cr	53	96425.823	0.21	102.1809	3.001	2.937	ug/L
|	Mn	55	1218067.333	2.64	100.1991	0.747	0.746	ug/L
|	Co	59	975453.161	2.12	100.2684	0.965	0.962	ug/L
|	Ni	60	202358.105	0.44	99.5961	1.349	1.354	ug/L
|	Cu	65	210475.445	0.46	100.4022	1.950	1.942	ug/L
|	Zn	66	125580.572	0.27	101.5083	1.214	1.196	ug/L
| >	Ge	72	461065.775	461065.77				ug/L
|	As	75	103445.720	0.22	101.7858	2.432	2.389	ug/L
|	Se	77	7602.889	0.02	103.6756	1.148	1.108	ug/L
|	Se	82	9389.046	0.02	100.6470	1.678	1.667	ug/L
⌊	Rb	85	1799.847	0.00				mg/L
	Y	89	295429.640	-52352.54				ug/L
	Rh	103	49.334	39.00				ug/L
⌈	Mo	98	233286.740	0.65	98.3352	0.116	0.118	ug/L
|	Ag	107	460960.883	1.28	102.9533	7.653	7.434	ug/L
|	Cd	114	107570.385	0.30	101.6403	2.105	2.071	ug/L
| >	In	115	361218.331	361218.33				ug/L
|	Sn	118	524.014	0.00	0.1203	0.005	4.054	ug/L
⌊	Sb	123	364926.561	1.01	99.3629	1.219	1.226	ug/L
⌈	Ba	135	154193.301	0.33	98.3004	0.201	0.204	ug/L
|	Ce	140	243.361	0.00				ug/L
⌊>	Tb	159	464479.585	464479.59				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	649687.327	1.44	102.4613	3.318	3.238	ug/L
|	Tl	205	1587411.615	3.52	101.2343	3.951	3.903	ug/L
|	Pb	206	544570.570	1.21	105.4646	3.180	3.015	ug/L
|	Pb	207	483113.746	1.07	99.3847	0.729	0.733	ug/L
|	Pb	208	2219460.198	4.91	102.8357	1.055	1.026	ug/L
|	U	238	3123187.378	6.92	98.2514	1.315	1.338	ug/L
⌊>	Bi	209	451403.202	451403.20				ug/L

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⌈	Na	23	70102307.931	253.78	13.4825	0.667	4.945	mg/L
|	Mg	24	17286792.776	62.60	5.2640	0.248	4.717	mg/L
|	K	39	40522446.151	144.79	5.1947	0.211	4.057	mg/L
|	Ca	43	255805.658	0.92	14.8033	0.546	3.691	mg/L
|	Fe	54	7393275.459	26.63	12.9510	0.808	6.241	mg/L
|	Fe	57	2980999.009	10.77	12.7880	0.742	5.801	mg/L
⌊>	Sc-1	45	276596.995	276596.99				mg/L
	Cl	35	1983136.737	1964120.67				mg/L
	Kr	83	58.667	-2.00				mg/L
	Br	81	7250.628	-1359.75				mg/L
	P	31	1705927.335	1692531.43				mg/L
	S	34	346862.174	158881.20				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	100.367				
|	Cr	52	101.159				
|	Cr	53					
|	Mn	55	100.199				
|	Co	59	100.268				
|	Ni	60	99.596				
|	Cu	65	100.402				
|	Zn	66	101.508				
|>	Ge	72		88.238			
|	As	75	101.786				
|	Se	77					
|	Se	82	100.647				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	102.953				
|	Cd	114	101.640				
|>	In	115		92.024			
|	Sn	118					
⌊	Sb	123	99.363				
⌈	Ba	135	98.300				
|	Ce	140					
⌊>	Tb	159		92.359			
⌈	Ho	165					
|	Tl	203	102.461				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	102.836				
|	U	238	98.251				
⌊>	Bi	209		90.956			
⌈	Na	23					

Sample ID: QC Std 5
Report Date/Time: Tuesday, February 22, 2011 10:33:36
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 5
Report Date/Time: Tuesday, February 22, 2011 10:33:36

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 22, 2011 10:38:11
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17198.112	0.00				ug/L
|	Be	9	12973.754	0.05	53.6316	5.032	9.383	ug/L
|	Al	27	292414.147	1.03	51.3474	2.733	5.322	ug/L
⌊>	Sc	45	282424.636	282424.64				ug/L
⌈	Ti	49	60481.731	0.13	98.1326	1.343	1.368	ug/L
|	V	51	470456.527	0.99	49.0494	1.729	3.525	ug/L
|	Cr	52	401589.299	0.84	48.6536	0.320	0.658	ug/L
|	Cr	53	46221.209	0.10	47.8237	1.150	2.405	ug/L
|	Mn	55	604917.674	1.28	48.6408	1.527	3.140	ug/L
|	Co	59	478642.352	1.02	48.1076	0.878	1.825	ug/L
|	Ni	60	99120.829	0.21	47.7054	0.635	1.331	ug/L
|	Cu	65	103782.217	0.22	48.3746	0.610	1.261	ug/L
|	Zn	66	62906.239	0.13	49.4248	0.803	1.625	ug/L
|>	Ge	72	471484.072	471484.07				ug/L
|	As	75	50654.325	0.11	48.8203	0.564	1.156	ug/L
|	Se	77	3782.049	0.01	49.9285	1.426	2.856	ug/L
|	Se	82	4742.047	0.01	49.7191	0.543	1.092	ug/L
⌊	Rb	85	1982.216	0.00				mg/L
	Y	89	308421.321	-39360.86				ug/L
	Rh	103	24.667	14.33				ug/L
⌈	Mo	98	235705.173	0.65	98.2255	1.939	1.974	ug/L
|	Ag	107	225607.254	0.62	49.8201	1.066	2.140	ug/L
|	Cd	114	51739.934	0.14	48.3125	1.639	3.392	ug/L
|>	In	115	365430.646	365430.65				ug/L
|	Sn	118	189155.717	0.52	48.8481	0.825	1.688	ug/L
⌊	Sb	123	183587.130	0.50	49.4169	1.004	2.031	ug/L
⌈	Ba	135	76695.758	0.16	47.8043	0.898	1.879	ug/L
|	Ce	140	53.339	0.00				ug/L
⌊>	Tb	159	475220.985	475220.98				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	317804.079	0.68	48.2583	0.697	1.445	ug/L
|	Tl	205	781642.521	1.67	47.9718	0.967	2.016	ug/L
|	Pb	206	255845.970	0.54	47.6517	0.415	0.872	ug/L
|	Pb	207	238610.813	0.51	47.2303	0.558	1.182	ug/L
|	Pb	208	1086377.363	2.31	48.4323	0.481	0.993	ug/L
|	U	238	1610373.808	3.44	48.7911	0.559	1.145	ug/L
⌊>	Bi	209	468838.036	468838.04				ug/L

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Na	23	27604578.670	97.74	5.1908	0.104	2.007	mg/L
Mg	24	17480972.090	61.92	5.2066	0.081	1.555	mg/L
K	39	41173798.739	144.09	5.1695	0.172	3.321	mg/L
Ca	43	89258.954	0.32	5.0555	0.233	4.599	mg/L
Fe	54	2923874.246	10.21	4.9664	0.173	3.478	mg/L
Fe	57	1231412.673	4.34	5.1510	0.152	2.959	mg/L
Sc-1	45	282424.636	282424.64				mg/L
Cl	35	20719.443	1703.37				mg/L
Kr	83	55.667	-5.00				mg/L
Br	81	7233.958	-1376.42				mg/L
P	31	11245.657	-2150.25				mg/L
S	34	196351.329	8370.35				mg/L

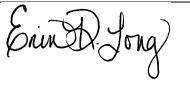
QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51	98.099				
Cr	52	97.307				
Cr	53					
Mn	55	97.282				
Co	59	96.215				
Ni	60	95.411				
Cu	65	96.749				
Zn	66	98.850				
Ge	72		90.232			
As	75	97.641				
Se	77					
Se	82	99.438				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	99.640				
Cd	114	96.625				
In	115		93.097			
Sn	118					
Sb	123	98.834				
Ba	135	95.609				
Ce	140					
Tb	159		94.495			
Ho	165					
Tl	203	96.517				
Tl	205					
Pb	206					
Pb	207					
Pb	208	96.865				
U	238	97.582				
Bi	209		94.469			
Na	23					

Sample ID: QC Std 6
Report Date/Time: Tuesday, February 22, 2011 10:40:23



Approved: February 23, 2011



Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Tuesday, February 22, 2011 10:40:23

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 22, 2011 10:45:27
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17231.647	0.00				ug/L
|	Be	9	10.667	0.00	-0.0130	0.030	230.008	ug/L
|	Al	27	3167.174	0.00	0.0209	0.076	362.055	ug/L
|>	Sc	45	293323.635	293323.63				ug/L
⌈	Ti	49	56.673	0.00	0.0523	0.033	63.699	ug/L
|	V	51	2366.074	-0.00	0.0042	0.010	237.666	ug/L
|	Cr	52	8010.621	0.00	0.0199	0.008	40.871	ug/L
|	Cr	53	206.690	-0.00	0.0715	0.058	81.031	ug/L
|	Mn	55	345.676	0.00	-0.0142	0.002	12.213	ug/L
|	Co	59	69.334	0.00	-0.0019	0.001	29.262	ug/L
|	Ni	60	48.001	0.00	0.0171	0.006	33.305	ug/L
|	Cu	65	85.001	-0.00	-0.0294	0.007	23.678	ug/L
|	Zn	66	432.680	0.00	-0.2396	0.021	8.861	ug/L
|>	Ge	72	468960.181	468960.18				ug/L
|	As	75	-164.959	0.00	-0.0068	0.056	814.958	ug/L
|	Se	77	75.334	0.00	0.0257	0.039	151.049	ug/L
|	Se	82	-5.858	-0.00	-0.0445	0.116	260.583	ug/L
⌊	Rb	85	19.667	-0.00				mg/L
	Y	89	312265.890	-35516.29				ug/L
	Rh	103	8.667	-1.67				ug/L
⌈	Mo	98	126.614	0.00	0.0615	0.004	6.091	ug/L
|	Ag	107	46.334	0.00	0.0073	0.002	23.588	ug/L
|	Cd	114	2.598	-0.00	-0.0043	0.002	39.214	ug/L
|>	In	115	366863.799	366863.80				ug/L
|	Sn	118	211.336	0.00	0.0378	0.002	5.479	ug/L
⌊	Sb	123	281.706	0.00	0.0706	0.008	11.685	ug/L
⌈	Ba	135	16.667	0.00	0.0236	0.001	5.168	ug/L
|	Ce	140	20.002	-0.00				ug/L
|>	Tb	159	480280.922	480280.92				ug/L
⌈	Ho	165	6.667	-0.00				ug/L
|	Tl	203	31.667	0.00	0.0027	0.000	5.176	ug/L
|	Tl	205	80.008	0.00	0.0140	0.002	15.837	ug/L
|	Pb	206	357.677	-0.00	-0.0011	0.001	122.179	ug/L
|	Pb	207	330.675	0.00	0.0131	0.003	23.653	ug/L
|	Pb	208	1474.058	0.00	0.0039	0.004	98.651	ug/L
|	U	238	81.001	0.00	0.0009	0.000	6.068	ug/L
|>	Bi	209	462213.195	462213.19				ug/L

Sample ID: QC Std 7
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Erin D. Long

⌈	Na	23	21565.400	0.01	-0.0028	0.000	5.943	mg/L
|	Mg	24	643.419	0.00	-0.0039	0.000	1.402	mg/L
|	K	39	550484.680	-0.00	-0.0049	0.000	6.686	mg/L
|	Ca	43	170.019	-0.00	-0.0010	0.003	291.061	mg/L
|	Fe	54	42070.747	-0.02	-0.0039	0.002	56.580	mg/L
|	Fe	57	6546.135	-0.00	-0.0042	0.002	48.340	mg/L
⌊>	Sc-1	45	293323.635	293323.63				mg/L
	Cl	35	18741.547	-274.52				mg/L
	Kr	83	60.334	-0.33				mg/L
	Br	81	7489.474	-1120.90				mg/L
	P	31	10384.810	-3011.09				mg/L
	S	34	185223.026	-2757.95				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		89.749			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		93.462			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		95.501			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		93.134			
⌈	Na	23					

Sample ID: QC Std 7
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
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Method 6020 - Summary Report

Sample ID: PBW 40 WG357046-02

Sample Date/Time: Tuesday, February 22, 2011 10:52:11
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 12
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18333.578	0.00				ug/L
|	Be	9	7.333	0.00	-0.0276	0.011	39.916	ug/L
|	Al	27	23026.524	0.07	3.2107	0.230	7.165	ug/L
⌊>	Sc	45	308796.631	308796.63				ug/L
⌈	Ti	49	80.008	0.00	0.0874	0.058	66.892	ug/L
|	V	51	2587.901	0.00	0.0200	0.007	34.422	ug/L
|	Cr	52	9871.636	0.00	0.2173	0.030	13.739	ug/L
|	Cr	53	486.727	0.00	0.3496	0.075	21.508	ug/L
|	Mn	55	1992.552	0.00	0.1146	0.003	2.344	ug/L
|	Co	59	87.001	0.00	-0.0003	0.002	573.123	ug/L
|	Ni	60	303.341	0.00	0.1366	0.007	5.455	ug/L
|	Cu	65	281.007	0.00	0.0590	0.004	7.227	ug/L
|	Zn	66	4602.439	0.01	2.9912	0.066	2.222	ug/L
|>	Ge	72	482333.385	482333.39				ug/L
|	As	75	-133.725	0.00	0.0270	0.041	153.811	ug/L
|	Se	77	67.334	0.00	-0.1104	0.290	262.350	ug/L
|	Se	82	11.594	0.00	0.1361	0.093	68.266	ug/L
⌊	Rb	85	50.667	0.00				mg/L
	Y	89	322954.297	-24827.89				ug/L
	Rh	103	7.667	-2.67				ug/L
⌈	Mo	98	126.545	0.00	0.0589	0.003	5.015	ug/L
|	Ag	107	25.667	-0.00	0.0025	0.001	51.464	ug/L
|	Cd	114	2.956	-0.00	-0.0041	0.008	196.959	ug/L
|>	In	115	385601.556	385601.56				ug/L
|	Sn	118	559.216	0.00	0.1203	0.001	1.066	ug/L
⌊	Sb	123	381.923	0.00	0.0925	0.007	7.726	ug/L
⌈	Ba	135	88.335	0.00	0.0649	0.010	14.998	ug/L
|	Ce	140	90.009	0.00				ug/L
⌊>	Tb	159	507911.590	507911.59				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	27.000	0.00	0.0017	0.000	22.404	ug/L
|	Tl	205	43.338	0.00	0.0115	0.000	3.509	ug/L
|	Pb	206	514.018	0.00	0.0212	0.001	3.900	ug/L
|	Pb	207	469.349	0.00	0.0339	0.004	12.577	ug/L
|	Pb	208	2073.104	0.00	0.0241	0.002	10.168	ug/L
|	U	238	101.668	0.00	0.0013	0.000	18.981	ug/L
⌊>	Bi	209	499754.211	499754.21				ug/L

Sample ID: PBW 40 WG357046-02
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⌈	Na	23	49765.207	0.10	0.0019	0.000	17.866	mg/L
|	Mg	24	5942.365	0.02	-0.0024	0.000	6.162	mg/L
|	K	39	601288.573	0.07	-0.0024	0.001	51.512	mg/L
|	Ca	43	610.080	0.00	0.0213	0.002	11.373	mg/L
|	Fe	54	96897.658	0.15	0.0789	0.002	2.048	mg/L
|	Fe	57	9685.658	0.00	0.0065	0.001	14.350	mg/L
⌊>	Sc-1	45	308796.631	308796.63				mg/L
	Cl	35	24044.880	5028.81				mg/L
	Kr	83	46.667	-14.00				mg/L
	Br	81	8629.723	19.35				mg/L
	P	31	22427.794	9031.89				mg/L
	S	34	214979.101	26998.12				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		92.308			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		98.236			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		100.995			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.699			
⌈	Na	23					

Sample ID: PBW 40 WG357046-02
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 40 WG357046-02
Report Date/Time: Tuesday, February 22, 2011 10:54:22

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: LCSW 40 WG357046-03

Sample Date/Time: Tuesday, February 22, 2011 10:58:56
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 13
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18233.283	0.00				ug/L
|	Be	9	6533.474	0.02	24.6811	1.635	6.625	ug/L
|	Al	27	165781.426	0.53	26.4335	1.489	5.632	ug/L
⌊>	Sc	45	307627.511	307627.51				ug/L
⌈	Ti	49	76.675	0.00	0.0847	0.035	41.188	ug/L
|	V	51	254817.565	0.54	26.4878	0.690	2.603	ug/L
|	Cr	52	229003.439	0.47	27.3621	0.670	2.447	ug/L
|	Cr	53	25501.698	0.05	26.3529	0.668	2.533	ug/L
|	Mn	55	333534.741	0.71	26.8336	0.296	1.103	ug/L
|	Co	59	260173.292	0.55	26.1788	0.296	1.131	ug/L
|	Ni	60	54646.789	0.12	26.3294	0.292	1.109	ug/L
|	Cu	65	57295.582	0.12	26.7106	0.449	1.680	ug/L
|	Zn	66	34624.861	0.07	26.9763	0.530	1.966	ug/L
| >	Ge	72	470921.417	470921.42				ug/L
|	As	75	24813.500	0.05	24.0237	0.597	2.486	ug/L
|	Se	77	1709.480	0.00	22.0434	1.168	5.300	ug/L
|	Se	82	2146.794	0.00	22.5479	0.905	4.014	ug/L
⌊	Rb	85	52.334	0.00				mg/L
	Y	89	312751.922	-35030.26				ug/L
	Rh	103	21.000	10.67				ug/L
⌈	Mo	98	73.982	0.00	0.0389	0.001	1.324	ug/L
|	Ag	107	111981.009	0.30	24.0928	1.005	4.170	ug/L
|	Cd	114	26632.190	0.07	24.2260	0.970	4.004	ug/L
| >	In	115	375279.327	375279.33				ug/L
|	Sn	118	208.936	0.00	0.0360	0.001	3.382	ug/L
⌊	Sb	123	93700.855	0.25	24.5696	0.911	3.707	ug/L
⌈	Ba	135	41304.208	0.08	25.0326	0.634	2.533	ug/L
|	Ce	140	76.675	0.00				ug/L
⌊>	Tb	159	488960.691	488960.69				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	173425.099	0.36	25.7674	0.354	1.374	ug/L
|	Tl	205	423548.619	0.88	25.4438	1.219	4.790	ug/L
|	Pb	206	146969.399	0.31	26.7587	0.684	2.557	ug/L
|	Pb	207	129460.328	0.27	25.0525	0.723	2.885	ug/L
|	Pb	208	597082.381	1.24	26.0169	0.527	2.025	ug/L
|	U	238	883978.987	1.85	26.2058	0.948	3.619	ug/L
⌊>	Bi	209	479077.320	479077.32				ug/L

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⌈	Na	23	50398.452	0.10	0.0020	0.000	17.918	mg/L
|	Mg	24	10673.429	0.03	-0.0011	0.000	10.601	mg/L
|	K	39	593350.671	0.05	-0.0030	0.001	38.394	mg/L
|	Ca	43	390.047	0.00	0.0100	0.004	38.972	mg/L
|	Fe	54	95042.365	0.15	0.0765	0.003	4.105	mg/L
|	Fe	57	8030.706	-0.00	0.0003	0.002	755.512	mg/L
⌊>	Sc-1	45	307627.511	307627.51				mg/L
	Cl	35	25076.069	6060.00				mg/L
	Kr	83	54.001	-6.67				mg/L
	Br	81	8236.725	-373.65				mg/L
	P	31	21553.346	8157.44				mg/L
	S	34	204613.171	16632.19				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		90.124			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		95.606			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.227			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		96.532			
⌈	Na	23					

Sample ID: LCSW 40 WG357046-03
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 40 WG357046-03
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Method 6020 - Summary Report

Sample ID: L1102048602

Sample Date/Time: Tuesday, February 22, 2011 11:05:41
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 14
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20504.629	0.01				ug/L
|	Be	9	14.667	0.00	-0.0001	0.041	27675.172	ug/L
|	Al	27	494082.104	1.59	79.4857	14.027	17.647	ug/L
|>	Sc	45	308419.066	308419.07				ug/L
⌈	Ti	49	656.754	0.00	1.0251	0.114	11.096	ug/L
|	V	51	4055.159	0.00	0.1803	0.040	22.087	ug/L
|	Cr	52	23076.855	0.03	1.8782	0.125	6.666	ug/L
|	Cr	53	1483.592	0.00	1.3968	0.065	4.670	ug/L
|	Mn	55	315855.639	0.67	25.3878	0.241	0.951	ug/L
|	Co	59	10091.193	0.02	1.0059	0.012	1.185	ug/L
|	Ni	60	2706.060	0.01	1.2971	0.013	1.019	ug/L
|	Cu	65	703.365	0.00	0.2591	0.010	3.721	ug/L
|	Zn	66	4603.105	0.01	3.0759	0.053	1.722	ug/L
|>	Ge	72	471289.623	471289.62				ug/L
|	As	75	-95.692	0.00	0.0603	0.035	58.002	ug/L
|	Se	77	78.667	0.00	0.0672	0.205	305.101	ug/L
|	Se	82	12.241	0.00	0.1443	0.087	60.620	ug/L
⌊	Rb	85	4107.218	0.01				mg/L
	Y	89	314122.559	-33659.62				ug/L
	Rh	103	8.333	-2.00				ug/L
⌈	Mo	98	336.991	0.00	0.1444	0.002	1.220	ug/L
|	Ag	107	68.668	0.00	0.0117	0.001	8.967	ug/L
|	Cd	114	4.590	-0.00	-0.0026	0.006	226.458	ug/L
|>	In	115	378696.157	378696.16				ug/L
|	Sn	118	454.544	0.00	0.0967	0.004	4.649	ug/L
⌊	Sb	123	117.659	0.00	0.0257	0.005	21.257	ug/L
⌈	Ba	135	16281.761	0.03	9.5805	0.152	1.590	ug/L
|	Ce	140	22510.900	0.04				ug/L
|>	Tb	159	503826.509	503826.51				ug/L
⌈	Ho	165	336.706	0.00				ug/L
|	Tl	203	104.002	0.00	0.0126	0.005	36.530	ug/L
|	Tl	205	246.695	0.00	0.0231	0.005	23.753	ug/L
|	Pb	206	1146.411	0.00	0.1324	0.010	7.930	ug/L
|	Pb	207	960.723	0.00	0.1258	0.008	6.351	ug/L
|	Pb	208	4599.803	0.01	0.1303	0.005	3.616	ug/L
|	U	238	923.053	0.00	0.0249	0.006	22.237	ug/L
|>	Bi	209	498116.296	498116.30				ug/L

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⌈	Na	23	4922854.433	15.89	0.8414	0.027	3.158	mg/L
|	Mg	24	595532.483	1.93	0.1583	0.006	4.083	mg/L
|	K	39	2671806.959	6.79	0.2389	0.010	4.349	mg/L
|	Ca	43	3204.167	0.01	0.1560	0.008	4.829	mg/L
|	Fe	54	154773.673	0.34	0.1702	0.015	8.712	mg/L
|	Fe	57	30034.837	0.07	0.0849	0.007	8.168	mg/L
⌊>	Sc-1	45	308419.066	308419.07				mg/L
	Cl	35	43942.341	24926.27				mg/L
	Kr	83	49.001	-11.67				mg/L
	Br	81	9986.325	1375.95				mg/L
	P	31	26364.299	12968.40				mg/L
	S	34	197238.675	9257.70				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		90.194			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.477			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		100.183			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.369			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102048602
Report Date/Time: Tuesday, February 22, 2011 11:07:52
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Method 6020 - Summary Report

Sample ID: L1102048607 WG357046-01

Sample Date/Time: Tuesday, February 22, 2011 11:12:26
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 15
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	24346.312	0.02				ug/L
|	Be	9	9.333	0.00	-0.0219	0.011	49.478	ug/L
|	Al	27	756507.679	2.31	115.3216	4.192	3.635	ug/L
⌊>	Sc	45	326774.851	326774.85				ug/L
⌈	Ti	49	643.419	0.00	0.9688	0.119	12.234	ug/L
|	V	51	3477.381	0.00	0.1070	0.013	11.826	ug/L
|	Cr	52	18905.044	0.02	1.2828	0.009	0.680	ug/L
|	Cr	53	1466.922	0.00	1.3266	0.145	10.933	ug/L
|	Mn	55	110079.721	0.23	8.5208	0.040	0.472	ug/L
|	Co	59	1319.100	0.00	0.1193	0.002	1.709	ug/L
|	Ni	60	2243.941	0.00	1.0378	0.015	1.420	ug/L
|	Cu	65	641.027	0.00	0.2200	0.007	3.066	ug/L
|	Zn	66	4385.339	0.01	2.7842	0.042	1.493	ug/L
|>	Ge	72	487774.672	487774.67				ug/L
|	As	75	-124.012	0.00	0.0374	0.049	131.074	ug/L
|	Se	77	56.000	-0.00	-0.2648	0.140	52.842	ug/L
|	Se	82	13.249	0.00	0.1513	0.104	69.038	ug/L
⌊	Rb	85	6812.722	0.01				mg/L
	Y	89	317366.061	-30416.12				ug/L
	Rh	103	10.333	-0.00				ug/L
⌈	Mo	98	261.207	0.00	0.1091	0.007	6.120	ug/L
|	Ag	107	33.667	-0.00	0.0040	0.002	41.762	ug/L
|	Cd	114	7.974	0.00	0.0001	0.005	3184.999	ug/L
|>	In	115	397194.074	397194.07				ug/L
|	Sn	118	188.002	0.00	0.0281	0.002	7.930	ug/L
⌊	Sb	123	98.659	0.00	0.0195	0.002	8.373	ug/L
⌈	Ba	135	12671.485	0.02	7.0490	0.148	2.095	ug/L
|	Ce	140	12175.294	0.02				ug/L
⌊>	Tb	159	533295.931	533295.93				ug/L
⌈	Ho	165	76.675	0.00				ug/L
|	Tl	203	62.667	0.00	0.0063	0.001	16.746	ug/L
|	Tl	205	126.680	0.00	0.0159	0.001	4.182	ug/L
|	Pb	206	1145.744	0.00	0.1205	0.007	5.945	ug/L
|	Pb	207	953.055	0.00	0.1139	0.004	3.571	ug/L
|	Pb	208	4569.129	0.01	0.1179	0.001	1.162	ug/L
|	U	238	704.365	0.00	0.0174	0.001	8.375	ug/L
⌊>	Bi	209	529331.746	529331.75				ug/L

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⌈	Na	23	4640248.254	14.14	0.7482	0.015	1.986	mg/L
|	Mg	24	1072602.559	3.28	0.2723	0.005	1.930	mg/L
|	K	39	2609470.481	6.11	0.2147	0.010	4.795	mg/L
|	Ca	43	6979.810	0.02	0.3321	0.035	10.597	mg/L
|	Fe	54	227857.347	0.54	0.2660	0.027	10.087	mg/L
|	Fe	57	60787.010	0.16	0.1904	0.012	6.379	mg/L
⌊>	Sc-1	45	326774.851	326774.85				mg/L
	Cl	35	145702.198	126686.13				mg/L
	Kr	83	48.001	-12.67				mg/L
	Br	81	11985.846	3375.47				mg/L
	P	31	25734.396	12338.49				mg/L
	S	34	188883.544	902.57				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.349			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		101.189			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		106.043			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		106.658			
⌈	Na	23					

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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102048608S WG357046-04

Sample Date/Time: Tuesday, February 22, 2011 11:19:12
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 16
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23160.179	0.01				ug/L
|	Be	9	7634.258	0.02	27.1412	2.476	9.121	ug/L
|	Al	27	1896810.819	5.79	289.4766	17.515	6.050	ug/L
⌊>	Sc	45	327271.179	327271.18				ug/L
⌈	Ti	49	2033.753	0.00	3.1626	0.870	27.517	ug/L
|	V	51	274545.898	0.56	27.6295	1.310	4.742	ug/L
|	Cr	52	251043.338	0.50	29.0860	1.043	3.587	ug/L
|	Cr	53	28001.960	0.06	28.0121	0.877	3.130	ug/L
|	Mn	55	527950.391	1.08	41.1270	1.099	2.671	ug/L
|	Co	59	287955.997	0.59	28.0422	1.097	3.911	ug/L
|	Ni	60	63380.294	0.13	29.5552	1.118	3.783	ug/L
|	Cu	65	64654.059	0.13	29.1755	0.981	3.362	ug/L
|	Zn	66	39126.139	0.08	29.5544	0.883	2.988	ug/L
|>	Ge	72	486667.695	486667.69				ug/L
|	As	75	25718.360	0.05	24.0932	0.504	2.091	ug/L
|	Se	77	1835.502	0.00	22.9452	0.136	0.594	ug/L
|	Se	82	2177.519	0.00	22.1258	0.371	1.677	ug/L
⌊	Rb	85	10122.226	0.02				mg/L
	Y	89	315576.813	-32205.37				ug/L
	Rh	103	20.334	10.00				ug/L
⌈	Mo	98	414.218	0.00	0.1687	0.008	4.666	ug/L
|	Ag	107	118614.471	0.30	24.2339	1.220	5.036	ug/L
|	Cd	114	28814.011	0.07	24.8805	1.291	5.188	ug/L
|>	In	115	394992.567	394992.57				ug/L
|	Sn	118	333.072	0.00	0.0630	0.003	4.129	ug/L
⌊	Sb	123	92047.078	0.23	22.9180	0.351	1.531	ug/L
⌈	Ba	135	59613.958	0.11	33.4009	0.325	0.974	ug/L
|	Ce	140	23312.815	0.04				ug/L
⌊>	Tb	159	528531.160	528531.16				ug/L
⌈	Ho	165	146.682	0.00				ug/L
|	Tl	203	195841.321	0.37	26.4472	0.538	2.036	ug/L
|	Tl	205	479514.008	0.91	26.1854	0.306	1.170	ug/L
|	Pb	206	168275.368	0.32	27.8516	0.468	1.679	ug/L
|	Pb	207	145167.761	0.27	25.5383	0.691	2.704	ug/L
|	Pb	208	678188.917	1.28	26.8622	0.533	1.984	ug/L
|	U	238	999067.145	1.90	26.9145	1.211	4.500	ug/L
⌊>	Bi	209	527024.292	527024.29				ug/L

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⌈	Na	23	4798361.113	14.60	0.7728	0.035	4.505	mg/L
|	Mg	24	1349721.063	4.13	0.3433	0.018	5.216	mg/L
|	K	39	3485808.222	8.78	0.3104	0.015	4.714	mg/L
|	Ca	43	11230.762	0.03	0.5389	0.016	2.976	mg/L
|	Fe	54	386053.280	1.02	0.5004	0.037	7.423	mg/L
|	Fe	57	123116.470	0.35	0.4161	0.025	6.120	mg/L
⌊>	Sc-1	45	327271.179	327271.18				mg/L
	Cl	35	45072.013	26055.94				mg/L
	Kr	83	48.001	-12.67				mg/L
	Br	81	9886.219	1275.84				mg/L
	P	31	29700.181	16304.28				mg/L
	S	34	210469.404	22488.43				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.137			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.629			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		105.096			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		106.193			
⌈	Na	23					

Sample ID: L1102048608S WG357046-04
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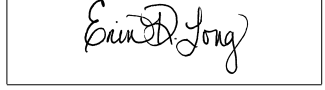
Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102048608S WG357046-04
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Method 6020 - Summary Report

Sample ID: L1102048609SD WG357046-05

Sample Date/Time: Tuesday, February 22, 2011 11:25:57
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 17
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23126.995	0.01				ug/L
|	Be	9	7748.339	0.02	28.0700	1.465	5.218	ug/L
|	Al	27	1195313.800	3.72	185.7253	23.866	12.850	ug/L
⌊>	Sc	45	320918.131	320918.13				ug/L
⌈	Ti	49	943.473	0.00	1.4729	0.200	13.578	ug/L
|	V	51	261950.842	0.54	26.9054	0.914	3.396	ug/L
|	Cr	52	239882.769	0.49	28.3499	0.857	3.024	ug/L
|	Cr	53	27724.488	0.06	28.3107	0.454	1.603	ug/L
|	Mn	55	490415.936	1.03	38.9965	0.599	1.536	ug/L
|	Co	59	273969.076	0.57	27.2316	0.222	0.817	ug/L
|	Ni	60	60084.258	0.13	28.6002	0.643	2.248	ug/L
|	Cu	65	60735.501	0.13	27.9718	0.313	1.119	ug/L
|	Zn	66	37175.348	0.08	28.6459	0.321	1.120	ug/L
|>	Ge	72	476720.661	476720.66				ug/L
|	As	75	25159.346	0.05	24.0610	0.464	1.927	ug/L
|	Se	77	1754.154	0.00	22.3547	1.063	4.756	ug/L
|	Se	82	2186.772	0.00	22.6856	0.193	0.849	ug/L
⌊	Rb	85	7592.958	0.02				mg/L
	Y	89	307631.440	-40150.74				ug/L
	Rh	103	16.667	6.33				ug/L
⌈	Mo	98	337.543	0.00	0.1427	0.005	3.320	ug/L
|	Ag	107	114419.495	0.30	24.0494	0.847	3.522	ug/L
|	Cd	114	28827.359	0.08	25.6314	1.205	4.699	ug/L
|>	In	115	384004.185	384004.19				ug/L
|	Sn	118	199.069	0.00	0.0323	0.001	3.887	ug/L
⌊	Sb	123	90586.946	0.24	23.2060	0.608	2.622	ug/L
⌈	Ba	135	56325.438	0.11	32.2533	1.344	4.166	ug/L
|	Ce	140	18712.703	0.04				ug/L
⌊>	Tb	159	517633.567	517633.57				ug/L
⌈	Ho	165	103.344	0.00				ug/L
|	Tl	203	188509.486	0.37	26.5854	1.077	4.053	ug/L
|	Tl	205	471088.378	0.93	26.8568	1.301	4.843	ug/L
|	Pb	206	159962.512	0.32	27.6459	1.096	3.965	ug/L
|	Pb	207	140663.323	0.28	25.8395	1.217	4.710	ug/L
|	Pb	208	651903.957	1.29	26.9604	0.867	3.217	ug/L
|	U	238	964439.362	1.91	27.1242	0.196	0.723	ug/L
⌊>	Bi	209	505012.332	505012.33				ug/L

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⌈	Na	23	4513076.649	14.00	0.7407	0.017	2.338	mg/L
|	Mg	24	1074821.481	3.35	0.2778	0.003	1.151	mg/L
|	K	39	2767219.936	6.74	0.2373	0.005	2.135	mg/L
|	Ca	43	7136.597	0.02	0.3456	0.020	5.658	mg/L
|	Fe	54	284190.938	0.72	0.3569	0.007	1.927	mg/L
|	Fe	57	82292.101	0.23	0.2737	0.003	0.938	mg/L
⌊>	Sc-1	45	320918.131	320918.13				mg/L
	Cl	35	37302.805	18286.74				mg/L
	Kr	83	57.667	-3.00				mg/L
	Br	81	11587.377	2977.00				mg/L
	P	31	23487.990	10092.09				mg/L
	S	34	191739.168	3758.19				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		91.234			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.829			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.929			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		101.758			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102048609SD WG357046-05
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Method 6020 - Summary Report

Sample ID: L1102048614

Sample Date/Time: Tuesday, February 22, 2011 11:32:44
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 18
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	24329.663	0.02				ug/L
|	Be	9	23.333	0.00	0.0289	0.017	58.076	ug/L
|	Al	27	1935932.426	5.99	299.5099	17.768	5.932	ug/L
⌊>	Sc	45	323303.776	323303.78				ug/L
⌈	Ti	49	1480.258	0.00	2.3032	0.191	8.277	ug/L
|	V	51	8034.674	0.01	0.5756	0.018	3.175	ug/L
|	Cr	52	41182.706	0.07	3.9871	0.047	1.188	ug/L
|	Cr	53	3937.836	0.01	3.8404	0.092	2.405	ug/L
|	Mn	55	546774.420	1.13	42.8629	0.115	0.267	ug/L
|	Co	59	7309.744	0.01	0.7076	0.012	1.647	ug/L
|	Ni	60	6249.348	0.01	2.9270	0.059	2.023	ug/L
|	Cu	65	2310.290	0.00	0.9823	0.025	2.496	ug/L
|	Zn	66	28809.732	0.06	21.7467	0.224	1.030	ug/L
|>	Ge	72	483547.469	483547.47				ug/L
|	As	75	60.313	0.00	0.2088	0.036	17.118	ug/L
|	Se	77	88.667	0.00	0.1705	0.159	93.449	ug/L
|	Se	82	20.916	0.00	0.2303	0.160	69.516	ug/L
⌊	Rb	85	5188.398	0.01				mg/L
	Y	89	323911.187	-23871.00				ug/L
	Rh	103	9.000	-1.33				ug/L
⌈	Mo	98	867.215	0.00	0.3479	0.008	2.362	ug/L
|	Ag	107	66.001	0.00	0.0108	0.002	21.957	ug/L
|	Cd	114	8.046	0.00	0.0002	0.006	2690.094	ug/L
|>	In	115	389397.720	389397.72				ug/L
|	Sn	118	254.803	0.00	0.0451	0.002	5.215	ug/L
⌊	Sb	123	406.255	0.00	0.0976	0.009	8.889	ug/L
⌈	Ba	135	12083.086	0.02	6.8190	0.198	2.908	ug/L
|	Ce	140	109534.309	0.21				ug/L
⌊>	Tb	159	525851.420	525851.42				ug/L
⌈	Ho	165	716.764	0.00				ug/L
|	Tl	203	45.001	0.00	0.0040	0.001	24.769	ug/L
|	Tl	205	116.679	0.00	0.0155	0.001	4.982	ug/L
|	Pb	206	5397.177	0.01	0.8447	0.037	4.358	ug/L
|	Pb	207	4668.136	0.01	0.7857	0.007	0.863	ug/L
|	Pb	208	21819.335	0.04	0.8206	0.017	2.074	ug/L
|	U	238	912.718	0.00	0.0235	0.001	6.173	ug/L
⌊>	Bi	209	516918.328	516918.33				ug/L

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⌈	Na	23	3594964.849	11.09	0.5860	0.048	8.250	mg/L
|	Mg	24	1434624.522	4.45	0.3704	0.030	8.081	mg/L
|	K	39	2092237.410	4.60	0.1604	0.010	5.995	mg/L
|	Ca	43	6119.150	0.02	0.2931	0.015	4.984	mg/L
|	Fe	54	957852.376	2.81	1.3722	0.144	10.497	mg/L
|	Fe	57	357144.247	1.08	1.2836	0.078	6.078	mg/L
⌊>	Sc-1	45	323303.776	323303.78				mg/L
	Cl	35	39355.295	20339.23				mg/L
	Kr	83	48.001	-12.67				mg/L
	Br	81	10757.117	2146.74				mg/L
	P	31	30432.237	17036.33				mg/L
	S	34	190831.699	2850.72				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		92.540			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.203			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		104.563			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		104.157			
⌈	Na	23					

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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102048617

Sample Date/Time: Tuesday, February 22, 2011 11:39:30
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 19
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

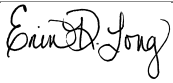
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23009.822	0.02				ug/L
|	Be	9	12.000	0.00	-0.0096	0.029	306.070	ug/L
|	Al	27	274532.243	0.87	43.5233	8.460	19.438	ug/L
⌊>	Sc	45	313494.882	313494.88				ug/L
⌈	Ti	49	250.028	0.00	0.3598	0.038	10.559	ug/L
|	V	51	3051.763	0.00	0.0701	0.005	6.818	ug/L
|	Cr	52	19121.798	0.02	1.3546	0.077	5.655	ug/L
|	Cr	53	1496.930	0.00	1.3855	0.186	13.447	ug/L
|	Mn	55	36451.022	0.08	2.8499	0.028	0.988	ug/L
|	Co	59	1010.061	0.00	0.0913	0.008	8.323	ug/L
|	Ni	60	1843.522	0.00	0.8690	0.039	4.464	ug/L
|	Cu	65	439.347	0.00	0.1329	0.004	2.715	ug/L
|	Zn	66	4401.012	0.01	2.8638	0.033	1.138	ug/L
| >	Ge	72	478252.830	478252.83				ug/L
|	As	75	-149.980	0.00	0.0104	0.019	180.644	ug/L
|	Se	77	79.334	0.00	0.0584	0.065	111.473	ug/L
|	Se	82	3.255	0.00	0.0505	0.033	64.412	ug/L
⌊	Rb	85	1568.139	0.00				mg/L
	Y	89	302342.311	-45439.87				ug/L
	Rh	103	6.000	-4.33				ug/L
⌈	Mo	98	201.241	0.00	0.0889	0.003	3.860	ug/L
|	Ag	107	73.001	0.00	0.0125	0.004	34.623	ug/L
|	Cd	114	0.265	-0.00	-0.0065	0.007	109.651	ug/L
| >	In	115	382982.188	382982.19				ug/L
|	Sn	118	215.202	0.00	0.0364	0.003	8.931	ug/L
⌊	Sb	123	133.995	0.00	0.0295	0.001	3.756	ug/L
⌈	Ba	135	3933.146	0.01	2.2764	0.030	1.302	ug/L
|	Ce	140	5135.165	0.01				ug/L
⌊>	Tb	159	514512.768	514512.77				ug/L
⌈	Ho	165	316.703	0.00				ug/L
|	Tl	203	35.000	0.00	0.0028	0.000	16.340	ug/L
|	Tl	205	110.012	0.00	0.0152	0.002	12.975	ug/L
|	Pb	206	652.695	0.00	0.0441	0.002	4.739	ug/L
|	Pb	207	581.023	0.00	0.0534	0.005	9.302	ug/L
|	Pb	208	2674.169	0.00	0.0479	0.004	7.339	ug/L
|	U	238	547.354	0.00	0.0138	0.001	9.872	ug/L
⌊>	Bi	209	505813.578	505813.58				ug/L

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⌈	Na	23	4287348.811	13.63	0.7209	0.028	3.892	mg/L
|	Mg	24	1410704.958	4.50	0.3749	0.012	3.229	mg/L
|	K	39	1415907.420	2.64	0.0901	0.007	7.934	mg/L
|	Ca	43	7263.369	0.02	0.3613	0.033	9.011	mg/L
|	Fe	54	123423.352	0.23	0.1180	0.011	9.687	mg/L
|	Fe	57	17874.434	0.03	0.0371	0.005	12.797	mg/L
⌊>	Sc-1	45	313494.882	313494.88				mg/L
	Cl	35	200373.638	181357.57				mg/L
	Kr	83	47.334	-13.33				mg/L
	Br	81	10570.253	1959.88				mg/L
	P	31	26759.409	13363.51				mg/L
	S	34	186321.176	-1659.80				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		91.527			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.569			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.308			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		101.920			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102048617PS WG357188-01

Sample Date/Time: Tuesday, February 22, 2011 11:46:17
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 20
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	26552.337	0.02				ug/L
|	Be	9	16292.616	0.05	57.3134	1.951	3.405	ug/L
|	Al	27	621690.420	1.87	93.5782	6.387	6.825	ug/L
⌊>	Sc	45	330785.820	330785.82				ug/L
⌈	Ti	49	296.701	0.00	0.4245	0.093	22.012	ug/L
|	V	51	537027.499	1.09	53.9705	0.733	1.357	ug/L
|	Cr	52	472774.660	0.95	55.3215	0.991	1.791	ug/L
|	Cr	53	54570.606	0.11	54.4181	0.265	0.486	ug/L
|	Mn	55	739855.161	1.51	57.3277	0.331	0.577	ug/L
|	Co	59	572268.856	1.17	55.4145	1.444	2.606	ug/L
|	Ni	60	120970.847	0.25	56.0908	1.113	1.985	ug/L
|	Cu	65	125177.283	0.26	56.2312	0.708	1.260	ug/L
|	Zn	66	67344.685	0.14	51.0043	0.787	1.544	ug/L
|>	Ge	72	489343.155	489343.16				ug/L
|	As	75	51812.649	0.11	48.1146	0.095	0.198	ug/L
|	Se	77	3588.644	0.01	45.5599	0.653	1.432	ug/L
|	Se	82	4386.613	0.01	44.3098	0.869	1.961	ug/L
⌊	Rb	85	1607.479	0.00				mg/L
	Y	89	311381.114	-36401.07				ug/L
	Rh	103	24.334	14.00				ug/L
⌈	Mo	98	208.840	0.00	0.0888	0.002	2.154	ug/L
|	Ag	107	245730.731	0.62	49.7856	0.744	1.494	ug/L
|	Cd	114	57110.587	0.14	48.9442	0.150	0.307	ug/L
|>	In	115	398209.489	398209.49				ug/L
|	Sn	118	387.741	0.00	0.0753	0.002	2.590	ug/L
⌊	Sb	123	203730.128	0.51	50.3266	1.147	2.279	ug/L
⌈	Ba	135	91507.353	0.17	51.3945	0.488	0.950	ug/L
|	Ce	140	5011.757	0.01				ug/L
⌊>	Tb	159	527329.460	527329.46				ug/L
⌈	Ho	165	200.022	0.00				ug/L
|	Tl	203	387973.186	0.75	53.4192	1.508	2.823	ug/L
|	Tl	205	925383.791	1.79	51.5154	0.452	0.877	ug/L
|	Pb	206	321386.491	0.62	54.3095	0.734	1.352	ug/L
|	Pb	207	290989.380	0.56	52.2525	0.738	1.412	ug/L
|	Pb	208	1329957.659	2.57	53.7806	0.764	1.421	ug/L
|	U	238	1967299.794	3.81	54.0807	1.968	3.639	ug/L
⌊>	Bi	209	516972.808	516972.81				ug/L

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⌈	Na	23	4319276.802	12.99	0.6873	0.010	1.403	mg/L
|	Mg	24	1436790.769	4.35	0.3617	0.015	4.020	mg/L
|	K	39	1481648.312	2.60	0.0886	0.004	4.709	mg/L
|	Ca	43	7400.150	0.02	0.3484	0.034	9.745	mg/L
|	Fe	54	124553.971	0.22	0.1096	0.011	10.311	mg/L
|	Fe	57	19146.904	0.03	0.0380	0.002	6.064	mg/L
⌊>	Sc-1	45	330785.820	330785.82				mg/L
	Cl	35	203940.748	184924.68				mg/L
	Kr	83	47.667	-13.00				mg/L
	Br	81	11016.734	2406.36				mg/L
	P	31	25899.559	12503.66				mg/L
	S	34	209923.545	21942.57				mg/L

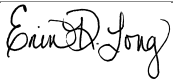
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.649			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		101.448			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		104.857			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		104.168			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102048617PS WG357188-01
Report Date/Time: Tuesday, February 22, 2011 11:48:30
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Method 6020 - Summary Report

Sample ID: L1102048617SDL WG357188-02

Sample Date/Time: Tuesday, February 22, 2011 11:53:05
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 21
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21489.953	0.01				ug/L
|	Be	9	11.333	0.00	-0.0117	0.020	169.008	ug/L
|	Al	27	50762.570	0.16	7.7987	1.034	13.257	ug/L
⌊>	Sc	45	305946.414	305946.41				ug/L
⌈	Ti	49	100.011	0.00	0.1183	0.043	36.488	ug/L
|	V	51	2469.254	0.00	0.0070	0.015	216.140	ug/L
|	Cr	52	10130.897	0.00	0.2444	0.025	10.419	ug/L
|	Cr	53	530.067	0.00	0.3916	0.016	4.116	ug/L
|	Mn	55	8291.853	0.02	0.6081	0.019	3.160	ug/L
|	Co	59	270.673	0.00	0.0177	0.003	17.417	ug/L
|	Ni	60	451.015	0.00	0.2055	0.010	4.652	ug/L
|	Cu	65	229.005	0.00	0.0348	0.009	26.136	ug/L
|	Zn	66	3386.941	0.01	2.0385	0.112	5.481	ug/L
| >	Ge	72	484053.840	484053.84				ug/L
|	As	75	-143.939	0.00	0.0177	0.016	88.588	ug/L
|	Se	77	73.334	0.00	-0.0303	0.138	455.889	ug/L
|	Se	82	-4.113	0.00	-0.0256	0.114	443.394	ug/L
⌊	Rb	85	354.343	0.00				mg/L
	Y	89	303858.026	-43924.16				ug/L
	Rh	103	10.333	-0.00				ug/L
⌈	Mo	98	63.649	0.00	0.0349	0.007	18.739	ug/L
|	Ag	107	32.667	-0.00	0.0041	0.001	34.162	ug/L
|	Cd	114	6.089	0.00	-0.0012	0.003	272.450	ug/L
| >	In	115	374334.528	374334.53				ug/L
|	Sn	118	189.335	0.00	0.0311	0.003	8.504	ug/L
⌊	Sb	123	69.406	0.00	0.0133	0.001	5.809	ug/L
⌈	Ba	135	826.042	0.00	0.4969	0.015	2.943	ug/L
|	Ce	140	996.816	0.00				ug/L
⌊>	Tb	159	505783.392	505783.39				ug/L
⌈	Ho	165	46.671	0.00				ug/L
|	Tl	203	43.667	0.00	0.0042	0.001	19.767	ug/L
|	Tl	205	120.013	0.00	0.0161	0.001	3.379	ug/L
|	Pb	206	449.348	0.00	0.0117	0.002	15.236	ug/L
|	Pb	207	396.012	0.00	0.0220	0.008	37.891	ug/L
|	Pb	208	1831.085	0.00	0.0157	0.005	29.036	ug/L
|	U	238	178.670	0.00	0.0036	0.000	1.973	ug/L
⌊>	Bi	209	488824.529	488824.53				ug/L

Sample ID: L1102048617SDL WG357188-02
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⌈	Na	23	872975.054	2.79	0.1451	0.006	4.065	mg/L
|	Mg	24	279771.363	0.91	0.0730	0.004	5.368	mg/L
|	K	39	762558.083	0.61	0.0173	0.004	21.341	mg/L
|	Ca	43	1600.288	0.00	0.0734	0.005	7.117	mg/L
|	Fe	54	60293.068	0.04	0.0222	0.004	19.818	mg/L
|	Fe	57	9088.373	0.00	0.0046	0.002	50.783	mg/L
⌊>	Sc-1	45	305946.414	305946.41				mg/L
	Cl	35	56699.663	37683.59				mg/L
	Kr	83	51.334	-9.33				mg/L
	Br	81	8303.448	-306.93				mg/L
	P	31	15227.151	1831.25				mg/L
	S	34	206837.233	18856.26				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		92.637			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		95.366			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		100.572			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.496			
⌈	Na	23					

Sample ID: L1102048617SDL WG357188-02
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102048617SDL WG357188-02
Report Date/Time: Tuesday, February 22, 2011 11:55:17
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 22, 2011 11:59:52
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20020.075	0.01				ug/L
|	Be	9	14000.464	0.05	53.0704	1.463	2.756	ug/L
|	Al	27	310073.945	1.00	49.9730	2.216	4.434	ug/L
⌊>	Sc	45	306991.076	306991.08				ug/L
⌈	Ti	49	63161.872	0.13	97.1516	1.623	1.670	ug/L
|	V	51	494418.790	0.99	48.8625	0.293	0.599	ug/L
|	Cr	52	424295.260	0.84	48.7385	0.524	1.075	ug/L
|	Cr	53	48944.376	0.10	48.0084	0.440	0.917	ug/L
|	Mn	55	647773.987	1.30	49.3818	0.472	0.956	ug/L
|	Co	59	516778.474	1.04	49.2445	0.778	1.579	ug/L
|	Ni	60	107626.822	0.22	49.1115	0.730	1.487	ug/L
|	Cu	65	113234.660	0.23	50.0507	1.074	2.146	ug/L
|	Zn	66	67442.684	0.13	50.2542	1.086	2.162	ug/L
⌊>	Ge	72	497319.957	497319.96				ug/L
|	As	75	52195.521	0.11	47.6974	0.621	1.302	ug/L
|	Se	77	3914.767	0.01	48.9680	1.638	3.346	ug/L
|	Se	82	4894.796	0.01	48.6493	0.821	1.688	ug/L
⌊	Rb	85	2048.231	0.00				mg/L
	Y	89	320713.349	-27068.83				ug/L
	Rh	103	19.334	9.00				ug/L
⌈	Mo	98	243995.485	0.64	97.3721	0.917	0.941	ug/L
|	Ag	107	233210.383	0.61	49.3173	0.385	0.780	ug/L
|	Cd	114	54962.452	0.14	49.1626	0.902	1.836	ug/L
⌊>	In	115	381530.596	381530.60				ug/L
|	Sn	118	194610.960	0.51	48.1305	0.365	0.757	ug/L
⌊	Sb	123	188415.202	0.49	48.5682	0.846	1.743	ug/L
⌈	Ba	135	80314.703	0.16	47.3149	0.961	2.032	ug/L
|	Ce	140	46.671	0.00				ug/L
⌊>	Tb	159	502853.248	502853.25				ug/L
⌈	Ho	165	26.669	0.00				ug/L
|	Tl	203	334988.534	0.70	49.9895	0.848	1.696	ug/L
|	Tl	205	812970.521	1.70	49.0428	0.854	1.741	ug/L
|	Pb	206	268291.894	0.56	49.1185	1.005	2.047	ug/L
|	Pb	207	253023.076	0.53	49.2290	1.112	2.258	ug/L
|	Pb	208	1134432.394	2.38	49.7046	1.135	2.283	ug/L
|	U	238	1710245.363	3.59	50.9198	0.851	1.671	ug/L
⌊>	Bi	209	477078.965	477078.96				ug/L

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Na	23	28938271.206	94.19	5.0020	0.150	2.997	mg/L	
Mg	24	18157546.110	59.15	4.9737	0.081	1.619	mg/L	
K	39	42951159.792	138.02	4.9513	0.108	2.174	mg/L	
Ca	43	94605.024	0.31	4.9208	0.104	2.122	mg/L	
Fe	54	3136741.921	10.06	4.8942	0.098	1.997	mg/L	
Fe	57	1305320.086	4.23	5.0168	0.017	0.338	mg/L	
> Sc-1	45	306991.076	306991.08				mg/L	
Cl	35	17914.713	-1101.36				mg/L	
Kr	83	55.001	-5.67				mg/L	
Br	81	8184.684	-425.69				mg/L	
P	31	11004.101	-2391.80				mg/L	
S	34	188936.182	955.20				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	97.725				
Cr	52	97.477				
Cr	53					
Mn	55	98.764				
Co	59	98.489				
Ni	60	98.223				
Cu	65	100.101				
Zn	66	100.508				
> Ge	72		95.176			
As	75	95.395				
Se	77					
Se	82	97.299				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	98.635				
Cd	114	98.325				
> In	115		97.199			
Sn	118					
Sb	123	97.136				
Ba	135	94.630				
Ce	140					
> Tb	159		99.990			
Ho	165					
Tl	203	99.979				
Tl	205					
Pb	206					
Pb	207					
Pb	208	99.409				
U	238	101.840				
> Bi	209		96.130			
Na	23					

Sample ID: QC Std 6
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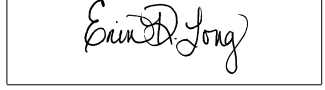
Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Tuesday, February 22, 2011 12:02:04

Approved: February 23, 2011



Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 22, 2011 12:07:07
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20704.809	0.01				ug/L
|	Be	9	4.000	0.00	-0.0398	0.008	19.496	ug/L
|	Al	27	3950.793	0.00	0.1249	0.092	73.457	ug/L
⌊>	Sc	45	306201.345	306201.35				ug/L
⌈	Ti	49	50.005	-0.00	0.0376	0.027	71.445	ug/L
|	V	51	2486.654	-0.00	0.0042	0.011	254.642	ug/L
|	Cr	52	8167.750	0.00	-0.0096	0.012	125.741	ug/L
|	Cr	53	233.359	0.00	0.0878	0.055	62.640	ug/L
|	Mn	55	345.009	0.00	-0.0156	0.001	7.935	ug/L
|	Co	59	68.668	0.00	-0.0023	0.001	36.713	ug/L
|	Ni	60	48.667	0.00	0.0163	0.002	11.432	ug/L
|	Cu	65	99.335	-0.00	-0.0249	0.003	12.960	ug/L
|	Zn	66	436.347	0.00	-0.2536	0.012	4.864	ug/L
| >	Ge	72	492742.342	492742.34				ug/L
|	As	75	-148.305	0.00	0.0160	0.051	317.613	ug/L
|	Se	77	64.667	0.00	-0.1609	0.193	119.954	ug/L
|	Se	82	-2.104	0.00	-0.0043	0.086	1995.684	ug/L
⌊	Rb	85	18.334	-0.00				mg/L
	Y	89	316185.595	-31596.59				ug/L
	Rh	103	9.667	-0.67				ug/L
⌈	Mo	98	96.019	0.00	0.0470	0.003	5.899	ug/L
|	Ag	107	33.000	-0.00	0.0040	0.001	25.149	ug/L
|	Cd	114	3.858	-0.00	-0.0033	0.001	44.019	ug/L
| >	In	115	384283.097	384283.10				ug/L
|	Sn	118	228.003	0.00	0.0394	0.003	6.998	ug/L
⌊	Sb	123	60.579	0.00	0.0106	0.002	20.527	ug/L
⌈	Ba	135	21.334	0.00	0.0260	0.003	11.649	ug/L
|	Ce	140	30.003	0.00				ug/L
⌊>	Tb	159	498822.044	498822.04				ug/L
⌈	Ho	165	13.335	-0.00				ug/L
|	Tl	203	30.334	0.00	0.0022	0.001	39.292	ug/L
|	Tl	205	56.673	0.00	0.0123	0.002	13.439	ug/L
|	Pb	206	405.679	0.00	0.0033	0.001	44.007	ug/L
|	Pb	207	345.676	0.00	0.0118	0.003	26.198	ug/L
|	Pb	208	1602.066	0.00	0.0053	0.001	10.039	ug/L
|	U	238	110.335	0.00	0.0016	0.000	26.730	ug/L
⌊>	Bi	209	492668.848	492668.85				ug/L

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⌈	Na	23	20406.179	0.00	-0.0031	0.000	3.349	mg/L
|	Mg	24	756.772	0.00	-0.0039	0.000	1.137	mg/L
|	K	39	546552.917	-0.09	-0.0082	0.002	20.154	mg/L
|	Ca	43	210.023	-0.00	0.0007	0.003	411.424	mg/L
|	Fe	54	47712.247	-0.01	0.0021	0.001	57.682	mg/L
|	Fe	57	7446.854	-0.00	-0.0018	0.001	79.048	mg/L
⌊>	Sc-1	45	306201.345	306201.35				mg/L
	Cl	35	17408.474	-1607.60				mg/L
	Kr	83	50.334	-10.33				mg/L
	Br	81	7806.381	-804.00				mg/L
	P	31	12735.522	-660.38				mg/L
	S	34	188088.560	107.58				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.300			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.900			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.188			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.271			
⌈	Na	23					

Sample ID: QC Std 7
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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Tuesday, February 22, 2011 12:09:18

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102048620

Sample Date/Time: Tuesday, February 22, 2011 12:13:53
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 22
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23009.902	0.01				ug/L
|	Be	9	16.000	0.00	0.0019	0.008	401.602	ug/L
|	Al	27	2349763.755	7.17	358.3772	11.527	3.216	ug/L
⌊>	Sc	45	327566.062	327566.06				ug/L
⌈	Ti	49	790.110	0.00	1.1966	0.100	8.352	ug/L
|	V	51	5171.926	0.01	0.2777	0.032	11.608	ug/L
|	Cr	52	47766.301	0.08	4.7205	0.114	2.411	ug/L
|	Cr	53	5055.118	0.01	4.9158	0.197	4.015	ug/L
|	Mn	55	358911.852	0.73	27.8270	0.131	0.471	ug/L
|	Co	59	7242.361	0.01	0.6936	0.003	0.396	ug/L
|	Ni	60	8340.227	0.02	3.8674	0.050	1.290	ug/L
|	Cu	65	1946.209	0.00	0.8073	0.005	0.629	ug/L
|	Zn	66	22299.064	0.04	16.5178	0.159	0.960	ug/L
|>	Ge	72	488668.668	488668.67				ug/L
|	As	75	-125.980	0.00	0.0356	0.021	58.534	ug/L
|	Se	77	85.334	0.00	0.1152	0.132	114.694	ug/L
|	Se	82	13.603	0.00	0.1548	0.081	52.080	ug/L
⌊	Rb	85	3083.506	0.01				mg/L
	Y	89	335436.311	-12345.87				ug/L
	Rh	103	9.333	-1.00				ug/L
⌈	Mo	98	1158.759	0.00	0.4572	0.022	4.753	ug/L
|	Ag	107	48.334	0.00	0.0070	0.002	29.041	ug/L
|	Cd	114	4.029	-0.00	-0.0033	0.007	222.971	ug/L
|>	In	115	393642.156	393642.16				ug/L
|	Sn	118	502.013	0.00	0.1038	0.003	3.175	ug/L
⌊	Sb	123	106.535	0.00	0.0217	0.002	8.240	ug/L
⌈	Ba	135	12460.550	0.02	6.9430	0.100	1.434	ug/L
|	Ce	140	80978.279	0.15				ug/L
⌊>	Tb	159	532433.684	532433.68				ug/L
⌈	Ho	165	1063.497	0.00				ug/L
|	Tl	203	40.667	0.00	0.0033	0.002	49.093	ug/L
|	Tl	205	100.011	0.00	0.0144	0.003	18.967	ug/L
|	Pb	206	2604.699	0.00	0.3582	0.006	1.741	ug/L
|	Pb	207	2068.235	0.00	0.3069	0.008	2.544	ug/L
|	Pb	208	10140.816	0.02	0.3351	0.007	2.102	ug/L
|	U	238	2365.970	0.00	0.0615	0.002	3.867	ug/L
⌊>	Bi	209	533416.257	533416.26				ug/L

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Na	23	3631356.650	11.03	0.5827	0.015	2.631	mg/L	
Mg	24	1518196.553	4.64	0.3861	0.015	3.985	mg/L	
K	39	1550463.228	2.86	0.0978	0.006	5.938	mg/L	
Ca	43	5395.331	0.02	0.2535	0.018	7.190	mg/L	
Fe	54	582219.989	1.62	0.7912	0.031	3.876	mg/L	
Fe	57	205994.968	0.60	0.7169	0.048	6.688	mg/L	
> Sc-1	45	327566.062	327566.06				mg/L	
Cl	35	183604.371	164588.30				mg/L	
Kr	83	45.667	-15.00				mg/L	
Br	81	10215.217	1604.84				mg/L	
P	31	32614.467	19218.56				mg/L	
S	34	217165.572	29184.59				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		93.520			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		100.284			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		105.872			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		107.481			
Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102048623

Sample Date/Time: Tuesday, February 22, 2011 12:20:40
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 23
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23828.529	0.02				ug/L
|	Be	9	20.000	0.00	0.0192	0.034	178.965	ug/L
|	Al	27	2231071.075	7.06	353.0744	26.653	7.549	ug/L
⌊>	Sc	45	315829.021	315829.02				ug/L
⌈	Ti	49	996.816	0.00	1.5599	0.156	10.021	ug/L
|	V	51	4495.234	0.00	0.2203	0.036	16.330	ug/L
|	Cr	52	34480.357	0.06	3.2368	0.042	1.293	ug/L
|	Cr	53	3220.843	0.01	3.1596	0.293	9.272	ug/L
|	Mn	55	290308.371	0.61	23.0530	0.120	0.518	ug/L
|	Co	59	4954.610	0.01	0.4835	0.007	1.529	ug/L
|	Ni	60	5562.269	0.01	2.6405	0.051	1.929	ug/L
|	Cu	65	1547.802	0.00	0.6449	0.004	0.610	ug/L
|	Zn	66	7244.362	0.01	5.1078	0.078	1.525	ug/L
|>	Ge	72	476956.675	476956.68				ug/L
|	As	75	-180.006	-0.00	-0.0187	0.052	276.556	ug/L
|	Se	77	68.000	0.00	-0.0903	0.415	459.061	ug/L
|	Se	82	0.539	0.00	0.0222	0.041	185.608	ug/L
⌊	Rb	85	2769.078	0.01				mg/L
	Y	89	314489.840	-33292.34				ug/L
	Rh	103	8.333	-2.00				ug/L
⌈	Mo	98	773.019	0.00	0.3195	0.010	3.263	ug/L
|	Ag	107	31.667	-0.00	0.0039	0.002	43.010	ug/L
|	Cd	114	3.411	-0.00	-0.0036	0.005	128.297	ug/L
|>	In	115	379077.898	379077.90				ug/L
|	Sn	118	378.674	0.00	0.0777	0.012	15.968	ug/L
⌊	Sb	123	64.283	0.00	0.0118	0.001	9.056	ug/L
⌈	Ba	135	8720.890	0.02	5.0405	0.150	2.981	ug/L
|	Ce	140	65641.336	0.13				ug/L
⌊>	Tb	159	513703.519	513703.52				ug/L
⌈	Ho	165	723.432	0.00				ug/L
|	Tl	203	32.000	0.00	0.0023	0.001	30.218	ug/L
|	Tl	205	66.674	0.00	0.0128	0.000	2.649	ug/L
|	Pb	206	2059.233	0.00	0.2856	0.011	3.688	ug/L
|	Pb	207	1958.221	0.00	0.3045	0.096	31.611	ug/L
|	Pb	208	8323.757	0.01	0.2798	0.024	8.564	ug/L
|	U	238	2083.238	0.00	0.0567	0.001	2.572	ug/L
⌊>	Bi	209	508403.669	508403.67				ug/L

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Erin D. Long

⌈	Na	23	3580234.275	11.28	0.5961	0.024	3.992	mg/L
|	Mg	24	1379546.876	4.37	0.3638	0.016	4.417	mg/L
|	K	39	1487794.565	2.83	0.0968	0.003	3.239	mg/L
|	Ca	43	4985.074	0.01	0.2424	0.006	2.610	mg/L
|	Fe	54	476094.003	1.35	0.6597	0.028	4.184	mg/L
|	Fe	57	167216.424	0.50	0.5981	0.018	3.042	mg/L
⌊>	Sc-1	45	315829.021	315829.02				mg/L
	Cl	35	35552.422	16536.35				mg/L
	Kr	83	53.001	-7.67				mg/L
	Br	81	11858.361	3247.99				mg/L
	P	31	25717.994	12322.09				mg/L
	S	34	194859.860	6878.88				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		91.279			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.574			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.147			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		102.441			
⌈	Na	23					

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
_>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102048626

Sample Date/Time: Tuesday, February 22, 2011 12:27:24
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 24
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	25565.995	0.03				ug/L
|	Be	9	4.000	0.00	-0.0395	0.021	52.891	ug/L
|	Al	27	9888.271	0.02	1.1038	0.232	21.030	ug/L
⌊>	Sc	45	305120.260	305120.26				ug/L
⌈	Ti	49	63.340	0.00	0.0619	0.025	39.639	ug/L
|	V	51	2498.652	0.00	0.0145	0.015	103.219	ug/L
|	Cr	52	10814.288	0.01	0.3499	0.031	8.819	ug/L
|	Cr	53	616.747	0.00	0.4908	0.063	12.888	ug/L
|	Mn	55	1385.777	0.00	0.0684	0.004	6.297	ug/L
|	Co	59	81.001	0.00	-0.0008	0.001	102.214	ug/L
|	Ni	60	317.342	0.00	0.1454	0.015	10.267	ug/L
|	Cu	65	301.008	0.00	0.0701	0.001	1.658	ug/L
|	Zn	66	2408.314	0.00	1.3132	0.048	3.690	ug/L
|>	Ge	72	475422.921	475422.92				ug/L
|	As	75	-182.871	-0.00	-0.0219	0.059	267.441	ug/L
|	Se	77	75.334	0.00	0.0119	0.112	936.381	ug/L
|	Se	82	-3.136	0.00	-0.0159	0.053	332.152	ug/L
⌊	Rb	85	35.667	0.00				mg/L
	Y	89	301044.850	-46737.33				ug/L
	Rh	103	9.333	-1.00				ug/L
⌈	Mo	98	31.315	0.00	0.0216	0.001	6.454	ug/L
|	Ag	107	24.667	-0.00	0.0024	0.001	37.090	ug/L
|	Cd	114	3.382	-0.00	-0.0037	0.002	53.057	ug/L
|>	In	115	376097.948	376097.95				ug/L
|	Sn	118	156.135	0.00	0.0225	0.005	20.813	ug/L
⌊	Sb	123	45.243	-0.00	0.0069	0.003	39.368	ug/L
⌈	Ba	135	87.335	0.00	0.0636	0.005	7.113	ug/L
|	Ce	140	63.340	0.00				ug/L
⌊>	Tb	159	513815.513	513815.51				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	17.000	0.00	0.0003	0.000	111.472	ug/L
|	Tl	205	50.005	0.00	0.0119	0.001	4.652	ug/L
|	Pb	206	445.348	0.00	0.0103	0.003	29.314	ug/L
|	Pb	207	372.344	0.00	0.0168	0.003	20.496	ug/L
|	Pb	208	1715.074	0.00	0.0100	0.001	11.851	ug/L
|	U	238	19.667	0.00	-0.0010	0.000	11.133	ug/L
⌊>	Bi	209	493144.317	493144.32				ug/L

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⌈	Na	23	46284.921	0.09	0.0014	0.000	30.910	mg/L
|	Mg	24	11871.572	0.04	-0.0008	0.000	27.794	mg/L
|	K	39	547161.097	-0.09	-0.0079	0.001	17.127	mg/L
|	Ca	43	416.717	0.00	0.0116	0.002	15.437	mg/L
|	Fe	54	97073.117	0.16	0.0811	0.007	8.790	mg/L
|	Fe	57	7857.205	-0.00	-0.0001	0.001	503.923	mg/L
⌊>	Sc-1	45	305120.260	305120.26				mg/L
	Cl	35	93922.375	74906.31				mg/L
	Kr	83	54.001	-6.67				mg/L
	Br	81	8751.830	141.45				mg/L
	P	31	23742.987	10347.08				mg/L
	S	34	194278.478	6297.50				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		90.985			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		95.815			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.169			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.367			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102048629

Sample Date/Time: Tuesday, February 22, 2011 12:34:10
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 25
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23461.274	0.02				ug/L
|	Be	9	5.333	0.00	-0.0351	0.009	25.904	ug/L
|	Al	27	20020.081	0.06	2.6915	0.280	10.400	ug/L
⌊>	Sc	45	312114.861	312114.86				ug/L
⌈	Ti	49	86.676	0.00	0.1000	0.057	56.994	ug/L
|	V	51	2449.409	0.00	0.0102	0.017	164.047	ug/L
|	Cr	52	11800.076	0.01	0.4753	0.010	2.023	ug/L
|	Cr	53	683.425	0.00	0.5616	0.036	6.486	ug/L
|	Mn	55	2163.923	0.00	0.1311	0.008	5.972	ug/L
|	Co	59	102.335	0.00	0.0014	0.001	87.463	ug/L
|	Ni	60	257.673	0.00	0.1173	0.003	2.174	ug/L
|	Cu	65	306.008	0.00	0.0728	0.015	20.080	ug/L
|	Zn	66	2176.926	0.00	1.1361	0.054	4.725	ug/L
|>	Ge	72	473928.090	473928.09				ug/L
|	As	75	-134.149	0.00	0.0240	0.042	174.454	ug/L
|	Se	77	74.000	0.00	-0.0029	0.116	4054.399	ug/L
|	Se	82	11.284	0.00	0.1343	0.072	53.889	ug/L
⌊	Rb	85	54.334	0.00				mg/L
	Y	89	304820.962	-42961.22				ug/L
	Rh	103	7.333	-3.00				ug/L
⌈	Mo	98	30.790	0.00	0.0212	0.001	4.669	ug/L
|	Ag	107	27.000	-0.00	0.0028	0.000	5.787	ug/L
|	Cd	114	9.108	0.00	0.0015	0.010	683.959	ug/L
|>	In	115	380976.190	380976.19				ug/L
|	Sn	118	164.535	0.00	0.0242	0.002	10.192	ug/L
⌊	Sb	123	41.907	-0.00	0.0059	0.001	20.060	ug/L
⌈	Ba	135	97.668	0.00	0.0700	0.002	3.076	ug/L
|	Ce	140	120.013	0.00				ug/L
⌊>	Tb	159	509668.401	509668.40				ug/L
⌈	Ho	165	6.667	-0.00				ug/L
|	Tl	203	13.333	-0.00	-0.0003	0.001	190.585	ug/L
|	Tl	205	30.003	0.00	0.0107	0.001	5.112	ug/L
|	Pb	206	444.348	0.00	0.0089	0.002	19.298	ug/L
|	Pb	207	358.343	0.00	0.0131	0.002	11.654	ug/L
|	Pb	208	1721.076	0.00	0.0092	0.002	22.491	ug/L
|	U	238	23.000	0.00	-0.0009	0.000	12.183	ug/L
⌊>	Bi	209	500523.746	500523.75				ug/L

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⌈	Na	23	78599.542	0.19	0.0067	0.001	14.981	mg/L
|	Mg	24	29155.403	0.09	0.0038	0.001	14.219	mg/L
|	K	39	588986.563	0.01	-0.0045	0.002	53.301	mg/L
|	Ca	43	513.398	0.00	0.0160	0.002	14.554	mg/L
|	Fe	54	101964.862	0.17	0.0853	0.010	11.939	mg/L
|	Fe	57	8958.248	0.00	0.0034	0.003	80.663	mg/L
⌊>	Sc-1	45	312114.861	312114.86				mg/L
	Cl	35	34778.380	15762.31				mg/L
	Kr	83	44.001	-16.67				mg/L
	Br	81	8441.568	-168.81				mg/L
	P	31	23480.287	10084.38				mg/L
	S	34	184962.199	-3018.78				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		90.699			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.058			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		101.345			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.854			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102049202

Sample Date/Time: Tuesday, February 22, 2011 12:40:55
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 26
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23962.124	0.02				ug/L
|	Be	9	6.667	0.00	-0.0303	0.004	12.253	ug/L
|	Al	27	324175.037	1.03	51.3781	4.815	9.371	ug/L
|>	Sc	45	312683.798	312683.80				ug/L
⌈	Ti	49	1203.526	0.00	1.8592	0.133	7.161	ug/L
|	V	51	25110.541	0.05	2.3116	0.045	1.929	ug/L
|	Cr	52	35769.887	0.06	3.3206	0.084	2.544	ug/L
|	Cr	53	3217.508	0.01	3.1025	0.289	9.322	ug/L
|	Mn	55	1209903.782	2.49	94.5860	1.689	1.785	ug/L
|	Co	59	3278.237	0.01	0.3114	0.006	1.878	ug/L
|	Ni	60	1856.191	0.00	0.8624	0.055	6.355	ug/L
|	Cu	65	49224.027	0.10	22.2610	0.465	2.090	ug/L
|	Zn	66	228607.070	0.47	176.0479	4.204	2.388	ug/L
|>	Ge	72	485206.422	485206.42				ug/L
|	As	75	2882.680	0.01	2.8436	0.044	1.555	ug/L
|	Se	77	76.667	0.00	0.0082	0.136	1648.595	ug/L
|	Se	82	11.939	0.00	0.1387	0.136	98.098	ug/L
⌊	Rb	85	9845.945	0.02				mg/L
	Y	89	311206.511	-36575.67				ug/L
	Rh	103	21.334	11.00				ug/L
⌈	Mo	98	40032.513	0.11	16.0138	0.205	1.279	ug/L
|	Ag	107	99.001	0.00	0.0181	0.000	2.420	ug/L
|	Cd	114	1173.649	0.00	1.0452	0.025	2.397	ug/L
|>	In	115	380807.082	380807.08				ug/L
|	Sn	118	685.490	0.00	0.1533	0.004	2.471	ug/L
⌊	Sb	123	40872.614	0.11	10.5523	0.218	2.063	ug/L
⌈	Ba	135	6133.608	0.01	3.4813	0.070	2.014	ug/L
|	Ce	140	2540.577	0.00				ug/L
|>	Tb	159	523783.079	523783.08				ug/L
⌈	Ho	165	33.337	0.00				ug/L
|	Tl	203	74.668	0.00	0.0083	0.001	15.744	ug/L
|	Tl	205	176.686	0.00	0.0189	0.006	30.023	ug/L
|	Pb	206	15224.067	0.03	2.5460	0.099	3.882	ug/L
|	Pb	207	13377.411	0.03	2.3879	0.113	4.734	ug/L
|	Pb	208	61714.226	0.12	2.4738	0.111	4.467	ug/L
|	U	238	356.343	0.00	0.0084	0.000	5.689	ug/L
|>	Bi	209	509503.278	509503.28				ug/L

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⌈	Na	23	11535331.537	36.88	1.9563	0.113	5.761	mg/L
|	Mg	24	7697848.060	24.63	2.0691	0.063	3.058	mg/L
|	K	39	15805450.590	48.70	1.7439	0.059	3.360	mg/L
|	Ca	43	83438.369	0.27	4.2616	0.074	1.740	mg/L
|	Fe	54	335290.171	0.91	0.4482	0.027	5.920	mg/L
|	Fe	57	111570.062	0.33	0.3932	0.017	4.250	mg/L
⌊>	Sc-1	45	312683.798	312683.80				mg/L
	Cl	35	54516.875	35500.81				mg/L
	Kr	83	45.334	-15.33				mg/L
	Br	81	9625.966	1015.59				mg/L
	P	31	93550.267	80154.36				mg/L
	S	34	289451.244	101470.27				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		92.858			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.015			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		104.151			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		102.663			
⌈	Na	23					

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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Zn 66 Upper, S, EEE	Zn	66	

Sample ID: L1102049202
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 22, 2011 12:47:41
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18400.281	0.00				ug/L
|	Be	9	14224.110	0.05	56.0420	2.700	4.818	ug/L
|	Al	27	306910.777	1.03	51.5129	4.774	9.267	ug/L
⌊>	Sc	45	295872.066	295872.07				ug/L
⌈	Ti	49	65315.872	0.14	103.6309	3.322	3.205	ug/L
|	V	51	492214.207	1.02	50.1756	0.498	0.993	ug/L
|	Cr	52	419686.224	0.85	49.7373	0.906	1.821	ug/L
|	Cr	53	49517.283	0.10	50.1031	1.637	3.268	ug/L
|	Mn	55	631644.060	1.31	49.6598	0.710	1.429	ug/L
|	Co	59	509973.049	1.06	50.1127	0.427	0.853	ug/L
|	Ni	60	107524.106	0.22	50.5961	0.737	1.456	ug/L
|	Cu	65	111851.229	0.23	50.9801	0.689	1.352	ug/L
|	Zn	66	66863.169	0.14	51.3861	0.850	1.654	ug/L
⌊>	Ge	72	482234.644	482234.64				ug/L
|	As	75	52891.467	0.11	49.8368	0.417	0.837	ug/L
|	Se	77	3904.097	0.01	50.3846	2.384	4.732	ug/L
|	Se	82	4861.134	0.01	49.8359	1.603	3.217	ug/L
⌊	Rb	85	1977.882	0.00				mg/L
	Y	89	302658.656	-45123.53				ug/L
	Rh	103	31.334	21.00				ug/L
⌈	Mo	98	242536.395	0.66	99.9737	1.895	1.895	ug/L
|	Ag	107	233090.214	0.63	50.9037	0.140	0.274	ug/L
|	Cd	114	56126.616	0.15	51.8444	0.255	0.491	ug/L
⌊>	In	115	369448.702	369448.70				ug/L
|	Sn	118	197363.671	0.53	50.4142	0.673	1.336	ug/L
⌊	Sb	123	189549.066	0.51	50.4644	0.690	1.367	ug/L
⌈	Ba	135	81977.166	0.17	49.8606	0.588	1.178	ug/L
|	Ce	140	80.008	0.00				ug/L
⌊>	Tb	159	486903.636	486903.64				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	339105.535	0.74	52.3657	1.491	2.847	ug/L
|	Tl	205	809241.063	1.76	50.5166	0.883	1.748	ug/L
|	Pb	206	272321.761	0.59	51.5887	0.488	0.946	ug/L
|	Pb	207	253382.816	0.55	51.0145	0.894	1.752	ug/L
|	Pb	208	1127930.140	2.44	51.1373	0.288	0.563	ug/L
|	U	238	1726901.671	3.75	53.1975	1.285	2.415	ug/L
⌊>	Bi	209	460994.945	460994.95				ug/L

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Na	23	29282595.435	99.29	5.2731	0.576	10.925	mg/L
Mg	24	17997581.026	61.00	5.1291	0.377	7.353	mg/L
K	39	43456997.441	145.30	5.2129	0.289	5.540	mg/L
Ca	43	95378.919	0.32	5.1575	0.252	4.887	mg/L
Fe	54	3112798.566	10.39	5.0558	0.385	7.610	mg/L
Fe	57	1274508.508	4.29	5.0948	0.320	6.281	mg/L
> Sc-1	45	295872.066	295872.07				mg/L
Cl	35	19273.898	257.83				mg/L
Kr	83	52.334	-8.33				mg/L
Br	81	7581.542	-1028.83				mg/L
P	31	12233.519	-1162.38				mg/L
S	34	213115.679	25134.70				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	100.351				
Cr	52	99.475				
Cr	53					
Mn	55	99.320				
Co	59	100.225				
Ni	60	101.192				
Cu	65	101.960				
Zn	66	102.772				
> Ge	72		92.289			
As	75	99.674				
Se	77					
Se	82	99.672				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	101.807				
Cd	114	103.689				
> In	115		94.121			
Sn	118					
Sb	123	100.929				
Ba	135	99.721				
Ce	140					
> Tb	159		96.818			
Ho	165					
Tl	203	104.731				
Tl	205					
Pb	206					
Pb	207					
Pb	208	102.275				
U	238	106.395				
> Bi	209		92.889			
Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 22, 2011 12:54:57
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20020.117	0.01				ug/L
|	Be	9	5.333	0.00	-0.0353	0.021	58.702	ug/L
|	Al	27	3250.544	0.00	0.0121	0.120	990.900	ug/L
⌊>	Sc	45	306342.512	306342.51				ug/L
⌈	Ti	49	53.339	0.00	0.0438	0.026	59.373	ug/L
|	V	51	2485.508	0.00	0.0058	0.017	286.816	ug/L
|	Cr	52	8232.806	0.00	0.0050	0.033	654.952	ug/L
|	Cr	53	176.686	-0.00	0.0326	0.019	59.183	ug/L
|	Mn	55	345.009	0.00	-0.0154	0.002	16.198	ug/L
|	Co	59	56.667	-0.00	-0.0034	0.001	29.085	ug/L
|	Ni	60	48.334	0.00	0.0163	0.001	7.503	ug/L
|	Cu	65	110.668	0.00	-0.0195	0.009	44.391	ug/L
|	Zn	66	461.015	0.00	-0.2322	0.029	12.654	ug/L
|>	Ge	72	489325.972	489325.97				ug/L
|	As	75	-157.543	0.00	0.0063	0.035	553.147	ug/L
|	Se	77	68.000	0.00	-0.1126	0.092	81.635	ug/L
|	Se	82	5.583	0.00	0.0721	0.115	159.023	ug/L
⌊	Rb	85	18.334	-0.00				mg/L
	Y	89	317411.870	-30370.31				ug/L
	Rh	103	8.667	-1.67				ug/L
⌈	Mo	98	107.211	0.00	0.0526	0.007	12.866	ug/L
|	Ag	107	24.334	-0.00	0.0023	0.001	22.663	ug/L
|	Cd	114	-2.225	-0.00	-0.0088	0.002	23.480	ug/L
|>	In	115	375432.206	375432.21				ug/L
|	Sn	118	234.669	0.00	0.0425	0.007	15.933	ug/L
⌊	Sb	123	49.285	0.00	0.0080	0.001	8.800	ug/L
⌈	Ba	135	14.000	-0.00	0.0215	0.002	9.742	ug/L
|	Ce	140	10.001	-0.00				ug/L
⌊>	Tb	159	507357.519	507357.52				ug/L
⌈	Ho	165	13.335	-0.00				ug/L
|	Tl	203	24.334	0.00	0.0015	0.001	62.822	ug/L
|	Tl	205	43.338	0.00	0.0116	0.002	19.249	ug/L
|	Pb	206	389.678	0.00	0.0021	0.007	317.784	ug/L
|	Pb	207	329.342	0.00	0.0101	0.004	40.524	ug/L
|	Pb	208	1545.396	0.00	0.0044	0.003	76.881	ug/L
|	U	238	85.001	0.00	0.0010	0.000	31.550	ug/L
⌊>	Bi	209	482349.886	482349.89				ug/L

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⌈	Na	23	19918.479	-0.00	-0.0032	0.000	2.806	mg/L
|	Mg	24	616.747	0.00	-0.0039	0.000	0.322	mg/L
|	K	39	566479.142	-0.03	-0.0058	0.003	53.921	mg/L
|	Ca	43	193.355	-0.00	-0.0002	0.002	701.401	mg/L
|	Fe	54	47352.006	-0.01	0.0016	0.004	257.165	mg/L
|	Fe	57	7266.701	-0.00	-0.0025	0.002	79.308	mg/L
⌊>	Sc-1	45	306342.512	306342.51				mg/L
	Cl	35	18612.640	-403.43				mg/L
	Kr	83	48.001	-12.67				mg/L
	Br	81	7885.110	-725.27				mg/L
	P	31	10895.967	-2499.94				mg/L
	S	34	193023.235	5042.26				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.646			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		95.645			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		100.885			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.192			
⌈	Na	23					

Sample ID: QC Std 7
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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Tuesday, February 22, 2011 12:57:08

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: ~~L1102057501~~ L1102027501

Sample Date/Time: Tuesday, February 22, 2011 13:01:42
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 27
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23176.906	0.01				ug/L
|	Be	9	6.000	0.00	-0.0334	0.022	64.880	ug/L
|	Al	27	177006.596	0.54	26.9721	5.215	19.335	ug/L
⌊>	Sc	45	321864.576	321864.58				ug/L
⌈	Ti	49	830.118	0.00	1.4018	0.065	4.654	ug/L
|	V	51	15206.893	0.03	1.4598	0.029	1.982	ug/L
|	Cr	52	16852.695	0.02	1.2533	0.063	5.003	ug/L
|	Cr	53	1556.944	0.00	1.5841	0.136	8.596	ug/L
|	Mn	55	32545.873	0.07	2.7607	0.057	2.057	ug/L
|	Co	59	1111.073	0.00	0.1106	0.002	1.920	ug/L
|	Ni	60	3362.599	0.01	1.7257	0.049	2.867	ug/L
|	Cu	65	724.033	0.00	0.2923	0.016	5.394	ug/L
|	Zn	66	13105.046	0.03	10.5624	0.033	0.311	ug/L
|>	Ge	72	440636.008	440636.01				ug/L
|	As	75	3586.809	0.01	3.8395	0.069	1.791	ug/L
|	Se	77	140.001	0.00	1.0213	0.390	38.143	ug/L
|	Se	82	1364.670	0.00	15.3226	0.545	3.556	ug/L
⌊	Rb	85	9111.909	0.02				mg/L
	Y	89	279614.098	-68168.08				ug/L
	Rh	103	106.335	96.00				ug/L
⌈	Mo	98	1062.638	0.00	0.4613	0.022	4.810	ug/L
|	Ag	107	79.001	0.00	0.0149	0.001	7.744	ug/L
|	Cd	114	1.883	-0.00	-0.0049	0.005	100.340	ug/L
|>	In	115	357690.996	357691.00				ug/L
|	Sn	118	1019.252	0.00	0.2524	0.005	1.934	ug/L
⌊	Sb	123	105.661	0.00	0.0241	0.005	19.804	ug/L
⌈	Ba	135	31074.862	0.06	18.4768	0.114	0.618	ug/L
|	Ce	140	1940.382	0.00				ug/L
⌊>	Tb	159	498277.055	498277.06				ug/L
⌈	Ho	165	43.338	0.00				ug/L
|	Tl	203	133.002	0.00	0.0179	0.001	3.029	ug/L
|	Tl	205	360.043	0.00	0.0310	0.003	10.507	ug/L
|	Pb	206	1033.064	0.00	0.1228	0.007	5.920	ug/L
|	Pb	207	928.719	0.00	0.1295	0.003	1.982	ug/L
|	Pb	208	4161.714	0.01	0.1218	0.002	1.601	ug/L
|	U	238	17673.117	0.04	0.5306	0.007	1.406	ug/L
⌊>	Bi	209	471718.833	471718.83				ug/L

Sample ID: ~~L1102057501~~ L1102027501
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Erin D. Long

Na	23	81827374.899	254.16	13.5028	0.205	1.520	mg/L	
Mg	24	21534922.123	66.91	5.6267	0.126	2.244	mg/L	
K	39	10627002.625	31.14	1.1134	0.019	1.715	mg/L	
Ca	43	613494.904	1.91	30.4905	0.653	2.141	mg/L	
Fe	54	153543.308	0.32	0.1583	0.002	1.444	mg/L	
Fe	57	62357.771	0.17	0.1992	0.020	10.103	mg/L	
Sc-1	45	321864.576	321864.58				mg/L	
Cl	35	474574.371	455558.30				mg/L	
Kr	83	51.001	-9.67				mg/L	
Br	81	821015.325	812404.95				mg/L	
P	31	40629.339	27233.44				mg/L	
S	34	750560.864	562579.89				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72		84.328			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
In	115		91.126			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
Tb	159		99.080			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
Bi	209		95.050			
Na	23					

Sample ID: ~~L1102057501~~ L1102027501
Report Date/Time: Tuesday, February 22, 2011 13:03:54

Approved: February 23, 2011

|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 23, 2011



Method 6020 - Summary Report

Sample ID: L1102027502

Sample Date/Time: Tuesday, February 22, 2011 13:08:28
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 28
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	24697.144	0.02				ug/L
|	Be	9	8.000	0.00	-0.0261	0.015	56.891	ug/L
|	Al	27	293649.063	0.91	45.2245	4.569	10.103	ug/L
⌊>	Sc	45	321436.853	321436.85				ug/L
⌈	Ti	49	1463.589	0.00	2.5496	0.419	16.417	ug/L
|	V	51	14956.847	0.03	1.4642	0.064	4.373	ug/L
|	Cr	52	16472.060	0.02	1.2451	0.095	7.634	ug/L
|	Cr	53	1783.671	0.00	1.8741	0.106	5.681	ug/L
|	Mn	55	42196.595	0.10	3.6611	0.048	1.298	ug/L
|	Co	59	1256.758	0.00	0.1289	0.005	4.030	ug/L
|	Ni	60	4107.552	0.01	2.1493	0.061	2.823	ug/L
|	Cu	65	876.047	0.00	0.3766	0.004	1.106	ug/L
|	Zn	66	14331.072	0.03	11.8383	0.153	1.292	ug/L
|>	Ge	72	432413.678	432413.68				ug/L
|	As	75	5655.444	0.01	6.0775	0.083	1.363	ug/L
|	Se	77	112.001	0.00	0.6508	0.101	15.461	ug/L
|	Se	82	2104.542	0.00	24.0709	0.389	1.616	ug/L
⌊	Rb	85	9249.368	0.02				mg/L
	Y	89	276802.238	-70979.94				ug/L
	Rh	103	104.002	93.67				ug/L
⌈	Mo	98	1037.041	0.00	0.4389	0.016	3.729	ug/L
|	Ag	107	86.335	0.00	0.0161	0.001	3.969	ug/L
|	Cd	114	3.068	-0.00	-0.0039	0.005	128.124	ug/L
|>	In	115	367316.228	367316.23				ug/L
|	Sn	118	1269.414	0.00	0.3096	0.002	0.596	ug/L
⌊	Sb	123	119.242	0.00	0.0270	0.002	8.707	ug/L
⌈	Ba	135	31862.677	0.06	18.4149	0.561	3.049	ug/L
|	Ce	140	2707.306	0.01				ug/L
⌊>	Tb	159	512772.941	512772.94				ug/L
⌈	Ho	165	53.339	0.00				ug/L
|	Tl	203	128.335	0.00	0.0164	0.000	2.221	ug/L
|	Tl	205	273.364	0.00	0.0250	0.002	7.651	ug/L
|	Pb	206	1641.151	0.00	0.2235	0.013	5.966	ug/L
|	Pb	207	1401.112	0.00	0.2119	0.020	9.493	ug/L
|	Pb	208	6600.266	0.01	0.2184	0.005	2.405	ug/L
|	U	238	17966.308	0.04	0.5179	0.010	1.931	ug/L
⌊>	Bi	209	491456.506	491456.51				ug/L

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⌈	Na	23	79935847.040	248.75	13.2152	0.386	2.922	mg/L
|	Mg	24	21335720.321	66.41	5.5846	0.163	2.915	mg/L
|	K	39	10632605.600	31.21	1.1160	0.032	2.883	mg/L
|	Ca	43	589514.771	1.83	29.3511	0.811	2.764	mg/L
|	Fe	54	160750.398	0.34	0.1696	0.007	4.326	mg/L
|	Fe	57	59898.471	0.16	0.1907	0.015	8.101	mg/L
⌊>	Sc-1	45	321436.853	321436.85				mg/L
	Cl	35	467724.520	448708.45				mg/L
	Kr	83	43.334	-17.33				mg/L
	Br	81	1197746.382	1189136.01				mg/L
	P	31	39346.070	25950.17				mg/L
	S	34	764868.023	576887.05				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		82.754			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		93.578			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		101.962			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.027			
⌈	Na	23					

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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102027502
Report Date/Time: Tuesday, February 22, 2011 13:10:40
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Method 6020 - Summary Report

Sample ID: L1102027503

Sample Date/Time: Tuesday, February 22, 2011 13:15:15
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 29
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20437.591	0.01				ug/L
|	Be	9	8.667	0.00	-0.0205	0.011	54.842	ug/L
|	Al	27	155262.880	0.53	26.2361	0.961	3.664	ug/L
⌊>	Sc	45	290288.303	290288.30				ug/L
⌈	Ti	49	580.075	0.00	1.0103	0.061	6.075	ug/L
|	V	51	30299.129	0.07	3.2975	0.059	1.777	ug/L
|	Cr	52	24790.949	0.04	2.4436	0.048	1.970	ug/L
|	Cr	53	2413.866	0.01	2.6514	0.079	2.995	ug/L
|	Mn	55	9708.474	0.02	0.8299	0.008	0.952	ug/L
|	Co	59	337.676	0.00	0.0290	0.003	11.737	ug/L
|	Ni	60	1313.433	0.00	0.6994	0.003	0.448	ug/L
|	Cu	65	704.032	0.00	0.2976	0.021	7.211	ug/L
|	Zn	66	5816.083	0.01	4.5757	0.123	2.683	ug/L
|>	Ge	72	422461.885	422461.88				ug/L
|	As	75	641.589	0.00	0.8404	0.058	6.872	ug/L
|	Se	77	82.000	0.00	0.2379	0.166	69.575	ug/L
|	Se	82	95.045	0.00	1.1285	0.147	13.055	ug/L
⌊	Rb	85	3682.715	0.01				mg/L
	Y	89	265241.327	-82540.86				ug/L
	Rh	103	41.000	30.67				ug/L
⌈	Mo	98	4703.135	0.01	2.0809	0.069	3.324	ug/L
|	Ag	107	150.669	0.00	0.0323	0.002	5.317	ug/L
|	Cd	114	6.751	0.00	-0.0000	0.005	14110.605	ug/L
|>	In	115	345706.280	345706.28				ug/L
|	Sn	118	349.206	0.00	0.0787	0.003	3.228	ug/L
⌊	Sb	123	135.077	0.00	0.0335	0.004	11.566	ug/L
⌈	Ba	135	13336.361	0.03	8.1530	0.313	3.838	ug/L
|	Ce	140	1153.515	0.00				ug/L
⌊>	Tb	159	485147.573	485147.57				ug/L
⌈	Ho	165	40.004	0.00				ug/L
|	Tl	203	30.334	0.00	0.0025	0.000	12.098	ug/L
|	Tl	205	60.006	0.00	0.0127	0.001	8.075	ug/L
|	Pb	206	1391.777	0.00	0.1940	0.010	5.104	ug/L
|	Pb	207	1216.086	0.00	0.1904	0.002	1.159	ug/L
|	Pb	208	5648.023	0.01	0.1923	0.001	0.776	ug/L
|	U	238	11793.739	0.03	0.3599	0.010	2.667	ug/L
⌊>	Bi	209	463403.366	463403.37				ug/L

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⌈	Na	23	58238909.832	200.61	10.6568	0.274	2.568	mg/L
|	Mg	24	5284011.731	18.21	1.5281	0.028	1.838	mg/L
|	K	39	7286276.262	23.22	0.8292	0.010	1.149	mg/L
|	Ca	43	229311.020	0.79	12.6287	0.173	1.371	mg/L
|	Fe	54	103433.483	0.20	0.0997	0.008	7.675	mg/L
|	Fe	57	23092.272	0.05	0.0638	0.003	4.765	mg/L
⌊>	Sc-1	45	290288.303	290288.30				mg/L
	Cl	35	121459.389	102443.32				mg/L
	Kr	83	33.334	-27.33				mg/L
	Br	81	41929.143	33318.77				mg/L
	P	31	20729.633	7333.73				mg/L
	S	34	431805.720	243824.74				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		80.850			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		88.072			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.469			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		93.374			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102027504

Sample Date/Time: Tuesday, February 22, 2011 13:22:01
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 30
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23644.665	0.02				ug/L
|	Be	9	12.000	0.00	-0.0071	0.022	308.443	ug/L
|	Al	27	138301.728	0.46	23.1021	1.732	7.495	ug/L
⌊>	Sc	45	292998.673	292998.67				ug/L
⌈	Ti	49	653.427	0.00	1.1260	0.845	75.082	ug/L
|	V	51	30701.637	0.07	3.2896	0.070	2.141	ug/L
|	Cr	52	24462.467	0.04	2.3462	0.053	2.256	ug/L
|	Cr	53	2230.472	0.00	2.4019	0.192	7.986	ug/L
|	Mn	55	11088.258	0.03	0.9382	0.023	2.478	ug/L
|	Co	59	330.342	0.00	0.0276	0.001	2.547	ug/L
|	Ni	60	1453.787	0.00	0.7630	0.035	4.623	ug/L
|	Cu	65	1310.099	0.00	0.6026	0.015	2.551	ug/L
|	Zn	66	7702.052	0.02	6.1522	0.663	10.771	ug/L
|>	Ge	72	429190.690	429190.69				ug/L
|	As	75	584.812	0.00	0.7700	0.051	6.632	ug/L
|	Se	77	93.334	0.00	0.3886	0.149	38.323	ug/L
|	Se	82	77.967	0.00	0.9154	0.062	6.786	ug/L
⌊	Rb	85	3677.046	0.01				mg/L
	Y	89	269811.631	-77970.55				ug/L
	Rh	103	45.334	35.00				ug/L
⌈	Mo	98	4544.951	0.01	1.9497	0.021	1.073	ug/L
|	Ag	107	160.670	0.00	0.0335	0.002	7.424	ug/L
|	Cd	114	3.744	-0.00	-0.0032	0.003	98.184	ug/L
|>	In	115	356576.339	356576.34				ug/L
|	Sn	118	363.473	0.00	0.0796	0.002	2.836	ug/L
⌊	Sb	123	144.079	0.00	0.0348	0.001	2.474	ug/L
⌈	Ba	135	13729.222	0.03	8.2485	0.230	2.791	ug/L
|	Ce	140	1223.531	0.00				ug/L
⌊>	Tb	159	493876.648	493876.65				ug/L
⌈	Ho	165	20.002	0.00				ug/L
|	Tl	203	30.000	0.00	0.0024	0.001	21.719	ug/L
|	Tl	205	70.007	0.00	0.0133	0.000	0.470	ug/L
|	Pb	206	1409.780	0.00	0.1944	0.002	0.908	ug/L
|	Pb	207	1234.755	0.00	0.1916	0.015	7.857	ug/L
|	Pb	208	5699.366	0.01	0.1918	0.003	1.398	ug/L
|	U	238	12050.711	0.03	0.3638	0.004	1.140	ug/L
⌊>	Bi	209	468536.779	468536.78				ug/L

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⌈	Na	23	61034100.842	208.37	11.0696	0.518	4.681	mg/L
|	Mg	24	5589015.911	19.08	1.6016	0.025	1.550	mg/L
|	K	39	7351914.977	23.21	0.8286	0.040	4.803	mg/L
|	Ca	43	232485.990	0.79	12.6861	0.577	4.550	mg/L
|	Fe	54	102856.549	0.19	0.0970	0.003	3.359	mg/L
|	Fe	57	21244.834	0.05	0.0554	0.010	17.611	mg/L
⌊>	Sc-1	45	292998.673	292998.67				mg/L
	Cl	35	119995.683	100979.61				mg/L
	Kr	83	42.334	-18.33				mg/L
	Br	81	29856.505	21246.13				mg/L
	P	31	21996.846	8600.94				mg/L
	S	34	421959.973	233979.00				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		82.138			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		90.842			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.205			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		94.408			
⌈	Na	23					

Sample ID: L1102027504
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102027505

Sample Date/Time: Tuesday, February 22, 2011 13:28:49
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 31
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	24145.791	0.02				ug/L
|	Be	9	6.000	0.00	-0.0311	0.021	67.998	ug/L
|	Al	27	67645.484	0.22	10.7292	0.875	8.159	ug/L
⌊>	Sc	45	301076.152	301076.15				ug/L
⌈	Ti	49	340.040	0.00	0.5788	0.186	32.171	ug/L
|	V	51	19178.096	0.04	2.0134	0.048	2.398	ug/L
|	Cr	52	12017.671	0.01	0.6940	0.038	5.466	ug/L
|	Cr	53	1423.577	0.00	1.5164	0.058	3.828	ug/L
|	Mn	55	8416.626	0.02	0.7191	0.011	1.466	ug/L
|	Co	59	387.011	0.00	0.0349	0.002	5.781	ug/L
|	Ni	60	1729.834	0.00	0.9291	0.025	2.686	ug/L
|	Cu	65	808.708	0.00	0.3548	0.012	3.454	ug/L
|	Zn	66	9551.989	0.02	7.9501	0.180	2.259	ug/L
|>	Ge	72	419616.860	419616.86				ug/L
|	As	75	273.077	0.00	0.4471	0.007	1.617	ug/L
|	Se	77	130.001	0.00	0.9771	0.278	28.486	ug/L
|	Se	82	113.591	0.00	1.3562	0.160	11.796	ug/L
⌊	Rb	85	6486.836	0.02				mg/L
	Y	89	258438.227	-89343.96				ug/L
	Rh	103	55.334	45.00				ug/L
⌈	Mo	98	3083.082	0.01	1.3263	0.031	2.334	ug/L
|	Ag	107	34.000	-0.00	0.0048	0.001	20.908	ug/L
|	Cd	114	15.176	0.00	0.0080	0.012	145.533	ug/L
|>	In	115	356239.485	356239.48				ug/L
|	Sn	118	174.402	0.00	0.0296	0.003	11.112	ug/L
⌊	Sb	123	91.868	0.00	0.0204	0.003	14.153	ug/L
⌈	Ba	135	42872.490	0.09	26.5340	0.842	3.173	ug/L
|	Ce	140	506.730	0.00				ug/L
⌊>	Tb	159	479087.640	479087.64				ug/L
⌈	Ho	165	13.335	-0.00				ug/L
|	Tl	203	72.001	0.00	0.0092	0.001	7.915	ug/L
|	Tl	205	193.355	0.00	0.0213	0.002	9.678	ug/L
|	Pb	206	614.358	0.00	0.0505	0.002	4.483	ug/L
|	Pb	207	493.017	0.00	0.0482	0.002	3.544	ug/L
|	Pb	208	2346.131	0.00	0.0462	0.002	4.763	ug/L
|	U	238	9664.434	0.02	0.3032	0.012	4.070	ug/L
⌊>	Bi	209	450851.075	450851.07				ug/L

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⌈	Na	23	62760232.783	208.55	11.0791	0.240	2.165	mg/L
|	Mg	24	14587216.930	48.49	4.0767	0.131	3.202	mg/L
|	K	39	8230688.794	25.48	0.9103	0.024	2.677	mg/L
|	Ca	43	360741.780	1.20	19.1958	0.971	5.059	mg/L
|	Fe	54	93044.165	0.15	0.0769	0.009	12.317	mg/L
|	Fe	57	22985.479	0.05	0.0602	0.011	17.667	mg/L
⌊>	Sc-1	45	301076.152	301076.15				mg/L
	Cl	35	376036.666	357020.60				mg/L
	Kr	83	47.334	-13.33				mg/L
	Br	81	52476.770	43866.39				mg/L
	P	31	22995.202	9599.30				mg/L
	S	34	419242.306	231261.33				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		80.305			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		90.756			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		95.264			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		90.845			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102027505
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Method 6020 - Summary Report

Sample ID: L1102029801

Sample Date/Time: Tuesday, February 22, 2011 13:35:36
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 32
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	26568.819	0.03				ug/L
|	Be	9	12.000	0.00	-0.0102	0.015	145.764	ug/L
|	Al	27	115585.520	0.36	17.9866	1.645	9.148	ug/L
⌊>	Sc	45	311993.171	311993.17				ug/L
⌈	Ti	49	723.432	0.00	1.2354	0.110	8.893	ug/L
|	V	51	13807.954	0.03	1.3249	0.022	1.654	ug/L
|	Cr	52	15234.419	0.02	1.0674	0.020	1.876	ug/L
|	Cr	53	1726.989	0.00	1.8008	0.099	5.493	ug/L
|	Mn	55	16294.765	0.04	1.3808	0.003	0.212	ug/L
|	Co	59	1004.061	0.00	0.1006	0.003	3.039	ug/L
|	Ni	60	3563.005	0.01	1.8542	0.077	4.173	ug/L
|	Cu	65	689.697	0.00	0.2800	0.005	1.789	ug/L
|	Zn	66	9370.817	0.02	7.4982	0.101	1.351	ug/L
| >	Ge	72	434493.228	434493.23				ug/L
|	As	75	4475.135	0.01	4.8203	0.228	4.729	ug/L
|	Se	77	130.668	0.00	0.9165	0.237	25.905	ug/L
|	Se	82	1679.105	0.00	19.1194	0.677	3.541	ug/L
⌊	Rb	85	8445.983	0.02				mg/L
	Y	89	267210.798	-80571.38				ug/L
	Rh	103	94.335	84.00				ug/L
⌈	Mo	98	982.113	0.00	0.4144	0.002	0.481	ug/L
|	Ag	107	57.334	0.00	0.0097	0.002	21.291	ug/L
|	Cd	114	2.542	-0.00	-0.0044	0.011	242.081	ug/L
| >	In	115	368745.494	368745.49				ug/L
|	Sn	118	526.014	0.00	0.1180	0.002	1.532	ug/L
⌊	Sb	123	93.244	0.00	0.0200	0.003	13.846	ug/L
⌈	Ba	135	31774.059	0.06	17.9788	0.424	2.358	ug/L
|	Ce	140	1887.033	0.00				ug/L
⌊>	Tb	159	523776.647	523776.65				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	110.668	0.00	0.0141	0.002	11.471	ug/L
|	Tl	205	266.697	0.00	0.0249	0.003	10.331	ug/L
|	Pb	206	729.701	0.00	0.0634	0.011	17.071	ug/L
|	Pb	207	642.360	0.00	0.0702	0.006	8.084	ug/L
|	Pb	208	2914.196	0.00	0.0634	0.002	3.932	ug/L
|	U	238	17730.565	0.04	0.5196	0.010	2.021	ug/L
⌊>	Bi	209	483125.302	483125.30				ug/L

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⌈	Na	23	79260730.976	254.00	13.4939	0.073	0.540	mg/L
|	Mg	24	21305538.229	68.28	5.7418	0.175	3.051	mg/L
|	K	39	10101486.896	30.49	1.0901	0.024	2.188	mg/L
|	Ca	43	569279.386	1.82	29.1835	0.568	1.945	mg/L
|	Fe	54	148208.382	0.31	0.1573	0.002	1.368	mg/L
|	Fe	57	58441.654	0.16	0.1914	0.028	14.774	mg/L
⌊>	Sc-1	45	311993.171	311993.17				mg/L
	Cl	35	447612.642	428596.57				mg/L
	Kr	83	45.334	-15.33				mg/L
	Br	81	969572.679	960962.30				mg/L
	P	31	39317.062	25921.16				mg/L
	S	34	742378.540	554397.56				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		83.152			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		93.942			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		104.150			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.348			
⌈	Na	23					

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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: F BLANK

Sample Date/Time: Tuesday, February 22, 2011 13:42:24
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 33
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22542.215	0.02				ug/L
|	Be	9	8.000	0.00	-0.0214	0.029	137.517	ug/L
|	Al	27	3450.600	0.00	0.1082	0.046	42.220	ug/L
⌊>	Sc	45	274471.920	274471.92				ug/L
⌈	Ti	49	60.006	0.00	0.0668	0.031	45.902	ug/L
|	V	51	2252.460	0.00	0.0139	0.003	22.819	ug/L
|	Cr	52	7047.220	-0.00	-0.0198	0.012	60.545	ug/L
|	Cr	53	173.352	-0.00	0.0538	0.071	131.358	ug/L
|	Mn	55	628.359	0.00	0.0133	0.001	5.494	ug/L
|	Co	59	45.334	-0.00	-0.0039	0.001	25.694	ug/L
|	Ni	60	71.334	0.00	0.0315	0.006	17.657	ug/L
|	Cu	65	847.711	0.00	0.3648	0.023	6.284	ug/L
|	Zn	66	2258.278	0.00	1.3846	0.023	1.682	ug/L
|>	Ge	72	429691.486	429691.49				ug/L
|	As	75	-31.786	0.00	0.1184	0.061	51.918	ug/L
|	Se	77	56.667	0.00	-0.1566	0.038	24.222	ug/L
|	Se	82	29.647	0.00	0.3569	0.161	45.104	ug/L
⌊	Rb	85	32.000	0.00				mg/L
	Y	89	263710.713	-84071.47				ug/L
	Rh	103	11.667	1.33				ug/L
⌈	Mo	98	22.347	0.00	0.0187	0.002	8.852	ug/L
|	Ag	107	84.335	0.00	0.0166	0.002	13.810	ug/L
|	Cd	114	1.948	-0.00	-0.0048	0.000	4.660	ug/L
|>	In	115	349238.706	349238.71				ug/L
|	Sn	118	103.867	0.00	0.0114	0.002	14.031	ug/L
⌊	Sb	123	29.574	-0.00	0.0034	0.002	47.845	ug/L
⌈	Ba	135	31.667	0.00	0.0333	0.002	6.891	ug/L
|	Ce	140	10.001	-0.00				ug/L
⌊>	Tb	159	469931.334	469931.33				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	24.667	0.00	0.0016	0.000	30.174	ug/L
|	Tl	205	50.005	0.00	0.0121	0.000	0.398	ug/L
|	Pb	206	376.011	0.00	0.0027	0.002	83.669	ug/L
|	Pb	207	320.675	0.00	0.0112	0.007	62.131	ug/L
|	Pb	208	1502.393	0.00	0.0055	0.002	29.663	ug/L
|	U	238	15.333	-0.00	-0.0011	0.000	15.372	ug/L
⌊>	Bi	209	460646.666	460646.67				ug/L

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⌈	Na	23	55458.895	0.14	0.0041	0.001	14.495	mg/L
|	Mg	24	5575.453	0.02	-0.0024	0.000	3.117	mg/L
|	K	39	561840.430	0.17	0.0013	0.003	244.904	mg/L
|	Ca	43	366.710	0.00	0.0110	0.002	21.501	mg/L
|	Fe	54	28642.191	-0.06	-0.0229	0.001	5.714	mg/L
|	Fe	57	6305.955	-0.00	-0.0034	0.002	69.982	mg/L
⌊>	Sc-1	45	274471.920	274471.92				mg/L
	Cl	35	18776.958	-239.11				mg/L
	Kr	83	40.667	-20.00				mg/L
	Br	81	19251.897	10641.52				mg/L
	P	31	8760.517	-4635.39				mg/L
	S	34	208686.281	20705.30				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		82.233			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		88.972			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		93.443			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		92.819			
⌈	Na	23					

Sample ID: F BLANK
Report Date/Time: Tuesday, February 22, 2011 13:44:37

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: F BLANK
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 22, 2011 13:49:11
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21573.333	0.02				ug/L
|	Be	9	14220.128	0.05	59.1001	3.149	5.329	ug/L
|	Al	27	294373.028	1.04	52.0619	2.062	3.961	ug/L
⌊>	Sc	45	279930.751	279930.75				ug/L
⌈	Ti	49	60307.602	0.14	105.2385	4.330	4.115	ug/L
|	V	51	464441.183	1.05	52.1026	1.316	2.526	ug/L
|	Cr	52	398428.011	0.89	51.9946	0.894	1.720	ug/L
|	Cr	53	45675.389	0.10	50.8364	1.540	3.029	ug/L
|	Mn	55	607379.668	1.39	52.5509	1.620	3.083	ug/L
|	Co	59	479400.399	1.09	51.8416	1.412	2.724	ug/L
|	Ni	60	100948.989	0.23	52.2672	0.815	1.560	ug/L
|	Cu	65	103895.324	0.24	52.1042	0.753	1.445	ug/L
|	Zn	66	61734.948	0.14	52.2169	1.192	2.283	ug/L
|>	Ge	72	438302.500	438302.50				ug/L
|	As	75	47017.750	0.11	48.7456	0.339	0.695	ug/L
|	Se	77	3618.655	0.01	51.4146	0.575	1.117	ug/L
|	Se	82	4371.320	0.01	49.2925	1.224	2.484	ug/L
⌊	Rb	85	1819.850	0.00				mg/L
	Y	89	275233.526	-72548.66				ug/L
	Rh	103	22.667	12.33				ug/L
⌈	Mo	98	218434.513	0.62	94.8708	2.547	2.684	ug/L
|	Ag	107	216314.248	0.62	49.7813	1.308	2.628	ug/L
|	Cd	114	50482.515	0.14	49.1335	1.551	3.156	ug/L
|>	In	115	350634.658	350634.66				ug/L
|	Sn	118	186833.288	0.53	50.2840	0.869	1.727	ug/L
⌊	Sb	123	180243.953	0.51	50.5609	0.843	1.668	ug/L
⌈	Ba	135	75914.271	0.16	47.2255	1.311	2.777	ug/L
|	Ce	140	60.006	0.00				ug/L
⌊>	Tb	159	476101.108	476101.11				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	331086.136	0.70	50.1175	0.384	0.767	ug/L
|	Tl	205	807938.680	1.72	49.4430	0.470	0.950	ug/L
|	Pb	206	265945.283	0.56	49.3920	1.172	2.373	ug/L
|	Pb	207	253911.489	0.54	50.1147	0.331	0.660	ug/L
|	Pb	208	1127446.882	2.39	50.1147	0.943	1.882	ug/L
|	U	238	1726740.513	3.67	52.1633	1.141	2.188	ug/L
⌊>	Bi	209	470228.416	470228.42				ug/L

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⌈	Na	23	27977471.284	99.88	5.3043	0.016	0.310	mg/L
|	Mg	24	17929694.900	64.06	5.3867	0.150	2.780	mg/L
|	K	39	42017438.927	148.21	5.3176	0.036	0.682	mg/L
|	Ca	43	92458.230	0.33	5.2746	0.120	2.275	mg/L
|	Fe	54	2986121.379	10.51	5.1133	0.161	3.157	mg/L
|	Fe	57	1237937.301	4.40	5.2189	0.018	0.349	mg/L
⌊>	Sc-1	45	279930.751	279930.75				mg/L
	Cl	35	19560.445	544.38				mg/L
	Kr	83	42.001	-18.67				mg/L
	Br	81	11559.345	2948.97				mg/L
	P	31	10925.999	-2469.90				mg/L
	S	34	213727.393	25746.42				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	104.205				
|	Cr	52	103.989				
|	Cr	53					
|	Mn	55	105.102				
|	Co	59	103.683				
|	Ni	60	104.534				
|	Cu	65	104.208				
|	Zn	66	104.434				
|>	Ge	72		83.881			
|	As	75	97.491				
|	Se	77					
|	Se	82	98.585				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	99.563				
|	Cd	114	98.267				
|>	In	115		89.328			
|	Sn	118					
⌊	Sb	123	101.122				
⌈	Ba	135	94.451				
|	Ce	140					
⌊>	Tb	159		94.670			
⌈	Ho	165					
|	Tl	203	100.235				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	100.229				
|	U	238	104.327				
⌊>	Bi	209		94.749			
⌈	Na	23					

Sample ID: QC Std 6
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Tuesday, February 22, 2011 13:51:24

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 22, 2011 13:56:27
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19268.726	0.01				ug/L
|	Be	9	2.667	-0.00	-0.0443	0.005	10.314	ug/L
|	Al	27	3467.279	0.00	0.0872	0.134	153.666	ug/L
⌊>	Sc	45	287685.682	287685.68				ug/L
⌈	Ti	49	56.673	0.00	0.0567	0.064	112.139	ug/L
|	V	51	2204.363	-0.00	-0.0011	0.001	59.501	ug/L
|	Cr	52	7274.051	-0.00	-0.0258	0.007	28.963	ug/L
|	Cr	53	220.024	0.00	0.0974	0.049	50.133	ug/L
|	Mn	55	285.007	0.00	-0.0179	0.002	12.666	ug/L
|	Co	59	53.334	0.00	-0.0032	0.000	6.279	ug/L
|	Ni	60	39.667	-0.00	0.0140	0.002	16.718	ug/L
|	Cu	65	92.668	-0.00	-0.0236	0.001	5.631	ug/L
|	Zn	66	360.010	-0.00	-0.2832	0.005	1.638	ug/L
| >	Ge	72	446292.511	446292.51				ug/L
|	As	75	-125.974	0.00	0.0241	0.049	203.840	ug/L
|	Se	77	52.667	-0.00	-0.2452	0.104	42.372	ug/L
|	Se	82	3.878	0.00	0.0589	0.111	189.224	ug/L
⌊	Rb	85	18.334	-0.00				mg/L
	Y	89	279815.719	-67966.46				ug/L
	Rh	103	11.667	1.33				ug/L
⌈	Mo	98	111.202	0.00	0.0570	0.006	10.253	ug/L
|	Ag	107	28.334	-0.00	0.0036	0.002	43.450	ug/L
|	Cd	114	0.498	-0.00	-0.0063	0.003	47.565	ug/L
| >	In	115	352071.629	352071.63				ug/L
|	Sn	118	236.669	0.00	0.0469	0.007	15.739	ug/L
⌊	Sb	123	30.156	-0.00	0.0035	0.001	29.546	ug/L
⌈	Ba	135	15.334	-0.00	0.0227	0.005	21.780	ug/L
|	Ce	140	16.668	-0.00				ug/L
⌊>	Tb	159	482685.045	482685.04				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	23.000	0.00	0.0013	0.000	16.469	ug/L
|	Tl	205	50.005	0.00	0.0120	0.002	14.573	ug/L
|	Pb	206	400.679	0.00	0.0048	0.001	19.768	ug/L
|	Pb	207	328.342	0.00	0.0106	0.002	21.144	ug/L
|	Pb	208	1556.063	0.00	0.0055	0.001	19.747	ug/L
|	U	238	80.334	0.00	0.0008	0.000	21.639	ug/L
⌊>	Bi	209	476698.041	476698.04				ug/L

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⌈	Na	23	19714.733	0.00	-0.0030	0.000	9.651	mg/L
|	Mg	24	496.729	0.00	-0.0039	0.000	0.278	mg/L
|	K	39	545472.138	0.02	-0.0041	0.003	70.789	mg/L
|	Ca	43	156.684	-0.00	-0.0015	0.003	193.092	mg/L
|	Fe	54	41532.459	-0.02	-0.0034	0.003	80.599	mg/L
|	Fe	57	5935.694	-0.01	-0.0061	0.003	42.452	mg/L
⌊>	Sc-1	45	287685.682	287685.68				mg/L
	Cl	35	17734.387	-1281.68				mg/L
	Kr	83	52.334	-8.33				mg/L
	Br	81	9132.171	521.80				mg/L
	P	31	10799.165	-2596.74				mg/L
	S	34	199279.803	11298.83				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		85.410			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		89.694			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		95.979			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		96.053			
⌈	Na	23					

Sample ID: QC Std 7
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Tuesday, February 22, 2011 13:58:38

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: PBW 23 WG356896-04

Sample Date/Time: Tuesday, February 22, 2011 14:29:15
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 34
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	24413.294	0.02				ug/L
|	Be	9	5.333	0.00	-0.0348	0.004	12.194	ug/L
|	Al	27	26435.063	0.08	3.7919	0.307	8.101	ug/L
⌊>	Sc	45	306356.290	306356.29				ug/L
⌈	Ti	49	330.044	0.00	0.5180	0.668	128.920	ug/L
|	V	51	2426.399	0.00	0.0237	0.002	8.094	ug/L
|	Cr	52	9083.548	0.00	0.2117	0.032	15.198	ug/L
|	Cr	53	350.041	0.00	0.2398	0.046	19.037	ug/L
|	Mn	55	2679.386	0.01	0.1858	0.001	0.656	ug/L
|	Co	59	75.668	0.00	-0.0008	0.001	126.642	ug/L
|	Ni	60	143.002	0.00	0.0668	0.010	14.405	ug/L
|	Cu	65	251.672	0.00	0.0549	0.001	2.638	ug/L
|	Zn	66	2032.894	0.00	1.1227	0.029	2.595	ug/L
|>	Ge	72	445989.067	445989.07				ug/L
|	As	75	-142.193	0.00	0.0073	0.038	519.566	ug/L
|	Se	77	59.334	0.00	-0.1502	0.206	137.180	ug/L
|	Se	82	5.281	0.00	0.0746	0.045	60.437	ug/L
⌊	Rb	85	58.667	0.00				mg/L
	Y	89	290907.378	-56874.80				ug/L
	Rh	103	5.333	-5.00				ug/L
⌈	Mo	98	32.311	0.00	0.0223	0.001	3.368	ug/L
|	Ag	107	18.334	-0.00	0.0011	0.001	78.608	ug/L
|	Cd	114	-1.870	-0.00	-0.0084	0.003	37.214	ug/L
|>	In	115	367892.619	367892.62				ug/L
|	Sn	118	149.601	0.00	0.0217	0.001	6.679	ug/L
⌊	Sb	123	32.240	-0.00	0.0037	0.001	37.412	ug/L
⌈	Ba	135	90.335	0.00	0.0671	0.007	10.626	ug/L
|	Ce	140	316.703	0.00				ug/L
⌊>	Tb	159	497939.083	497939.08				ug/L
⌈	Ho	165	16.668	-0.00				ug/L
|	Tl	203	19.000	0.00	0.0006	0.001	181.820	ug/L
|	Tl	205	13.335	-0.00	0.0098	0.000	3.869	ug/L
|	Pb	206	662.362	0.00	0.0478	0.008	17.763	ug/L
|	Pb	207	586.023	0.00	0.0561	0.007	11.907	ug/L
|	Pb	208	2662.499	0.00	0.0492	0.005	10.422	ug/L
|	U	238	27.000	0.00	-0.0008	0.000	11.734	ug/L
⌊>	Bi	209	498122.519	498122.52				ug/L

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⌈	Na	23	83223.216	0.21	0.0078	0.000	4.790	mg/L
|	Mg	24	19347.306	0.06	0.0012	0.000	6.078	mg/L
|	K	39	584619.015	0.03	-0.0038	0.002	50.244	mg/L
|	Ca	43	703.429	0.00	0.0264	0.005	17.935	mg/L
|	Fe	54	94251.123	0.15	0.0759	0.002	3.206	mg/L
|	Fe	57	7433.509	-0.00	-0.0019	0.002	88.301	mg/L
⌊>	Sc-1	45	306356.290	306356.29				mg/L
	Cl	35	70689.645	51673.57				mg/L
	Kr	83	44.334	-16.33				mg/L
	Br	81	8180.013	-430.36				mg/L
	P	31	21028.800	7632.90				mg/L
	S	34	208074.015	20093.04				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
\>	Ge	72		85.352			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
\>	In	115		93.725			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.012			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.370			
⌈	Na	23					

Sample ID: PBW 23 WG356896-04
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 23 WG356896-04
Report Date/Time: Tuesday, February 22, 2011 14:31:29

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: LCSW 23 WG356896-05

Sample Date/Time: Tuesday, February 22, 2011 14:36:02
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 35
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20888.501	0.01				ug/L
|	Be	9	7125.873	0.02	27.0767	0.923	3.410	ug/L
|	Al	27	195291.281	0.63	31.3937	1.454	4.632	ug/L
⌊>	Sc	45	305925.898	305925.90				ug/L
⌈	Ti	49	220.025	0.00	0.3385	0.086	25.513	ug/L
|	V	51	248408.692	0.55	27.3402	0.465	1.701	ug/L
|	Cr	52	220773.677	0.48	27.9410	0.380	1.361	ug/L
|	Cr	53	25127.387	0.06	27.4917	0.710	2.584	ug/L
|	Mn	55	327522.846	0.74	27.8955	0.403	1.446	ug/L
|	Co	59	257548.638	0.58	27.4329	0.179	0.651	ug/L
|	Ni	60	54651.490	0.12	27.8752	0.412	1.479	ug/L
|	Cu	65	55952.671	0.13	27.6149	0.476	1.723	ug/L
|	Zn	66	33498.691	0.07	27.6418	0.515	1.864	ug/L
|>	Ge	72	444846.790	444846.79				ug/L
|	As	75	23380.249	0.05	23.9587	0.239	0.999	ug/L
|	Se	77	1698.144	0.00	23.2372	0.638	2.744	ug/L
|	Se	82	2023.490	0.00	22.4910	0.770	3.423	ug/L
⌊	Rb	85	112.002	0.00				mg/L
	Y	89	284577.419	-63204.76				ug/L
	Rh	103	21.334	11.00				ug/L
⌈	Mo	98	42.945	0.00	0.0270	0.005	17.591	ug/L
|	Ag	107	109172.449	0.30	24.2753	0.589	2.425	ug/L
|	Cd	114	25923.762	0.07	24.3800	0.781	3.203	ug/L
|>	In	115	362976.087	362976.09				ug/L
|	Sn	118	1137.531	0.00	0.2793	0.009	3.045	ug/L
⌊	Sb	123	91940.051	0.25	24.9204	0.696	2.794	ug/L
⌈	Ba	135	41812.656	0.08	24.5589	0.327	1.332	ug/L
|	Ce	140	403.382	0.00				ug/L
⌊>	Tb	159	504383.350	504383.35				ug/L
⌈	Ho	165	6.667	-0.00				ug/L
|	Tl	203	186327.893	0.38	26.9196	0.503	1.870	ug/L
|	Tl	205	456907.579	0.93	26.6953	0.801	3.002	ug/L
|	Pb	206	158608.138	0.32	28.0888	0.646	2.298	ug/L
|	Pb	207	136540.334	0.28	25.7041	0.829	3.225	ug/L
|	Pb	208	634790.259	1.29	26.9018	0.360	1.339	ug/L
|	U	238	944578.784	1.92	27.2363	0.610	2.239	ug/L
⌊>	Bi	209	492674.845	492674.85				ug/L

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⌈	Na	23	101341.057	0.27	0.0109	0.000	3.262	mg/L
|	Mg	24	49872.433	0.16	0.0097	0.000	3.144	mg/L
|	K	39	638247.527	0.21	0.0026	0.000	11.731	mg/L
|	Ca	43	800.112	0.00	0.0315	0.003	10.754	mg/L
|	Fe	54	97831.131	0.16	0.0818	0.006	7.740	mg/L
|	Fe	57	10569.977	0.01	0.0103	0.001	10.859	mg/L
⌊>	Sc-1	45	305925.898	305925.90				mg/L
	Cl	35	261965.813	242949.74				mg/L
	Kr	83	47.334	-13.33				mg/L
	Br	81	8590.357	-20.02				mg/L
	P	31	23837.358	10441.46				mg/L
	S	34	236513.255	48532.28				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		85.134			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		92.472			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		100.294			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.272			
⌈	Na	23					

Sample ID: LCSW 23 WG356896-05
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 23 WG356896-05
Report Date/Time: Tuesday, February 22, 2011 14:38:13
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Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102040202

Sample Date/Time: Tuesday, February 22, 2011 14:42:47
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 36
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20888.654	0.01				ug/L
|	Be	9	8.667	0.00	-0.0200	0.012	62.452	ug/L
|	Al	27	269621.962	0.93	46.3405	6.007	12.963	ug/L
⌊>	Sc	45	287782.283	287782.28				ug/L
⌈	Ti	49	613.417	0.00	1.0205	0.549	53.790	ug/L
|	V	51	3284.280	0.00	0.1209	0.008	6.450	ug/L
|	Cr	52	10165.599	0.01	0.3610	0.021	5.856	ug/L
|	Cr	53	453.389	0.00	0.3570	0.069	19.201	ug/L
|	Mn	55	67610.148	0.15	5.7455	0.057	0.992	ug/L
|	Co	59	771.037	0.00	0.0736	0.002	2.302	ug/L
|	Ni	60	715.033	0.00	0.3599	0.022	6.188	ug/L
|	Cu	65	454.682	0.00	0.1564	0.005	3.210	ug/L
|	Zn	66	4207.594	0.01	2.9725	0.033	1.124	ug/L
|>	Ge	72	443273.191	443273.19				ug/L
|	As	75	-91.706	0.00	0.0582	0.045	77.370	ug/L
|	Se	77	54.667	-0.00	-0.2120	0.105	49.547	ug/L
|	Se	82	7.296	0.00	0.0976	0.072	73.625	ug/L
⌊	Rb	85	2046.230	0.00				mg/L
	Y	89	279400.352	-68381.83				ug/L
	Rh	103	13.000	2.67				ug/L
⌈	Mo	98	42.461	0.00	0.0269	0.002	6.206	ug/L
|	Ag	107	24.667	-0.00	0.0026	0.001	48.991	ug/L
|	Cd	114	4.187	-0.00	-0.0027	0.004	130.366	ug/L
|>	In	115	359683.251	359683.25				ug/L
|	Sn	118	125.867	0.00	0.0164	0.000	2.851	ug/L
⌊	Sb	123	72.577	0.00	0.0150	0.001	8.153	ug/L
⌈	Ba	135	6214.993	0.01	3.7958	0.030	0.784	ug/L
|	Ce	140	5982.388	0.01				ug/L
⌊>	Tb	159	486503.026	486503.03				ug/L
⌈	Ho	165	53.339	0.00				ug/L
|	Tl	203	58.001	0.00	0.0066	0.003	40.638	ug/L
|	Tl	205	123.346	0.00	0.0165	0.003	16.053	ug/L
|	Pb	206	843.711	0.00	0.0869	0.005	6.292	ug/L
|	Pb	207	740.702	0.00	0.0917	0.001	1.187	ug/L
|	Pb	208	3392.261	0.00	0.0869	0.002	2.378	ug/L
|	U	238	272.340	0.00	0.0066	0.000	4.194	ug/L
⌊>	Bi	209	474194.487	474194.49				ug/L

Sample ID: L1102040202
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⌈	Na	23	4060798.693	14.05	0.7432	0.024	3.250	mg/L
|	Mg	24	1298127.807	4.51	0.3756	0.013	3.575	mg/L
|	K	39	1923769.221	4.80	0.1677	0.002	1.104	mg/L
|	Ca	43	13280.142	0.05	0.7282	0.019	2.593	mg/L
|	Fe	54	132148.250	0.30	0.1496	0.010	6.586	mg/L
|	Fe	57	23259.361	0.05	0.0652	0.003	5.226	mg/L
⌊>	Sc-1	45	287782.283	287782.28				mg/L
	Cl	35	40857.976	21841.91				mg/L
	Kr	83	42.667	-18.00				mg/L
	Br	81	9152.187	541.81				mg/L
	P	31	22240.769	8844.87				mg/L
	S	34	216767.000	28786.02				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		84.833			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		91.633			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.738			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		95.548			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102040202
Report Date/Time: Tuesday, February 22, 2011 14:44:58
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Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102040207 WG356896-01

Sample Date/Time: Tuesday, February 22, 2011 14:49:32
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 37
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22441.872	0.02				ug/L
|	Be	9	9.333	0.00	-0.0178	0.020	114.069	ug/L
|	Al	27	214459.249	0.73	36.2411	0.997	2.750	ug/L
⌊>	Sc	45	291693.187	291693.19				ug/L
⌈	Ti	49	503.396	0.00	0.8442	0.101	12.017	ug/L
|	V	51	3043.027	0.00	0.0999	0.014	14.147	ug/L
|	Cr	52	10344.118	0.01	0.4078	0.021	5.095	ug/L
|	Cr	53	483.394	0.00	0.3987	0.080	20.125	ug/L
|	Mn	55	54852.930	0.13	4.7348	0.074	1.557	ug/L
|	Co	59	631.360	0.00	0.0598	0.002	2.745	ug/L
|	Ni	60	653.695	0.00	0.3344	0.022	6.537	ug/L
|	Cu	65	381.011	0.00	0.1232	0.029	23.286	ug/L
|	Zn	66	2926.791	0.01	1.9323	0.079	4.064	ug/L
|>	Ge	72	435708.330	435708.33				ug/L
|	As	75	-127.782	0.00	0.0194	0.023	120.727	ug/L
|	Se	77	60.667	0.00	-0.1098	0.228	207.694	ug/L
|	Se	82	2.246	0.00	0.0422	0.092	216.959	ug/L
⌊	Rb	85	1845.189	0.00				mg/L
	Y	89	277299.800	-70482.38				ug/L
	Rh	103	9.000	-1.33				ug/L
⌈	Mo	98	50.238	0.00	0.0305	0.006	18.845	ug/L
|	Ag	107	31.334	-0.00	0.0042	0.000	5.728	ug/L
|	Cd	114	8.483	0.00	0.0014	0.002	118.694	ug/L
|>	In	115	355784.823	355784.82				ug/L
|	Sn	118	130.534	0.00	0.0180	0.004	20.307	ug/L
⌊	Sb	123	440.254	0.00	0.1168	0.006	4.868	ug/L
⌈	Ba	135	5639.313	0.01	3.4503	0.025	0.732	ug/L
|	Ce	140	4087.913	0.01				ug/L
⌊>	Tb	159	485804.858	485804.86				ug/L
⌈	Ho	165	50.005	0.00				ug/L
|	Tl	203	38.667	0.00	0.0037	0.000	8.315	ug/L
|	Tl	205	63.340	0.00	0.0129	0.002	18.225	ug/L
|	Pb	206	640.694	0.00	0.0497	0.006	11.639	ug/L
|	Pb	207	573.356	0.00	0.0592	0.002	3.166	ug/L
|	Pb	208	2643.832	0.00	0.0542	0.003	5.261	ug/L
|	U	238	247.339	0.00	0.0059	0.001	21.087	ug/L
⌊>	Bi	209	472951.133	472951.13				ug/L

Sample ID: L1102040207 WG356896-01
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⌈	Na	23	4404277.147	15.03	0.7957	0.020	2.508	mg/L
|	Mg	24	1538214.080	5.27	0.4398	0.022	4.926	mg/L
|	K	39	1929805.276	4.74	0.1652	0.005	2.739	mg/L
|	Ca	43	14381.778	0.05	0.7787	0.028	3.558	mg/L
|	Fe	54	118297.313	0.24	0.1235	0.012	9.414	mg/L
|	Fe	57	20643.365	0.04	0.0533	0.003	6.249	mg/L
⌊>	Sc-1	45	291693.187	291693.19				mg/L
	Cl	35	31737.635	12721.56				mg/L
	Kr	83	48.334	-12.33				mg/L
	Br	81	8821.223	210.85				mg/L
	P	31	20814.360	7418.46				mg/L
	S	34	204885.001	16904.02				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
| >	Ge	72		83.385			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
| >	In	115		90.640			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.600			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		95.298			
⌈	Na	23					

Sample ID: L1102040207 WG356896-01
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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102040208S WG356896-06

Sample Date/Time: Tuesday, February 22, 2011 14:56:18
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 38
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	24346.311	0.02				ug/L
|	Be	9	7251.964	0.02	28.3344	1.206	4.258	ug/L
|	Al	27	559587.097	1.87	93.6163	18.150	19.388	ug/L
⌊>	Sc	45	297614.604	297614.60				ug/L
⌈	Ti	49	740.103	0.00	1.2618	0.347	27.492	ug/L
|	V	51	244427.881	0.56	27.5288	0.511	1.857	ug/L
|	Cr	52	213414.970	0.47	27.6270	0.364	1.318	ug/L
|	Cr	53	24388.857	0.06	27.3013	1.322	4.842	ug/L
|	Mn	55	378156.124	0.87	32.9655	0.680	2.062	ug/L
|	Co	59	255233.251	0.59	27.8186	0.393	1.414	ug/L
|	Ni	60	54209.822	0.12	28.2950	0.956	3.378	ug/L
|	Cu	65	56455.852	0.13	28.5138	0.718	2.518	ug/L
|	Zn	66	33183.979	0.08	28.0263	0.619	2.209	ug/L
|>	Ge	72	434744.547	434744.55				ug/L
|	As	75	23048.855	0.05	24.1681	0.145	0.601	ug/L
|	Se	77	1616.797	0.00	22.6107	0.392	1.734	ug/L
|	Se	82	1964.836	0.00	22.3499	0.129	0.577	ug/L
⌊	Rb	85	2029.560	0.00				mg/L
	Y	89	278622.477	-69159.71				ug/L
	Rh	103	17.667	7.33				ug/L
⌈	Mo	98	52.799	0.00	0.0315	0.003	11.073	ug/L
|	Ag	107	106867.864	0.30	24.1845	0.746	3.085	ug/L
|	Cd	114	26512.583	0.07	25.3772	0.830	3.269	ug/L
|>	In	115	356587.829	356587.83				ug/L
|	Sn	118	170.535	0.00	0.0285	0.002	6.461	ug/L
⌊	Sb	123	90021.874	0.25	24.8277	0.296	1.191	ug/L
⌈	Ba	135	45136.420	0.09	26.9429	0.179	0.665	ug/L
|	Ce	140	4294.686	0.01				ug/L
⌊>	Tb	159	496259.242	496259.24				ug/L
⌈	Ho	165	43.338	0.00				ug/L
|	Tl	203	176746.110	0.37	26.3871	0.500	1.896	ug/L
|	Tl	205	432136.865	0.91	26.0860	0.439	1.682	ug/L
|	Pb	206	149419.124	0.31	27.3377	0.523	1.912	ug/L
|	Pb	207	135736.768	0.28	26.3960	0.907	3.434	ug/L
|	Pb	208	624155.526	1.31	27.3308	0.518	1.895	ug/L
|	U	238	960486.788	2.01	28.6116	0.866	3.026	ug/L
⌊>	Bi	209	476773.343	476773.34				ug/L

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⌈	Na	23	4740566.517	15.87	0.8401	0.032	3.817	mg/L
|	Mg	24	1420232.280	4.77	0.3977	0.015	3.768	mg/L
|	K	39	1965940.403	4.73	0.1649	0.006	3.800	mg/L
|	Ca	43	12539.113	0.04	0.6639	0.012	1.757	mg/L
|	Fe	54	128843.056	0.27	0.1368	0.002	1.252	mg/L
|	Fe	57	23329.569	0.05	0.0623	0.004	6.785	mg/L
⌊>	Sc-1	45	297614.604	297614.60				mg/L
	Cl	35	71451.714	52435.64				mg/L
	Kr	83	44.334	-16.33				mg/L
	Br	81	10836.540	2226.16				mg/L
	P	31	21945.762	8549.86				mg/L
	S	34	195583.855	7602.88				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		83.200			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		90.845			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.678			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		96.068			
⌈	Na	23					

Sample ID: L1102040208S WG356896-06
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102040208S WG356896-06
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Method 6020 - Summary Report

Sample ID: L1102040209SD WG356896-07

Sample Date/Time: Tuesday, February 22, 2011 15:03:04
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 39
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22926.268	0.02				ug/L
|	Be	9	7562.863	0.02	28.9059	1.570	5.432	ug/L
|	Al	27	382359.504	1.25	62.3159	4.169	6.691	ug/L
⌊>	Sc	45	304278.282	304278.28				ug/L
⌈	Ti	49	370.044	0.00	0.6004	0.020	3.376	ug/L
|	V	51	247121.506	0.55	27.3569	0.895	3.271	ug/L
|	Cr	52	221543.200	0.48	28.2161	0.825	2.924	ug/L
|	Cr	53	25792.469	0.06	28.3883	0.225	0.791	ug/L
|	Mn	55	390074.233	0.88	33.4270	0.299	0.894	ug/L
|	Co	59	265450.750	0.60	28.4411	0.158	0.555	ug/L
|	Ni	60	56133.749	0.13	28.7974	0.694	2.411	ug/L
|	Cu	65	57882.361	0.13	28.7324	0.485	1.687	ug/L
|	Zn	66	34125.806	0.08	28.3381	0.070	0.246	ug/L
| >	Ge	72	442252.448	442252.45				ug/L
|	As	75	23497.630	0.05	24.2195	0.164	0.679	ug/L
|	Se	77	1685.475	0.00	23.2004	0.985	4.245	ug/L
|	Se	82	2007.190	0.00	22.4454	0.416	1.854	ug/L
⌊	Rb	85	1895.199	0.00				mg/L
	Y	89	280310.428	-67471.76				ug/L
	Rh	103	17.667	7.33				ug/L
⌈	Mo	98	56.571	0.00	0.0321	0.001	4.379	ug/L
|	Ag	107	108311.386	0.29	23.5330	0.728	3.092	ug/L
|	Cd	114	27134.759	0.07	24.9329	0.671	2.690	ug/L
| >	In	115	371369.295	371369.29				ug/L
|	Sn	118	204.935	0.00	0.0355	0.003	8.368	ug/L
⌊	Sb	123	93996.653	0.25	24.8911	0.241	0.967	ug/L
⌈	Ba	135	46892.830	0.09	27.0144	0.316	1.171	ug/L
|	Ce	140	4354.724	0.01				ug/L
⌊>	Tb	159	514228.242	514228.24				ug/L
⌈	Ho	165	40.004	0.00				ug/L
|	Tl	203	186129.019	0.37	26.3924	0.756	2.865	ug/L
|	Tl	205	466342.988	0.93	26.7387	1.047	3.917	ug/L
|	Pb	206	158670.206	0.32	27.5693	0.448	1.626	ug/L
|	Pb	207	136959.276	0.27	25.2932	0.614	2.429	ug/L
|	Pb	208	642960.891	1.28	26.7375	0.611	2.285	ug/L
|	U	238	992303.315	1.98	28.0652	0.739	2.634	ug/L
⌊>	Bi	209	502115.226	502115.23				ug/L

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⌈	Na	23	4484226.338	14.68	0.7767	0.030	3.922	mg/L
|	Mg	24	1391676.051	4.57	0.3810	0.012	3.254	mg/L
|	K	39	1894698.714	4.35	0.1513	0.002	1.432	mg/L
|	Ca	43	12422.298	0.04	0.6428	0.024	3.667	mg/L
|	Fe	54	128052.821	0.26	0.1311	0.009	6.866	mg/L
|	Fe	57	21712.385	0.04	0.0540	0.003	5.238	mg/L
⌊>	Sc-1	45	304278.282	304278.28				mg/L
	Cl	35	156659.522	137643.45				mg/L
	Kr	83	43.001	-17.67				mg/L
	Br	81	11892.402	3282.03				mg/L
	P	31	22258.765	8862.86				mg/L
	S	34	216552.795	28571.82				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		84.637			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		94.610			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.251			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		101.174			
⌈	Na	23					

Sample ID: L1102040209SD WG356896-07
Report Date/Time: Tuesday, February 22, 2011 15:05:16
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102040209SD WG356896-07
Report Date/Time: Tuesday, February 22, 2011 15:05:16
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Method 6020 - Summary Report

Sample ID: L1102040214

Sample Date/Time: Tuesday, February 22, 2011 15:09:50
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 40
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21088.967	0.01				ug/L
|	Be	9	11.333	0.00	-0.0096	0.011	116.416	ug/L
|	Al	27	183712.805	0.62	30.9103	1.420	4.593	ug/L
⌊>	Sc	45	291903.198	291903.20				ug/L
⌈	Ti	49	306.702	0.00	0.4895	0.004	0.830	ug/L
|	V	51	2990.974	0.00	0.0882	0.009	10.455	ug/L
|	Cr	52	9948.379	0.01	0.3324	0.005	1.480	ug/L
|	Cr	53	483.393	0.00	0.3897	0.028	7.229	ug/L
|	Mn	55	90856.869	0.20	7.7358	0.048	0.618	ug/L
|	Co	59	588.023	0.00	0.0540	0.003	6.151	ug/L
|	Ni	60	515.685	0.00	0.2580	0.006	2.294	ug/L
|	Cu	65	449.015	0.00	0.1537	0.003	2.082	ug/L
|	Zn	66	2394.977	0.00	1.4403	0.052	3.578	ug/L
| >	Ge	72	443214.470	443214.47				ug/L
|	As	75	-98.996	0.00	0.0513	0.029	55.900	ug/L
|	Se	77	54.000	-0.00	-0.2215	0.152	68.746	ug/L
|	Se	82	11.626	0.00	0.1470	0.098	66.385	ug/L
⌊	Rb	85	1612.479	0.00				mg/L
	Y	89	274490.016	-73292.17				ug/L
	Rh	103	13.667	3.33				ug/L
⌈	Mo	98	36.685	0.00	0.0240	0.001	3.620	ug/L
|	Ag	107	23.667	-0.00	0.0023	0.000	12.712	ug/L
|	Cd	114	4.940	0.00	-0.0022	0.001	49.961	ug/L
| >	In	115	369986.417	369986.42				ug/L
|	Sn	118	146.801	0.00	0.0208	0.002	11.057	ug/L
⌊	Sb	123	122.200	0.00	0.0276	0.002	7.682	ug/L
⌈	Ba	135	6095.586	0.01	3.6522	0.076	2.079	ug/L
|	Ce	140	3174.154	0.01				ug/L
⌊>	Tb	159	495910.379	495910.38				ug/L
⌈	Ho	165	63.340	0.00				ug/L
|	Tl	203	29.000	0.00	0.0021	0.001	50.833	ug/L
|	Tl	205	40.004	0.00	0.0113	0.001	5.195	ug/L
|	Pb	206	622.026	0.00	0.0423	0.002	5.577	ug/L
|	Pb	207	526.686	0.00	0.0465	0.002	5.204	ug/L
|	Pb	208	2536.155	0.00	0.0455	0.002	4.679	ug/L
|	U	238	158.336	0.00	0.0030	0.001	26.686	ug/L
⌊>	Bi	209	490076.939	490076.94				ug/L

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⌈	Na	23	5464690.519	18.69	0.9900	0.074	7.511	mg/L
|	Mg	24	1577660.949	5.41	0.4513	0.021	4.620	mg/L
|	K	39	2113458.339	5.37	0.1879	0.011	5.761	mg/L
|	Ca	43	14605.456	0.05	0.7910	0.031	3.914	mg/L
|	Fe	54	139165.474	0.32	0.1583	0.008	5.244	mg/L
|	Fe	57	27152.897	0.07	0.0797	0.003	3.561	mg/L
⌊>	Sc-1	45	291903.198	291903.20				mg/L
	Cl	35	62015.060	42998.99				mg/L
	Kr	83	43.001	-17.67				mg/L
	Br	81	10079.078	1468.70				mg/L
	P	31	20943.284	7547.38				mg/L
	S	34	219668.323	31687.35				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		84.821			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		94.258			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.609			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.749			
⌈	Na	23					

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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102040214
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Method 6020 - Summary Report

Sample ID: L1102040217

Sample Date/Time: Tuesday, February 22, 2011 15:16:37
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 41
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23227.311	0.02				ug/L
|	Be	9	8.667	0.00	-0.0208	0.020	95.932	ug/L
|	Al	27	207327.822	0.69	34.5276	1.736	5.027	ug/L
⌊>	Sc	45	296037.169	296037.17				ug/L
⌈	Ti	49	383.379	0.00	0.6204	0.086	13.837	ug/L
|	V	51	2880.742	0.00	0.0756	0.003	4.451	ug/L
|	Cr	52	10134.901	0.01	0.3555	0.011	3.057	ug/L
|	Cr	53	540.069	0.00	0.4529	0.138	30.428	ug/L
|	Mn	55	89628.805	0.20	7.6226	0.025	0.326	ug/L
|	Co	59	537.687	0.00	0.0485	0.003	6.722	ug/L
|	Ni	60	635.360	0.00	0.3188	0.016	5.107	ug/L
|	Cu	65	1321.767	0.00	0.5863	0.013	2.191	ug/L
|	Zn	66	5968.869	0.01	4.4502	0.708	15.904	ug/L
|>	Ge	72	443716.327	443716.33				ug/L
|	As	75	-157.520	0.00	-0.0081	0.044	549.330	ug/L
|	Se	77	62.000	0.00	-0.1061	0.097	91.575	ug/L
|	Se	82	-4.078	0.00	-0.0276	0.109	396.038	ug/L
⌊	Rb	85	1639.151	0.00				mg/L
	Y	89	275641.318	-72140.87				ug/L
	Rh	103	12.333	2.00				ug/L
⌈	Mo	98	56.603	0.00	0.0324	0.003	10.120	ug/L
|	Ag	107	31.334	-0.00	0.0040	0.001	18.719	ug/L
|	Cd	114	-0.310	-0.00	-0.0070	0.006	91.260	ug/L
|>	In	115	366945.296	366945.30				ug/L
|	Sn	118	634.820	0.00	0.1467	0.012	8.358	ug/L
⌊	Sb	123	68.952	0.00	0.0136	0.002	13.916	ug/L
⌈	Ba	135	5970.842	0.01	3.5011	0.139	3.958	ug/L
|	Ce	140	3087.452	0.01				ug/L
⌊>	Tb	159	507174.477	507174.48				ug/L
⌈	Ho	165	46.671	0.00				ug/L
|	Tl	203	22.000	0.00	0.0010	0.000	40.894	ug/L
|	Tl	205	46.672	0.00	0.0117	0.002	20.582	ug/L
|	Pb	206	638.027	0.00	0.0453	0.003	7.283	ug/L
|	Pb	207	534.020	0.00	0.0481	0.003	6.032	ug/L
|	Pb	208	2475.478	0.00	0.0431	0.002	4.941	ug/L
|	U	238	141.336	0.00	0.0026	0.000	9.509	ug/L
⌊>	Bi	209	489345.504	489345.50				ug/L

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Na	23	5440750.400	18.33	0.9707	0.042	4.318	mg/L	
Mg	24	1596352.033	5.40	0.4502	0.025	5.537	mg/L	
K	39	2077945.764	5.14	0.1798	0.006	3.556	mg/L	
Ca	43	15002.755	0.05	0.8006	0.011	1.399	mg/L	
Fe	54	134713.265	0.29	0.1476	0.005	3.107	mg/L	
Fe	57	27169.573	0.06	0.0783	0.003	3.338	mg/L	
> Sc-1	45	296037.169	296037.17				mg/L	
Cl	35	81386.798	62370.73				mg/L	
Kr	83	47.334	-13.33				mg/L	
Br	81	9381.077	770.70				mg/L	
P	31	24949.328	11553.43				mg/L	
S	34	215290.493	27309.52				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		84.917			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		93.483			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		100.849			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		98.601			
Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102040217PS WG356974-01

Sample Date/Time: Tuesday, February 22, 2011 15:23:24
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 42
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20320.653	0.01				ug/L
|	Be	9	14216.766	0.05	58.3654	2.482	4.253	ug/L
|	Al	27	495182.613	1.74	86.7627	7.240	8.344	ug/L
⌊>	Sc	45	283756.857	283756.86				ug/L
⌈	Ti	49	410.049	0.00	0.6857	0.020	2.874	ug/L
|	V	51	469311.887	1.08	53.3682	0.889	1.666	ug/L
|	Cr	52	407628.545	0.93	53.9500	0.450	0.834	ug/L
|	Cr	53	46767.107	0.11	52.7719	0.274	0.519	ug/L
|	Mn	55	701750.483	1.62	61.5420	0.998	1.621	ug/L
|	Co	59	490234.460	1.13	53.7311	1.044	1.943	ug/L
|	Ni	60	102262.595	0.24	53.6639	0.260	0.485	ug/L
|	Cu	65	106839.484	0.25	54.3145	0.979	1.803	ug/L
|	Zn	66	58048.579	0.13	49.7369	0.661	1.329	ug/L
| >	Ge	72	432402.609	432402.61				ug/L
|	As	75	44714.351	0.10	46.9922	0.514	1.093	ug/L
|	Se	77	2977.111	0.01	42.6992	2.483	5.815	ug/L
|	Se	82	3841.083	0.01	43.9145	1.440	3.278	ug/L
⌊	Rb	85	1631.483	0.00				mg/L
	Y	89	274034.446	-73747.74				ug/L
	Rh	103	26.000	15.67				ug/L
⌈	Mo	98	44.274	0.00	0.0284	0.002	7.454	ug/L
|	Ag	107	206828.199	0.60	48.1677	0.904	1.876	ug/L
|	Cd	114	50411.676	0.15	49.6600	0.872	1.756	ug/L
| >	In	115	346509.864	346509.86				ug/L
|	Sn	118	672.556	0.00	0.1666	0.003	1.536	ug/L
⌊	Sb	123	177445.602	0.51	50.3797	1.339	2.658	ug/L
⌈	Ba	135	82200.758	0.17	51.7405	0.773	1.494	ug/L
|	Ce	140	2804.010	0.01				ug/L
⌊>	Tb	159	470455.883	470455.88				ug/L
⌈	Ho	165	60.006	0.00				ug/L
|	Tl	203	336873.487	0.74	52.4217	1.948	3.715	ug/L
|	Tl	205	832480.611	1.82	52.3615	1.496	2.858	ug/L
|	Pb	206	280843.693	0.61	53.6214	1.959	3.652	ug/L
|	Pb	207	245901.879	0.54	49.8910	1.918	3.845	ug/L
|	Pb	208	1148730.170	2.51	52.4850	1.898	3.617	ug/L
|	U	238	1756730.398	3.84	54.5253	1.190	2.183	ug/L
⌊>	Bi	209	457712.196	457712.20				ug/L

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⌈	Na	23	5100702.032	17.91	0.9487	0.006	0.624	mg/L
|	Mg	24	1500145.504	5.29	0.4413	0.019	4.360	mg/L
|	K	39	1957847.217	5.03	0.1757	0.010	5.455	mg/L
|	Ca	43	13390.298	0.05	0.7458	0.039	5.195	mg/L
|	Fe	54	133340.182	0.31	0.1550	0.007	4.837	mg/L
|	Fe	57	24966.978	0.06	0.0739	0.006	8.660	mg/L
⌊>	Sc-1	45	283756.857	283756.86				mg/L
	Cl	35	77029.570	58013.50				mg/L
	Kr	83	43.334	-17.33				mg/L
	Br	81	8893.954	283.58				mg/L
	P	31	20781.121	7385.22				mg/L
	S	34	185388.858	-2592.12				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		82.752			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		88.277			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		93.548			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		92.227			
⌈	Na	23					

Sample ID: L1102040217PS WG356974-01
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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102040217PS WG356974-01
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Method 6020 - Summary Report

Sample ID: L1102040217SDL WG356974-02

Sample Date/Time: Tuesday, February 22, 2011 15:30:11
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 43
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20053.456	0.01				ug/L
|	Be	9	8.000	0.00	-0.0217	0.022	101.463	ug/L
|	Al	27	49976.229	0.17	8.4858	1.385	16.321	ug/L
⌊>	Sc	45	277772.133	277772.13				ug/L
⌈	Ti	49	123.347	0.00	0.1753	0.081	46.213	ug/L
|	V	51	2247.190	0.00	0.0086	0.003	30.455	ug/L
|	Cr	52	7592.958	0.00	0.0359	0.024	67.701	ug/L
|	Cr	53	330.039	0.00	0.2250	0.055	24.516	ug/L
|	Mn	55	17499.143	0.04	1.4760	0.051	3.489	ug/L
|	Co	59	153.003	0.00	0.0077	0.002	25.699	ug/L
|	Ni	60	284.340	0.00	0.1414	0.010	7.386	ug/L
|	Cu	65	360.010	0.00	0.1118	0.006	5.540	ug/L
|	Zn	66	3184.205	0.01	2.1425	0.010	0.464	ug/L
|>	Ge	72	437513.971	437513.97				ug/L
|	As	75	-90.363	0.00	0.0587	0.010	16.713	ug/L
|	Se	77	55.333	-0.00	-0.1918	0.077	40.302	ug/L
|	Se	82	7.603	0.00	0.1019	0.098	96.546	ug/L
⌊	Rb	85	335.676	0.00				mg/L
	Y	89	271783.962	-75998.22				ug/L
	Rh	103	11.000	0.67				ug/L
⌈	Mo	98	20.009	0.00	0.0178	0.000	1.828	ug/L
|	Ag	107	25.334	-0.00	0.0030	0.000	9.434	ug/L
|	Cd	114	0.537	-0.00	-0.0062	0.003	48.928	ug/L
|>	In	115	345624.426	345624.43				ug/L
|	Sn	118	179.602	0.00	0.0324	0.003	8.626	ug/L
⌊	Sb	123	377.878	0.00	0.1026	0.012	11.606	ug/L
⌈	Ba	135	1175.081	0.00	0.7594	0.019	2.540	ug/L
|	Ce	140	606.746	0.00				ug/L
⌊>	Tb	159	466341.972	466341.97				ug/L
⌈	Ho	165	26.669	0.00				ug/L
|	Tl	203	21.667	0.00	0.0012	0.001	48.723	ug/L
|	Tl	205	53.339	0.00	0.0124	0.001	11.030	ug/L
|	Pb	206	402.679	0.00	0.0086	0.004	48.016	ug/L
|	Pb	207	360.343	0.00	0.0202	0.004	20.523	ug/L
|	Pb	208	1632.069	0.00	0.0122	0.004	31.064	ug/L
|	U	238	75.334	0.00	0.0008	0.000	17.056	ug/L
⌊>	Bi	209	455560.722	455560.72				ug/L

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⌈	Na	23	1043910.071	3.69	0.1930	0.007	3.465	mg/L
|	Mg	24	310542.538	1.12	0.0900	0.001	0.756	mg/L
|	K	39	849741.018	1.18	0.0375	0.000	0.563	mg/L
|	Ca	43	3040.768	0.01	0.1650	0.016	9.920	mg/L
|	Fe	54	56622.532	0.04	0.0254	0.004	14.008	mg/L
|	Fe	57	9598.901	0.01	0.0103	0.002	17.067	mg/L
⌊>	Sc-1	45	277772.133	277772.13				mg/L
	Cl	35	28724.530	9708.46				mg/L
	Kr	83	45.667	-15.00				mg/L
	Br	81	6919.060	-1691.32				mg/L
	P	31	12576.601	-819.30				mg/L
	S	34	173117.845	-14863.13				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		83.730			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		88.051			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		92.730			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		91.794			
⌈	Na	23					

Sample ID: L1102040217SDL WG356974-02
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102040217SDL WG356974-02
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 22, 2011 15:36:59
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18016.558	0.01				ug/L
|	Be	9	13208.061	0.05	55.6741	2.186	3.927	ug/L
|	Al	27	284855.267	1.03	51.1820	4.783	9.346	ug/L
⌊>	Sc	45	276235.252	276235.25				ug/L
⌈	Ti	49	58372.364	0.13	101.5154	1.461	1.439	ug/L
|	V	51	450821.953	1.02	50.3843	1.233	2.448	ug/L
|	Cr	52	384974.181	0.86	50.0205	1.154	2.307	ug/L
|	Cr	53	44968.765	0.10	49.8758	1.767	3.543	ug/L
|	Mn	55	567533.202	1.29	48.9095	0.809	1.654	ug/L
|	Co	59	453578.986	1.03	48.8606	0.369	0.755	ug/L
|	Ni	60	96817.136	0.22	49.9431	1.022	2.046	ug/L
|	Cu	65	99705.714	0.23	49.8125	0.743	1.492	ug/L
|	Zn	66	60499.744	0.14	50.9661	0.599	1.175	ug/L
| >	Ge	72	439901.059	439901.06				ug/L
|	As	75	47381.935	0.11	48.9410	0.789	1.613	ug/L
|	Se	77	3456.598	0.01	48.8749	1.910	3.908	ug/L
|	Se	82	4384.540	0.01	49.2675	0.361	0.732	ug/L
⌊	Rb	85	1798.513	0.00				mg/L
	Y	89	282884.050	-64898.13				ug/L
	Rh	103	23.000	12.67				ug/L
⌈	Mo	98	219105.782	0.64	97.2211	0.419	0.431	ug/L
|	Ag	107	208466.277	0.61	49.0240	0.948	1.933	ug/L
|	Cd	114	50022.487	0.15	49.7501	1.062	2.135	ug/L
| >	In	115	343144.940	343144.94				ug/L
|	Sn	118	178027.800	0.52	48.9563	0.420	0.859	ug/L
⌊	Sb	123	174120.069	0.51	49.9076	0.430	0.861	ug/L
⌈	Ba	135	73307.801	0.16	47.7311	0.875	1.834	ug/L
|	Ce	140	50.005	0.00				ug/L
⌊>	Tb	159	454910.280	454910.28				ug/L
⌈	Ho	165	20.002	0.00				ug/L
|	Tl	203	311998.446	0.70	50.1638	2.137	4.260	ug/L
|	Tl	205	769874.523	1.74	50.0329	2.185	4.367	ug/L
|	Pb	206	250788.128	0.57	49.4584	1.510	3.053	ug/L
|	Pb	207	236885.676	0.53	49.6326	0.829	1.669	ug/L
|	Pb	208	1055309.270	2.38	49.7877	0.795	1.598	ug/L
|	U	238	1604168.863	3.62	51.4238	0.427	0.830	ug/L
⌊>	Bi	209	443009.071	443009.07				ug/L

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Na	23	27061779.340	98.10	5.2099	0.352	6.762	mg/L
Mg	24	17149464.261	62.14	5.2257	0.191	3.652	mg/L
K	39	40576148.093	145.33	5.2138	0.377	7.233	mg/L
Ca	43	88895.705	0.32	5.1493	0.335	6.500	mg/L
Fe	54	2831074.528	10.10	4.9169	0.262	5.328	mg/L
Fe	57	1141313.288	4.11	4.8835	0.377	7.719	mg/L
Sc-1	45	276235.252	276235.25				mg/L
Cl	35	18555.874	-460.20				mg/L
Kr	83	56.334	-4.33				mg/L
Br	81	6905.051	-1705.32				mg/L
P	31	11170.302	-2225.60				mg/L
S	34	211652.458	23671.48				mg/L

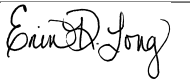
QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51	100.769				
Cr	52	100.041				
Cr	53					
Mn	55	97.819				
Co	59	97.721				
Ni	60	99.886				
Cu	65	99.625				
Zn	66	101.932				
Ge	72		84.187			
As	75	97.882				
Se	77					
Se	82	98.535				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	98.048				
Cd	114	99.500				
In	115		87.420			
Sn	118					
Sb	123	99.815				
Ba	135	95.462				
Ce	140					
Tb	159		90.456			
Ho	165					
Tl	203	100.328				
Tl	205					
Pb	206					
Pb	207					
Pb	208	99.575				
U	238	102.848				
Bi	209		89.265			
Na	23					

Sample ID: QC Std 6
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Tuesday, February 22, 2011 15:39:11

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 22, 2011 15:44:14
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17248.198	0.00				ug/L
|	Be	9	7.333	0.00	-0.0254	0.023	90.386	ug/L
|	Al	27	3167.172	0.00	0.0365	0.087	237.173	ug/L
⌊>	Sc	45	286158.748	286158.75				ug/L
⌈	Ti	49	56.673	0.00	0.0584	0.028	47.508	ug/L
|	V	51	2095.662	-0.00	-0.0108	0.009	85.490	ug/L
|	Cr	52	7057.227	-0.00	-0.0449	0.022	48.939	ug/L
|	Cr	53	186.687	-0.00	0.0626	0.015	23.326	ug/L
|	Mn	55	316.342	0.00	-0.0150	0.002	13.314	ug/L
|	Co	59	52.667	0.00	-0.0032	0.000	15.158	ug/L
|	Ni	60	40.000	-0.00	0.0144	0.003	23.403	ug/L
|	Cu	65	105.335	0.00	-0.0168	0.006	34.689	ug/L
|	Zn	66	512.352	0.00	-0.1511	0.014	8.969	ug/L
|>	Ge	72	441985.881	441985.88				ug/L
|	As	75	-115.724	0.00	0.0337	0.004	12.024	ug/L
|	Se	77	57.334	0.00	-0.1684	0.240	142.786	ug/L
|	Se	82	3.936	0.00	0.0605	0.033	55.089	ug/L
⌊	Rb	85	21.000	0.00				mg/L
	Y	89	282836.479	-64945.70				ug/L
	Rh	103	12.000	1.67				ug/L
⌈	Mo	98	104.759	0.00	0.0561	0.002	3.913	ug/L
|	Ag	107	22.000	-0.00	0.0024	0.000	17.085	ug/L
|	Cd	114	2.136	-0.00	-0.0046	0.006	124.389	ug/L
|>	In	115	338270.745	338270.75				ug/L
|	Sn	118	232.536	0.00	0.0484	0.008	17.551	ug/L
⌊	Sb	123	96.118	0.00	0.0231	0.002	7.374	ug/L
⌈	Ba	135	20.334	0.00	0.0268	0.003	12.962	ug/L
|	Ce	140	36.670	0.00				ug/L
⌊>	Tb	159	446813.681	446813.68				ug/L
⌈	Ho	165	6.667	-0.00				ug/L
|	Tl	203	25.334	0.00	0.0018	0.001	52.212	ug/L
|	Tl	205	33.337	0.00	0.0111	0.000	3.019	ug/L
|	Pb	206	357.677	0.00	0.0006	0.001	207.840	ug/L
|	Pb	207	293.674	-0.00	0.0070	0.005	69.175	ug/L
|	Pb	208	1398.386	-0.00	0.0020	0.002	85.218	ug/L
|	U	238	72.334	0.00	0.0007	0.001	96.688	ug/L
⌊>	Bi	209	451310.406	451310.41				ug/L

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⌈	Na	23	18756.117	0.00	-0.0032	0.000	4.583	mg/L
|	Mg	24	523.399	0.00	-0.0039	0.000	0.541	mg/L
|	K	39	551544.415	0.05	-0.0030	0.004	132.964	mg/L
|	Ca	43	153.350	-0.00	-0.0018	0.003	178.336	mg/L
|	Fe	54	40092.509	-0.02	-0.0055	0.004	67.215	mg/L
|	Fe	57	6506.100	-0.00	-0.0037	0.001	21.315	mg/L
⌊>	Sc-1	45	286158.748	286158.75				mg/L
	Cl	35	17450.553	-1565.52				mg/L
	Kr	83	45.667	-15.00				mg/L
	Br	81	6736.272	-1874.10				mg/L
	P	31	10059.065	-3336.84				mg/L
	S	34	186281.996	-1698.98				mg/L

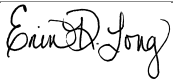
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		84.586			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		86.178			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		88.846			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		90.937			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Tuesday, February 22, 2011 15:46:25

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102040220

Sample Date/Time: Tuesday, February 22, 2011 15:51:00
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 44
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19569.520	0.01				ug/L
|	Be	9	8.667	0.00	-0.0194	0.014	72.994	ug/L
|	Al	27	28657.688	0.09	4.4976	0.317	7.051	ug/L
⌊>	Sc	45	286090.232	286090.23				ug/L
⌈	Ti	49	60.006	0.00	0.0653	0.031	47.083	ug/L
|	V	51	2422.050	0.00	0.0293	0.007	22.374	ug/L
|	Cr	52	10355.129	0.01	0.4079	0.011	2.777	ug/L
|	Cr	53	480.060	0.00	0.3948	0.092	23.250	ug/L
|	Mn	55	6328.066	0.01	0.5085	0.021	4.111	ug/L
|	Co	59	118.002	0.00	0.0039	0.000	8.233	ug/L
|	Ni	60	250.672	0.00	0.1243	0.005	3.983	ug/L
|	Cu	65	241.339	0.00	0.0525	0.005	9.917	ug/L
|	Zn	66	2510.341	0.00	1.5723	0.114	7.277	ug/L
|>	Ge	72	436145.875	436145.88				ug/L
|	As	75	-134.457	0.00	0.0126	0.010	77.505	ug/L
|	Se	77	50.667	-0.00	-0.2558	0.143	55.786	ug/L
|	Se	82	-1.446	0.00	0.0003	0.080	31358.341	ug/L
⌊	Rb	85	72.334	0.00				mg/L
	Y	89	283792.282	-63989.90				ug/L
	Rh	103	8.667	-1.67				ug/L
⌈	Mo	98	65.019	0.00	0.0376	0.005	12.936	ug/L
|	Ag	107	46.667	0.00	0.0080	0.002	27.651	ug/L
|	Cd	114	3.718	-0.00	-0.0031	0.005	149.848	ug/L
|>	In	115	345423.549	345423.55				ug/L
|	Sn	118	318.405	0.00	0.0704	0.002	2.856	ug/L
⌊	Sb	123	108.535	0.00	0.0260	0.004	14.002	ug/L
⌈	Ba	135	117.669	0.00	0.0861	0.012	13.718	ug/L
|	Ce	140	506.730	0.00				ug/L
⌊>	Tb	159	478137.477	478137.48				ug/L
⌈	Ho	165	23.336	0.00				ug/L
|	Tl	203	29.000	0.00	0.0023	0.000	14.585	ug/L
|	Tl	205	86.676	0.00	0.0144	0.001	6.543	ug/L
|	Pb	206	442.348	0.00	0.0151	0.005	31.341	ug/L
|	Pb	207	400.012	0.00	0.0272	0.003	11.400	ug/L
|	Pb	208	1800.415	0.00	0.0189	0.001	2.900	ug/L
|	U	238	122.002	0.00	0.0022	0.001	27.095	ug/L
⌊>	Bi	209	461115.093	461115.09				ug/L

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Na	23	154516.728	0.48	0.0221	0.001	5.447	mg/L	
Mg	24	29690.352	0.10	0.0047	0.000	2.123	mg/L	
K	39	604564.963	0.24	0.0037	0.005	131.693	mg/L	
Ca	43	656.754	0.00	0.0265	0.006	21.120	mg/L	
Fe	54	92088.360	0.16	0.0831	0.009	10.675	mg/L	
Fe	57	8030.694	0.00	0.0027	0.002	84.258	mg/L	
> Sc-1	45	286090.232	286090.23				mg/L	
Cl	35	55098.733	36082.66				mg/L	
Kr	83	51.334	-9.33				mg/L	
Br	81	7277.314	-1333.06				mg/L	
P	31	22729.492	9333.59				mg/L	
S	34	185703.565	-2277.41				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		83.469			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		88.000			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		95.075			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		92.913			
Na	23					

Sample ID: L1102040220
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102040220
Report Date/Time: Tuesday, February 22, 2011 15:53:13
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Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102040223

Sample Date/Time: Tuesday, February 22, 2011 15:57:49
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 45
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20587.950	0.01				ug/L
|	Be	9	4.667	0.00	-0.0360	0.009	26.204	ug/L
|	Al	27	38758.428	0.13	6.2931	0.206	3.279	ug/L
⌊>	Sc	45	284319.802	284319.80				ug/L
⌈	Ti	49	66.674	0.00	0.0754	0.026	33.863	ug/L
|	V	51	2359.841	0.00	0.0191	0.009	45.688	ug/L
|	Cr	52	9849.614	0.01	0.3251	0.028	8.622	ug/L
|	Cr	53	433.386	0.00	0.3372	0.102	30.351	ug/L
|	Mn	55	3641.033	0.01	0.2709	0.008	3.047	ug/L
|	Co	59	97.335	0.00	0.0016	0.001	36.636	ug/L
|	Ni	60	174.337	0.00	0.0836	0.015	17.455	ug/L
|	Cu	65	191.337	0.00	0.0261	0.007	24.924	ug/L
|	Zn	66	1932.540	0.00	1.0554	0.054	5.090	ug/L
| >	Ge	72	441346.723	441346.72				ug/L
|	As	75	-97.980	0.00	0.0520	0.060	115.245	ug/L
|	Se	77	59.334	0.00	-0.1414	0.186	131.534	ug/L
|	Se	82	13.226	0.00	0.1654	0.154	92.851	ug/L
⌊	Rb	85	158.336	0.00				mg/L
	Y	89	290452.708	-57329.48				ug/L
	Rh	103	9.000	-1.33				ug/L
⌈	Mo	98	44.831	0.00	0.0284	0.002	7.867	ug/L
|	Ag	107	30.334	-0.00	0.0041	0.002	47.452	ug/L
|	Cd	114	8.389	0.00	0.0013	0.007	568.404	ug/L
| >	In	115	351789.822	351789.82				ug/L
|	Sn	118	195.069	0.00	0.0357	0.002	6.759	ug/L
⌊	Sb	123	89.619	0.00	0.0201	0.005	24.049	ug/L
⌈	Ba	135	119.002	0.00	0.0867	0.008	9.144	ug/L
|	Ce	140	326.705	0.00				ug/L
⌊>	Tb	159	480302.854	480302.85				ug/L
⌈	Ho	165	3.334	-0.00				ug/L
|	Tl	203	25.000	0.00	0.0017	0.001	54.508	ug/L
|	Tl	205	73.341	0.00	0.0135	0.000	2.903	ug/L
|	Pb	206	432.347	0.00	0.0125	0.004	35.013	ug/L
|	Pb	207	350.676	0.00	0.0167	0.003	15.072	ug/L
|	Pb	208	1702.742	0.00	0.0139	0.002	12.194	ug/L
|	U	238	49.667	0.00	-0.0000	0.000	858.794	ug/L
⌊>	Bi	209	465103.049	465103.05				ug/L

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⌈	Na	23	77708.580	0.21	0.0079	0.000	4.808	mg/L
|	Mg	24	41443.213	0.14	0.0082	0.000	2.947	mg/L
|	K	39	621756.214	0.31	0.0062	0.002	39.892	mg/L
|	Ca	43	876.793	0.00	0.0390	0.002	6.340	mg/L
|	Fe	54	95562.181	0.17	0.0897	0.002	1.916	mg/L
|	Fe	57	8521.150	0.00	0.0049	0.001	27.097	mg/L
⌊>	Sc-1	45	284319.802	284319.80				mg/L
	Cl	35	48644.699	29628.63				mg/L
	Kr	83	50.667	-10.00				mg/L
	Br	81	8575.011	-35.36				mg/L
	P	31	22099.286	8703.38				mg/L
	S	34	204862.048	16881.07				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		84.464			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		89.622			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		95.506			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		93.716			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102040223
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Method 6020 - Summary Report

Sample ID: L1102043401

Sample Date/Time: Tuesday, February 22, 2011 16:04:37
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 46
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19903.151	0.01				ug/L
|	Be	9	8.000	0.00	-0.0217	0.044	202.875	ug/L
|	Al	27	51365.049	0.17	8.4134	0.243	2.888	ug/L
⌊>	Sc	45	287511.127	287511.13				ug/L
⌈	Ti	49	143.349	0.00	0.2175	0.028	12.737	ug/L
|	V	51	4640.987	0.01	0.2930	0.010	3.537	ug/L
|	Cr	52	14554.730	0.02	1.0152	0.021	2.081	ug/L
|	Cr	53	1183.522	0.00	1.2152	0.093	7.685	ug/L
|	Mn	55	3121.852	0.01	0.2359	0.004	1.622	ug/L
|	Co	59	192.670	0.00	0.0126	0.003	23.720	ug/L
|	Ni	60	1055.400	0.00	0.5561	0.033	6.019	ug/L
|	Cu	65	249.339	0.00	0.0595	0.006	9.907	ug/L
|	Zn	66	2417.650	0.00	1.5416	0.052	3.368	ug/L
|>	Ge	72	426025.467	426025.47				ug/L
|	As	75	-31.860	0.00	0.1184	0.022	18.288	ug/L
|	Se	77	76.000	0.00	0.1384	0.058	41.596	ug/L
|	Se	82	35.603	0.00	0.4297	0.072	16.803	ug/L
⌊	Rb	85	3024.154	0.01				mg/L
	Y	89	269377.055	-78405.13				ug/L
	Rh	103	31.000	20.67				ug/L
⌈	Mo	98	55.612	0.00	0.0338	0.004	10.835	ug/L
|	Ag	107	22.000	-0.00	0.0023	0.001	39.973	ug/L
|	Cd	114	0.125	-0.00	-0.0066	0.006	97.653	ug/L
|>	In	115	340080.887	340080.89				ug/L
|	Sn	118	178.402	0.00	0.0329	0.003	8.991	ug/L
⌊	Sb	123	73.243	0.00	0.0163	0.002	15.058	ug/L
⌈	Ba	135	35095.510	0.08	22.5420	0.647	2.872	ug/L
|	Ce	140	390.047	0.00				ug/L
⌊>	Tb	159	461450.855	461450.85				ug/L
⌈	Ho	165	20.002	0.00				ug/L
|	Tl	203	37.334	0.00	0.0038	0.000	13.113	ug/L
|	Tl	205	40.004	0.00	0.0116	0.001	5.835	ug/L
|	Pb	206	493.350	0.00	0.0281	0.006	20.312	ug/L
|	Pb	207	418.346	0.00	0.0339	0.004	11.980	ug/L
|	Pb	208	1930.092	0.00	0.0279	0.003	11.664	ug/L
|	U	238	1359.773	0.00	0.0418	0.003	6.061	ug/L
⌊>	Bi	209	445632.035	445632.03				ug/L

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⌈	Na	23	18766422.266	65.23	3.4630	0.052	1.510	mg/L
|	Mg	24	7569668.491	26.34	2.2127	0.052	2.329	mg/L
|	K	39	6594051.732	21.07	0.7519	0.026	3.432	mg/L
|	Ca	43	83801.457	0.29	4.6557	0.088	1.901	mg/L
|	Fe	54	84916.856	0.13	0.0701	0.006	9.164	mg/L
|	Fe	57	11030.522	0.01	0.0148	0.001	3.952	mg/L
⌊>	Sc-1	45	287511.127	287511.13				mg/L
	Cl	35	152316.677	133300.61				mg/L
	Kr	83	45.667	-15.00				mg/L
	Br	81	22877.490	14267.11				mg/L
	P	31	20234.718	6838.82				mg/L
	S	34	219252.531	31271.55				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		81.532			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		86.639			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		91.757			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		89.793			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102044301 WG356896-02

Sample Date/Time: Tuesday, February 22, 2011 16:11:24
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 47
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20136.977	0.02				ug/L
|	Be	9	8.667	0.00	-0.0186	0.011	61.334	ug/L
|	Al	27	93822.744	0.33	16.6321	2.197	13.210	ug/L
⌊>	Sc	45	274869.286	274869.29				ug/L
⌈	Ti	49	1053.494	0.00	1.9706	0.215	10.933	ug/L
|	V	51	3095.701	0.00	0.1355	0.006	4.607	ug/L
|	Cr	52	11830.785	0.01	0.7412	0.026	3.462	ug/L
|	Cr	53	1643.633	0.00	1.8620	0.167	8.968	ug/L
|	Mn	55	3191014.831	7.95	301.5377	8.118	2.692	ug/L
|	Co	59	7390.144	0.02	0.8627	0.016	1.892	ug/L
|	Ni	60	10609.078	0.03	5.9847	0.089	1.484	ug/L
|	Cu	65	1626.816	0.00	0.8219	0.027	3.240	ug/L
|	Zn	66	58337.777	0.14	53.8581	0.367	0.682	ug/L
| >	Ge	72	401698.431	401698.43				ug/L
|	As	75	-61.913	0.00	0.0811	0.073	89.656	ug/L
|	Se	77	122.001	0.00	0.9301	0.226	24.337	ug/L
|	Se	82	23.566	0.00	0.3020	0.196	64.782	ug/L
⌊	Rb	85	14030.982	0.03				mg/L
	Y	89	259466.651	-88315.53				ug/L
	Rh	103	96.001	85.67				ug/L
⌈	Mo	98	670.527	0.00	0.3223	0.011	3.527	ug/L
|	Ag	107	23.334	-0.00	0.0029	0.002	60.339	ug/L
|	Cd	114	314.992	0.00	0.3236	0.017	5.206	ug/L
| >	In	115	326039.153	326039.15				ug/L
|	Sn	118	173.468	0.00	0.0336	0.002	5.122	ug/L
⌊	Sb	123	139.366	0.00	0.0371	0.001	2.924	ug/L
⌈	Ba	135	25236.414	0.06	16.4304	0.222	1.349	ug/L
|	Ce	140	913.466	0.00				ug/L
⌊>	Tb	159	455213.399	455213.40				ug/L
⌈	Ho	165	20.002	0.00				ug/L
|	Tl	203	153.336	0.00	0.0225	0.001	5.231	ug/L
|	Tl	205	413.383	0.00	0.0360	0.005	13.904	ug/L
|	Pb	206	590.690	0.00	0.0482	0.008	15.802	ug/L
|	Pb	207	494.684	0.00	0.0503	0.003	5.981	ug/L
|	Pb	208	2373.137	0.00	0.0494	0.001	2.432	ug/L
|	U	238	13682.511	0.03	0.4374	0.004	0.986	ug/L
⌊>	Bi	209	442888.121	442888.12				ug/L

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⌈	Na	23	207119293.379	754.90	40.1116	1.941	4.839	mg/L
|	Mg	24	42470729.734	154.66	13.0109	0.522	4.011	mg/L
|	K	39	15211751.801	53.51	1.9167	0.075	3.927	mg/L
|	Ca	43	1121578.002	4.09	65.4236	4.259	6.511	mg/L
|	Fe	54	315780.004	0.99	0.4860	0.027	5.481	mg/L
|	Fe	57	149140.867	0.52	0.6143	0.037	6.059	mg/L
⌊>	Sc-1	45	274869.286	274869.29				mg/L
	Cl	35	1197595.204	1178579.13				mg/L
	Kr	83	50.001	-10.67				mg/L
	Br	81	15085.396	6475.02				mg/L
	P	31	19316.119	5920.22				mg/L
	S	34	1600551.681	1412570.70				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		76.876			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		83.062			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		90.517			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		89.240			
⌈	Na	23					

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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1102044301 WG356896-02
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Method 6020 - Summary Report

Sample ID: L1102044301S WG356896-08

Sample Date/Time: Tuesday, February 22, 2011 16:18:09
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 48
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22709.108	0.02				ug/L
|	Be	9	7365.380	0.03	29.4485	1.622	5.508	ug/L
|	Al	27	259058.623	0.88	43.9047	0.641	1.461	ug/L
⌊>	Sc	45	291378.416	291378.42				ug/L
⌈	Ti	49	1306.883	0.00	2.3377	0.182	7.768	ug/L
|	V	51	244266.373	0.58	28.4744	0.571	2.007	ug/L
|	Cr	52	215205.266	0.50	28.8762	0.433	1.501	ug/L
|	Cr	53	25428.173	0.06	29.4766	0.199	0.676	ug/L
|	Mn	55	3803563.590	9.05	343.5013	6.380	1.857	ug/L
|	Co	59	262224.398	0.62	29.5656	0.816	2.758	ug/L
|	Ni	60	64461.548	0.15	34.7999	1.086	3.121	ug/L
|	Cu	65	55746.688	0.13	29.1332	0.524	1.798	ug/L
|	Zn	66	93539.140	0.22	82.9001	0.955	1.152	ug/L
| >	Ge	72	420046.964	420046.96				ug/L
|	As	75	23025.684	0.06	24.9883	0.531	2.126	ug/L
|	Se	77	1752.154	0.00	25.4693	0.762	2.992	ug/L
|	Se	82	1978.209	0.00	23.2939	0.413	1.775	ug/L
⌊	Rb	85	15260.798	0.04				mg/L
	Y	89	270042.905	-77739.28				ug/L
	Rh	103	123.002	112.67				ug/L
⌈	Mo	98	763.388	0.00	0.3399	0.010	3.036	ug/L
|	Ag	107	104246.780	0.30	23.9326	0.261	1.092	ug/L
|	Cd	114	26650.944	0.08	25.8824	0.282	1.090	ug/L
| >	In	115	351318.475	351318.47				ug/L
|	Sn	118	180.535	0.00	0.0319	0.000	1.272	ug/L
⌊	Sb	123	92214.931	0.26	25.8233	0.500	1.935	ug/L
⌈	Ba	135	69213.974	0.14	41.0313	0.115	0.280	ug/L
|	Ce	140	1243.535	0.00				ug/L
⌊>	Tb	159	499621.484	499621.48				ug/L
⌈	Ho	165	26.669	0.00				ug/L
|	Tl	203	187257.718	0.39	27.5297	0.367	1.334	ug/L
|	Tl	205	464286.317	0.96	27.6095	0.989	3.580	ug/L
|	Pb	206	158126.432	0.33	28.5084	1.044	3.661	ug/L
|	Pb	207	136228.680	0.28	26.0836	0.725	2.781	ug/L
|	Pb	208	641911.575	1.32	27.6769	0.273	0.988	ug/L
|	U	238	1050791.908	2.17	30.8204	0.243	0.788	ug/L
⌊>	Bi	209	484299.934	484299.93				ug/L

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⌈	Na	23	223076992.242	765.00	40.6481	0.919	2.262	mg/L
|	Mg	24	45359155.869	155.80	13.1071	0.266	2.028	mg/L
|	K	39	16658050.124	55.38	1.9840	0.125	6.307	mg/L
|	Ca	43	1213937.919	4.17	66.7649	2.752	4.122	mg/L
|	Fe	54	350350.586	1.04	0.5116	0.017	3.269	mg/L
|	Fe	57	164788.228	0.54	0.6417	0.037	5.691	mg/L
⌊>	Sc-1	45	291378.416	291378.42				mg/L
	Cl	35	1273628.183	1254612.11				mg/L
	Kr	83	40.000	-20.67				mg/L
	Br	81	17479.274	8868.90				mg/L
	P	31	20660.318	7264.42				mg/L
	S	34	1697759.971	1509778.99				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
| >	Ge	72		80.388			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
| >	In	115		89.502			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.347			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.585			
⌈	Na	23					

Sample ID: L1102044301S WG356896-08
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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1102044301S WG356896-08
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Method 6020 - Summary Report

Sample ID: L1102044705

Sample Date/Time: Tuesday, February 22, 2011 16:24:55
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 49
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	24329.574	0.02				ug/L
|	Be	9	9.333	0.00	-0.0177	0.026	147.882	ug/L
|	Al	27	19402.154	0.06	2.7326	0.346	12.649	ug/L
⌊>	Sc	45	299809.513	299809.51				ug/L
⌈	Ti	49	146.682	0.00	0.2071	0.039	18.704	ug/L
|	V	51	2587.081	0.00	0.0368	0.008	20.542	ug/L
|	Cr	52	10350.124	0.01	0.3544	0.007	1.957	ug/L
|	Cr	53	533.401	0.00	0.4315	0.065	14.998	ug/L
|	Mn	55	2832.763	0.01	0.1948	0.004	2.270	ug/L
|	Co	59	104.668	0.00	0.0021	0.001	69.690	ug/L
|	Ni	60	196.671	0.00	0.0923	0.003	2.737	ug/L
|	Cu	65	392.345	0.00	0.1214	0.021	17.017	ug/L
|	Zn	66	2385.975	0.00	1.3872	0.064	4.631	ug/L
|>	Ge	72	453506.051	453506.05				ug/L
|	As	75	-128.257	0.00	0.0243	0.042	171.851	ug/L
|	Se	77	58.000	0.00	-0.1811	0.112	61.922	ug/L
|	Se	82	7.649	0.00	0.1002	0.130	129.793	ug/L
⌊	Rb	85	55.334	0.00				mg/L
	Y	89	291658.161	-56124.02				ug/L
	Rh	103	9.333	-1.00				ug/L
⌈	Mo	98	26.795	0.00	0.0194	0.001	6.525	ug/L
|	Ag	107	30.667	-0.00	0.0035	0.000	6.694	ug/L
|	Cd	114	-3.257	-0.00	-0.0096	0.003	30.952	ug/L
|>	In	115	388934.605	388934.61				ug/L
|	Sn	118	144.268	0.00	0.0184	0.001	7.848	ug/L
⌊	Sb	123	65.327	0.00	0.0116	0.003	28.616	ug/L
⌈	Ba	135	124.669	0.00	0.0811	0.003	4.260	ug/L
|	Ce	140	533.401	0.00				ug/L
⌊>	Tb	159	544617.535	544617.54				ug/L
⌈	Ho	165	6.667	-0.00				ug/L
|	Tl	203	37.000	0.00	0.0026	0.001	33.521	ug/L
|	Tl	205	83.342	0.00	0.0134	0.000	3.020	ug/L
|	Pb	206	517.685	0.00	0.0140	0.005	34.811	ug/L
|	Pb	207	455.015	0.00	0.0238	0.003	13.045	ug/L
|	Pb	208	2093.441	0.00	0.0172	0.004	24.361	ug/L
|	U	238	148.336	0.00	0.0023	0.001	30.197	ug/L
⌊>	Bi	209	547978.397	547978.40				ug/L

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⌈	Na	23	133394.870	0.38	0.0170	0.002	10.633	mg/L
|	Mg	24	43431.792	0.14	0.0082	0.001	12.297	mg/L
|	K	39	585106.206	0.08	-0.0020	0.004	208.161	mg/L
|	Ca	43	850.121	0.00	0.0350	0.002	4.367	mg/L
|	Fe	54	91863.459	0.15	0.0760	0.016	20.883	mg/L
|	Fe	57	7940.612	-0.00	0.0008	0.002	239.256	mg/L
⌊>	Sc-1	45	299809.513	299809.51				mg/L
	Cl	35	58076.852	39060.78				mg/L
	Kr	83	40.334	-20.33				mg/L
	Br	81	8591.023	-19.35				mg/L
	P	31	22368.362	8972.46				mg/L
	S	34	233177.633	45196.66				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		86.791			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.085			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		108.294			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		110.416			
⌈	Na	23					

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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102045001

Sample Date/Time: Tuesday, February 22, 2011 16:31:41
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 50
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23427.654	0.02				ug/L
|	Be	9	6.000	0.00	-0.0314	0.013	42.392	ug/L
|	Al	27	62075.684	0.21	10.2025	0.938	9.190	ug/L
|>	Sc	45	290330.251	290330.25				ug/L
⌈	Ti	49	496.729	0.00	0.8427	0.191	22.659	ug/L
|	V	51	3743.642	0.00	0.1853	0.011	5.967	ug/L
|	Cr	52	13360.386	0.01	0.8363	0.020	2.427	ug/L
|	Cr	53	1336.891	0.00	1.3788	0.186	13.454	ug/L
|	Mn	55	426801.756	0.99	37.6538	0.847	2.250	ug/L
|	Co	59	1037.731	0.00	0.1056	0.006	5.624	ug/L
|	Ni	60	8624.807	0.02	4.5494	0.171	3.751	ug/L
|	Cu	65	2488.001	0.01	1.2051	0.026	2.171	ug/L
|	Zn	66	33797.710	0.08	28.8964	0.551	1.905	ug/L
|>	Ge	72	429707.697	429707.70				ug/L
|	As	75	-19.295	0.00	0.1324	0.047	35.287	ug/L
|	Se	77	90.000	0.00	0.3355	0.008	2.330	ug/L
|	Se	82	20.931	0.00	0.2592	0.165	63.710	ug/L
⌊	Rb	85	5078.341	0.01				mg/L
	Y	89	274758.363	-73023.82				ug/L
	Rh	103	50.001	39.67				ug/L
⌈	Mo	98	723.641	0.00	0.3120	0.012	3.744	ug/L
|	Ag	107	31.667	-0.00	0.0041	0.001	19.240	ug/L
|	Cd	114	56.241	0.00	0.0460	0.004	9.674	ug/L
|>	In	115	363600.331	363600.33				ug/L
|	Sn	118	199.869	0.00	0.0353	0.001	3.123	ug/L
⌊	Sb	123	183.204	0.00	0.0447	0.004	7.919	ug/L
⌈	Ba	135	29546.896	0.06	17.1988	0.172	1.001	ug/L
|	Ce	140	230.026	0.00				ug/L
|>	Tb	159	509139.240	509139.24				ug/L
⌈	Ho	165	40.004	0.00				ug/L
|	Tl	203	90.335	0.00	0.0105	0.001	13.501	ug/L
|	Tl	205	170.018	0.00	0.0187	0.002	10.183	ug/L
|	Pb	206	1116.740	0.00	0.1242	0.012	9.832	ug/L
|	Pb	207	915.384	0.00	0.1145	0.005	4.063	ug/L
|	Pb	208	4419.434	0.01	0.1198	0.004	3.034	ug/L
|	U	238	1615.147	0.00	0.0438	0.001	1.889	ug/L
|>	Bi	209	506397.052	506397.05				ug/L

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⌈	Na	23	58393780.555	201.34	10.6959	0.396	3.705	mg/L
|	Mg	24	14745272.053	50.87	4.2769	0.220	5.134	mg/L
|	K	39	8732006.168	28.24	1.0093	0.042	4.120	mg/L
|	Ca	43	371394.194	1.28	20.4844	0.617	3.013	mg/L
|	Fe	54	186997.705	0.48	0.2404	0.024	9.782	mg/L
|	Fe	57	65654.964	0.20	0.2384	0.020	8.393	mg/L
⌊>	Sc-1	45	290330.251	290330.25				mg/L
	Cl	35	512796.515	493780.45				mg/L
	Kr	83	46.334	-14.33				mg/L
	Br	81	13125.280	4514.90				mg/L
	P	31	22762.552	9366.65				mg/L
	S	34	608615.239	420634.26				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		82.236			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		92.631			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		101.240			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		102.037			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102045001
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Method 6020 - Summary Report

Sample ID: L1102045002 WG356896-03

Sample Date/Time: Tuesday, February 22, 2011 16:38:28
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 51
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21323.132	0.02				ug/L
|	Be	9	17.333	0.00	0.0208	0.016	79.230	ug/L
|	Al	27	436631.995	1.64	81.6824	4.159	5.091	ug/L
⌊>	Sc	45	265308.859	265308.86				ug/L
⌈	Ti	49	1410.245	0.00	2.5731	0.677	26.320	ug/L
|	V	51	35151.821	0.08	3.9558	0.086	2.176	ug/L
|	Cr	52	15615.673	0.02	1.2261	0.009	0.717	ug/L
|	Cr	53	2847.358	0.01	3.2276	0.243	7.539	ug/L
|	Mn	55	733301.991	1.77	67.2816	1.105	1.642	ug/L
|	Co	59	6748.011	0.02	0.7650	0.023	3.054	ug/L
|	Ni	60	7059.896	0.02	3.8701	0.047	1.226	ug/L
|	Cu	65	97893.828	0.24	52.0631	0.617	1.186	ug/L
|	Zn	66	155844.052	0.38	140.7611	2.498	1.775	ug/L
| >	Ge	72	413293.766	413293.77				ug/L
|	As	75	284.634	0.00	0.4640	0.053	11.518	ug/L
|	Se	77	165.335	0.00	1.5458	0.239	15.482	ug/L
|	Se	82	32.937	0.00	0.4104	0.035	8.617	ug/L
⌊	Rb	85	5766.053	0.01				mg/L
	Y	89	271226.901	-76555.28				ug/L
	Rh	103	56.001	45.67				ug/L
⌈	Mo	98	1366.048	0.00	0.6220	0.016	2.587	ug/L
|	Ag	107	295.341	0.00	0.0674	0.003	4.159	ug/L
|	Cd	114	1761.142	0.01	1.7648	0.019	1.105	ug/L
| >	In	115	339242.875	339242.87				ug/L
|	Sn	118	277.604	0.00	0.0606	0.001	1.224	ug/L
⌊	Sb	123	987.049	0.00	0.2816	0.015	5.410	ug/L
⌈	Ba	135	32319.801	0.07	20.5569	0.186	0.903	ug/L
|	Ce	140	4167.953	0.01				ug/L
⌊>	Tb	159	465809.483	465809.48				ug/L
⌈	Ho	165	50.005	0.00				ug/L
|	Tl	203	438.014	0.00	0.0670	0.004	5.725	ug/L
|	Tl	205	1016.821	0.00	0.0739	0.009	12.041	ug/L
|	Pb	206	33849.539	0.07	6.5018	0.147	2.267	ug/L
|	Pb	207	28884.615	0.06	5.9030	0.107	1.817	ug/L
|	Pb	208	135588.808	0.30	6.2349	0.170	2.726	ug/L
|	U	238	6316.391	0.01	0.1976	0.004	2.250	ug/L
⌊>	Bi	209	450570.259	450570.26				ug/L

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⌈	Na	23	299277898.739	1130.18	60.0536	5.741	9.560	mg/L
|	Mg	24	16794824.689	63.41	5.3322	0.442	8.296	mg/L
|	K	39	9135636.895	32.58	1.1651	0.054	4.644	mg/L
|	Ca	43	419751.646	1.58	25.3334	1.266	4.998	mg/L
|	Fe	54	399833.211	1.35	0.6597	0.033	5.060	mg/L
|	Fe	57	151097.179	0.54	0.6466	0.062	9.536	mg/L
⌊>	Sc-1	45	265308.859	265308.86				mg/L
	Cl	35	1855714.594	1836698.52				mg/L
	Kr	83	45.667	-15.00				mg/L
	Br	81	15122.761	6512.39				mg/L
	P	31	20764.942	7369.04				mg/L
	S	34	570624.146	382643.17				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		79.095			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		86.426			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		92.624			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		90.788			
⌈	Na	23					

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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Zn 66 Upper, S, EEE	Zn	66	

Sample ID: L1102045002 WG356896-03
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Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102045002DUP WG356896-09

Sample Date/Time: Tuesday, February 22, 2011 16:45:15
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 52
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21556.892	0.02				ug/L
|	Be	9	4.667	0.00	-0.0356	0.005	13.493	ug/L
|	Al	27	233989.764	0.84	41.6636	8.754	21.012	ug/L
|>	Sc	45	278683.677	278683.68				ug/L
⌈	Ti	49	1870.481	0.00	3.2519	3.267	100.477	ug/L
|	V	51	35456.212	0.08	3.8471	0.087	2.267	ug/L
|	Cr	52	14989.043	0.02	1.0655	0.044	4.093	ug/L
|	Cr	53	2620.605	0.01	2.8521	0.060	2.093	ug/L
|	Mn	55	738652.390	1.73	65.4379	0.573	0.876	ug/L
|	Co	59	6439.805	0.01	0.7042	0.009	1.249	ug/L
|	Ni	60	7160.306	0.02	3.7881	0.114	3.009	ug/L
|	Cu	65	104147.370	0.24	53.4837	0.338	0.632	ug/L
|	Zn	66	159757.906	0.37	139.2902	1.746	1.254	ug/L
|>	Ge	72	428060.998	428061.00				ug/L
|	As	75	135.298	0.00	0.2951	0.021	7.211	ug/L
|	Se	77	165.335	0.00	1.4591	0.099	6.765	ug/L
|	Se	82	32.656	0.00	0.3919	0.111	28.314	ug/L
⌊	Rb	85	5530.585	0.01				mg/L
	Y	89	276881.799	-70900.38				ug/L
	Rh	103	61.001	50.67				ug/L
⌈	Mo	98	1412.575	0.00	0.6273	0.004	0.582	ug/L
|	Ag	107	2965.137	0.01	0.6849	0.009	1.245	ug/L
|	Cd	114	830.350	0.00	0.8068	0.074	9.154	ug/L
|>	In	115	347757.307	347757.31				ug/L
|	Sn	118	339.072	0.00	0.0755	0.004	4.824	ug/L
⌊	Sb	123	993.803	0.00	0.2762	0.012	4.448	ug/L
⌈	Ba	135	33509.430	0.07	20.2859	0.125	0.615	ug/L
|	Ce	140	1620.293	0.00				ug/L
|>	Tb	159	489347.027	489347.03				ug/L
⌈	Ho	165	30.003	0.00				ug/L
|	Tl	203	139.669	0.00	0.0193	0.001	6.135	ug/L
|	Tl	205	353.375	0.00	0.0309	0.002	6.499	ug/L
|	Pb	206	14784.411	0.03	2.7202	0.041	1.518	ug/L
|	Pb	207	12724.573	0.03	2.4960	0.120	4.803	ug/L
|	Pb	208	58371.609	0.12	2.5714	0.083	3.213	ug/L
|	U	238	4878.240	0.01	0.1479	0.004	2.802	ug/L
|>	Bi	209	463497.072	463497.07				ug/L

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⌈	Na	23	294085970.522	1057.32	56.1819	4.702	8.370	mg/L
|	Mg	24	17348666.063	62.34	5.2418	0.298	5.689	mg/L
|	K	39	9366874.643	31.78	1.1363	0.062	5.483	mg/L
|	Ca	43	433913.979	1.56	24.9495	1.749	7.009	mg/L
|	Fe	54	363303.857	1.14	0.5613	0.045	7.995	mg/L
|	Fe	57	141989.437	0.48	0.5750	0.040	6.998	mg/L
⌊>	Sc-1	45	278683.677	278683.68				mg/L
	Cl	35	1688706.580	1669690.51				mg/L
	Kr	83	39.667	-21.00				mg/L
	Br	81	14839.672	6229.30				mg/L
	P	31	21486.539	8090.64				mg/L
	S	34	584363.258	396382.28				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
| >	Ge	72		81.921			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
| >	In	115		88.595			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.304			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		93.393			
⌈	Na	23					

Sample ID: L1102045002DUP WG356896-09
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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Zn 66 Upper, S, EEE	Zn	66	

Sample ID: L1102045002DUP WG356896-09
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 22, 2011 16:52:02
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19753.176	0.01				ug/L
|	Be	9	13824.897	0.05	56.4534	5.061	8.965	ug/L
|	Al	27	291993.070	1.02	50.6470	3.743	7.391	ug/L
|>	Sc	45	285695.166	285695.17				ug/L
⌈	Ti	49	59703.668	0.13	101.8770	1.823	1.790	ug/L
|	V	51	466790.490	1.04	51.1807	0.185	0.362	ug/L
|	Cr	52	390042.339	0.85	49.7153	0.892	1.793	ug/L
|	Cr	53	46512.571	0.10	50.6172	0.917	1.812	ug/L
|	Mn	55	594330.353	1.33	50.2590	0.467	0.929	ug/L
|	Co	59	476059.240	1.06	50.3128	0.415	0.825	ug/L
|	Ni	60	100523.574	0.22	50.8725	0.884	1.738	ug/L
|	Cu	65	103304.902	0.23	50.6459	0.744	1.469	ug/L
|	Zn	66	61661.834	0.14	50.9638	0.263	0.516	ug/L
|>	Ge	72	448360.978	448360.98				ug/L
|	As	75	47429.121	0.11	48.0731	0.423	0.879	ug/L
|	Se	77	3548.630	0.01	49.2429	0.401	0.815	ug/L
|	Se	82	4399.534	0.01	48.5018	1.116	2.300	ug/L
⌊	Rb	85	1869.860	0.00				mg/L
	Y	89	292801.248	-54980.93				ug/L
	Rh	103	18.334	8.00				ug/L
⌈	Mo	98	229748.282	0.63	95.7097	1.713	1.790	ug/L
|	Ag	107	228859.496	0.63	50.5191	0.814	1.612	ug/L
|	Cd	114	51467.566	0.14	48.0584	1.997	4.156	ug/L
|>	In	115	365549.310	365549.31				ug/L
|	Sn	118	191058.223	0.52	49.3239	0.813	1.649	ug/L
⌊	Sb	123	182694.726	0.50	49.1562	0.613	1.247	ug/L
⌈	Ba	135	78180.879	0.16	46.0647	0.498	1.082	ug/L
|	Ce	140	50.005	0.00				ug/L
|>	Tb	159	502657.979	502657.98				ug/L
⌈	Ho	165	6.667	-0.00				ug/L
|	Tl	203	345144.574	0.70	50.1765	0.866	1.725	ug/L
|	Tl	205	863453.285	1.76	50.7459	1.890	3.724	ug/L
|	Pb	206	283747.512	0.58	50.6094	0.071	0.141	ug/L
|	Pb	207	263542.143	0.54	49.9523	0.630	1.261	ug/L
|	Pb	208	1175621.253	2.40	50.1798	0.240	0.479	ug/L
|	U	238	1841969.129	3.76	53.4265	1.650	3.089	ug/L
|>	Bi	209	489635.595	489635.59				ug/L

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⌈	Na	23	27631643.456	96.82	5.1419	0.319	6.198	mg/L
|	Mg	24	17273210.835	60.56	5.0924	0.329	6.463	mg/L
|	K	39	41572232.504	143.73	5.1566	0.128	2.483	mg/L
|	Ca	43	90251.381	0.32	5.0491	0.209	4.135	mg/L
|	Fe	54	2859494.814	9.86	4.7980	0.197	4.110	mg/L
|	Fe	57	1211445.769	4.22	5.0095	0.265	5.295	mg/L
⌊>	Sc-1	45	285695.166	285695.17				mg/L
	Cl	35	20354.695	1338.63				mg/L
	Kr	83	58.001	-2.67				mg/L
	Br	81	7133.881	-1476.50				mg/L
	P	31	11128.901	-2267.00				mg/L
	S	34	204027.406	16046.43				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	102.361				
|	Cr	52	99.431				
|	Cr	53					
|	Mn	55	100.518				
|	Co	59	100.626				
|	Ni	60	101.745				
|	Cu	65	101.292				
|	Zn	66	101.928				
|>	Ge	72		85.806			
|	As	75	96.146				
|	Se	77					
|	Se	82	97.004				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	101.038				
|	Cd	114	96.117				
|>	In	115		93.128			
|	Sn	118					
⌊	Sb	123	98.312				
⌈	Ba	135	92.129				
|	Ce	140					
⌊>	Tb	159		99.951			
⌈	Ho	165					
|	Tl	203	100.353				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	100.360				
|	U	238	106.853				
⌊>	Bi	209		98.660			
⌈	Na	23					

Sample ID: QC Std 6
Report Date/Time: Tuesday, February 22, 2011 16:54:14

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Tuesday, February 22, 2011 16:54:14
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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 22, 2011 16:59:17
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19953.283	0.01				ug/L
|	Be	9	3.333	0.00	-0.0414	0.005	12.134	ug/L
|	Al	27	3650.687	0.00	0.1198	0.121	100.638	ug/L
⌊>	Sc	45	284784.503	284784.50				ug/L
⌈	Ti	49	70.007	0.00	0.0782	0.027	34.791	ug/L
|	V	51	2186.493	-0.00	-0.0059	0.007	110.571	ug/L
|	Cr	52	7262.377	-0.00	-0.0388	0.012	29.816	ug/L
|	Cr	53	273.364	0.00	0.1522	0.038	24.817	ug/L
|	Mn	55	335.009	0.00	-0.0140	0.001	6.664	ug/L
|	Co	59	49.334	-0.00	-0.0037	0.000	12.066	ug/L
|	Ni	60	52.001	0.00	0.0200	0.002	10.049	ug/L
|	Cu	65	121.335	0.00	-0.0101	0.003	29.140	ug/L
|	Zn	66	524.019	0.00	-0.1505	0.016	10.933	ug/L
|>	Ge	72	451720.438	451720.44				ug/L
|	As	75	-136.230	0.00	0.0156	0.012	74.323	ug/L
|	Se	77	57.334	0.00	-0.1840	0.371	201.362	ug/L
|	Se	82	-1.441	0.00	0.0014	0.066	4757.279	ug/L
⌊	Rb	85	18.667	-0.00				mg/L
	Y	89	291431.161	-56351.02				ug/L
	Rh	103	5.333	-5.00				ug/L
⌈	Mo	98	118.760	0.00	0.0583	0.010	16.501	ug/L
|	Ag	107	23.334	-0.00	0.0022	0.001	23.331	ug/L
|	Cd	114	-5.851	-0.00	-0.0122	0.004	29.536	ug/L
|>	In	115	366329.811	366329.81				ug/L
|	Sn	118	293.471	0.00	0.0590	0.002	4.109	ug/L
⌊	Sb	123	43.369	-0.00	0.0067	0.002	27.233	ug/L
⌈	Ba	135	22.000	0.00	0.0261	0.002	7.560	ug/L
|	Ce	140	26.669	-0.00				ug/L
⌊>	Tb	159	508191.215	508191.22				ug/L
⌈	Ho	165	16.668	-0.00				ug/L
|	Tl	203	30.334	0.00	0.0021	0.000	21.556	ug/L
|	Tl	205	26.669	0.00	0.0105	0.001	8.135	ug/L
|	Pb	206	396.012	0.00	0.0003	0.007	2187.420	ug/L
|	Pb	207	354.010	0.00	0.0122	0.004	35.339	ug/L
|	Pb	208	1603.400	0.00	0.0041	0.004	89.739	ug/L
|	U	238	97.668	0.00	0.0012	0.000	25.182	ug/L
⌊>	Bi	209	502219.142	502219.14				ug/L

Sample ID: QC Std 7
Report Date/Time: Tuesday, February 22, 2011 17:01:28
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⌈	Na	23	22420.680	0.01	-0.0025	0.000	6.987	mg/L
|	Mg	24	723.432	0.00	-0.0039	0.000	0.688	mg/L
|	K	39	557441.518	0.08	-0.0020	0.002	119.474	mg/L
|	Ca	43	196.688	-0.00	0.0008	0.004	452.855	mg/L
|	Fe	54	42178.983	-0.01	-0.0015	0.005	348.381	mg/L
|	Fe	57	6556.140	-0.00	-0.0034	0.001	15.063	mg/L
⌊>	Sc-1	45	284784.503	284784.50				mg/L
	Cl	35	19486.972	470.90				mg/L
	Kr	83	50.667	-10.00				mg/L
	Br	81	7080.506	-1529.87				mg/L
	P	31	11119.689	-2276.21				mg/L
	S	34	219800.737	31819.76				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		86.449			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		93.326			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		101.051			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		101.195			
⌈	Na	23					

Sample ID: QC Std 7
Report Date/Time: Tuesday, February 22, 2011 17:01:28

Approved: February 23, 2011

|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\└>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Tuesday, February 22, 2011 17:01:28

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: PBW 73 WG357168-02

Sample Date/Time: Tuesday, February 22, 2011 17:06:03
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 53
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20086.823	0.01				ug/L
|	Be	9	10.000	0.00	-0.0143	0.007	51.897	ug/L
|	Al	27	15645.568	0.05	2.2293	0.117	5.264	ug/L
⌊>	Sc	45	284713.838	284713.84				ug/L
⌈	Ti	49	76.675	0.00	0.0946	0.045	47.759	ug/L
|	V	51	2217.093	0.00	0.0058	0.002	34.867	ug/L
|	Cr	52	8714.549	0.00	0.1879	0.019	10.243	ug/L
|	Cr	53	446.721	0.00	0.3566	0.029	8.261	ug/L
|	Mn	55	1156.078	0.00	0.0583	0.002	2.631	ug/L
|	Co	59	75.334	0.00	-0.0007	0.001	204.155	ug/L
|	Ni	60	94.668	0.00	0.0431	0.004	10.431	ug/L
|	Cu	65	198.671	0.00	0.0309	0.010	33.869	ug/L
|	Zn	66	2295.620	0.00	1.3860	0.037	2.649	ug/L
|>	Ge	72	436502.866	436502.87				ug/L
|	As	75	-159.489	-0.00	-0.0132	0.035	263.186	ug/L
|	Se	77	57.334	0.00	-0.1611	0.157	97.653	ug/L
|	Se	82	8.954	0.00	0.1190	0.144	120.815	ug/L
⌊	Rb	85	41.667	0.00				mg/L
	Y	89	297012.601	-50769.58				ug/L
	Rh	103	12.333	2.00				ug/L
⌈	Mo	98	54.384	0.00	0.0317	0.003	9.917	ug/L
|	Ag	107	24.667	-0.00	0.0026	0.001	37.510	ug/L
|	Cd	114	1.192	-0.00	-0.0056	0.003	57.159	ug/L
|>	In	115	364485.286	364485.29				ug/L
|	Sn	118	175.868	0.00	0.0289	0.004	13.891	ug/L
⌊	Sb	123	44.618	-0.00	0.0071	0.001	12.277	ug/L
⌈	Ba	135	77.001	0.00	0.0591	0.003	4.981	ug/L
|	Ce	140	43.338	0.00				ug/L
⌊>	Tb	159	498901.223	498901.22				ug/L
⌈	Ho	165	20.002	0.00				ug/L
|	Tl	203	12.333	-0.00	-0.0004	0.001	150.554	ug/L
|	Tl	205	20.002	0.00	0.0102	0.001	10.037	ug/L
|	Pb	206	515.685	0.00	0.0219	0.004	18.529	ug/L
|	Pb	207	410.013	0.00	0.0232	0.003	14.065	ug/L
|	Pb	208	2000.766	0.00	0.0213	0.002	8.722	ug/L
|	U	238	49.001	0.00	-0.0001	0.000	33.126	ug/L
⌊>	Bi	209	497573.884	497573.88				ug/L

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⌈	Na	23	42658.416	0.08	0.0013	0.000	25.848	mg/L
|	Mg	24	8707.996	0.03	-0.0015	0.000	5.443	mg/L
|	K	39	568340.517	0.12	-0.0006	0.001	190.861	mg/L
|	Ca	43	376.712	0.00	0.0109	0.004	37.138	mg/L
|	Fe	54	87607.368	0.15	0.0760	0.008	11.104	mg/L
|	Fe	57	6989.809	-0.00	-0.0016	0.001	37.774	mg/L
⌊>	Sc-1	45	284713.838	284713.84				mg/L
	Cl	35	30057.113	11041.04				mg/L
	Kr	83	43.667	-17.00				mg/L
	Br	81	7731.654	-878.72				mg/L
	P	31	20327.337	6931.43				mg/L
	S	34	232595.958	44614.98				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		83.537			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		92.856			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.204			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.259			
⌈	Na	23					

Sample ID: PBW 73 WG357168-02
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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

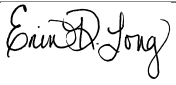
QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 73 WG357168-02
Report Date/Time: Tuesday, February 22, 2011 17:08:16
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Method 6020 - Summary Report

Sample ID: LCSW 73 ~~WG357468-03~~ WG357168-03

Sample Date/Time: Tuesday, February 22, 2011 17:12:50
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 54
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20521.268	0.01				ug/L
|	Be	9	6814.321	0.02	26.7226	0.765	2.864	ug/L
|	Al	27	159800.354	0.53	26.4329	0.869	3.287	ug/L
⌊>	Sc	45	296622.346	296622.35				ug/L
⌈	Ti	49	86.676	0.00	0.1094	0.027	24.668	ug/L
|	V	51	242255.252	0.54	26.6941	0.081	0.304	ug/L
|	Cr	52	215084.082	0.47	27.2366	0.523	1.920	ug/L
|	Cr	53	24839.980	0.06	27.2170	0.946	3.477	ug/L
|	Mn	55	319149.818	0.72	27.2203	0.646	2.375	ug/L
|	Co	59	252271.480	0.57	26.9098	0.545	2.027	ug/L
|	Ni	60	53543.503	0.12	27.3490	0.353	1.292	ug/L
|	Cu	65	55583.613	0.12	27.4695	0.155	0.565	ug/L
|	Zn	66	31603.513	0.07	26.0816	0.226	0.867	ug/L
|>	Ge	72	444210.951	444210.95				ug/L
|	As	75	22477.935	0.05	23.0749	0.544	2.359	ug/L
|	Se	77	1636.134	0.00	22.3915	1.973	8.813	ug/L
|	Se	82	2012.558	0.00	22.4060	0.834	3.720	ug/L
⌊	Rb	85	30.000	0.00				mg/L
	Y	89	292355.620	-55426.56				ug/L
	Rh	103	18.334	8.00				ug/L
⌈	Mo	98	37.982	0.00	0.0246	0.001	4.586	ug/L
|	Ag	107	110334.182	0.30	24.1313	0.452	1.872	ug/L
|	Cd	114	26987.457	0.07	24.9609	0.219	0.878	ug/L
|>	In	115	368918.536	368918.54				ug/L
|	Sn	118	128.534	0.00	0.0163	0.002	11.943	ug/L
⌊	Sb	123	90571.783	0.25	24.1447	0.321	1.328	ug/L
⌈	Ba	135	40917.283	0.08	23.8754	0.087	0.364	ug/L
|	Ce	140	40.004	0.00				ug/L
⌊>	Tb	159	507685.130	507685.13				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	184078.018	0.37	26.5111	0.571	2.153	ug/L
|	Tl	205	441523.571	0.89	25.7087	0.375	1.460	ug/L
|	Pb	206	157198.841	0.32	27.7460	0.554	1.997	ug/L
|	Pb	207	135332.264	0.27	25.3847	0.408	1.609	ug/L
|	Pb	208	625075.010	1.26	26.3995	0.297	1.126	ug/L
|	U	238	966306.664	1.96	27.7692	0.794	2.860	ug/L
⌊>	Bi	209	494347.106	494347.11				ug/L

Sample ID: LCSW 73 ~~WG357468-03~~ WG357168-03
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Na	23	52784.209	0.11	0.0028	0.000	14.858	mg/L
Mg	24	4711.582	0.01	-0.0027	0.000	4.162	mg/L
K	39	552194.457	-0.02	-0.0054	0.003	58.533	mg/L
Ca	43	330.038	0.00	0.0075	0.001	18.890	mg/L
Fe	54	87766.664	0.13	0.0704	0.008	10.730	mg/L
Fe	57	7106.569	-0.00	-0.0022	0.002	68.750	mg/L
> Sc-1	45	296622.346	296622.35				mg/L
Cl	35	20174.998	1158.93				mg/L
Kr	83	39.000	-21.67				mg/L
Br	81	7520.169	-1090.21				mg/L
P	31	20708.148	7312.24				mg/L
S	34	216734.964	28753.99				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		85.012			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		93.986			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		100.950			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		99.609			
Na	23					

Sample ID: LCSW 73 ~~WG357468-03~~ WG357168-03
Report Date/Time: Tuesday, February 22, 2011 17:15:03

Approved: February 23, 2011

| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 73 ~~WG357468-03~~ WG357168-03
Report Date/Time: Tuesday, February 22, 2011 17:15:03
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Method 6020 - Summary Report

Sample ID: L1102051701

Sample Date/Time: Tuesday, February 22, 2011 17:19:38
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 55
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	27237.134	0.00				ug/L
|	Be	9	712.025	0.00	1.7722	0.053	2.981	ug/L
|	Al	27	110564364.454	243.79	12188.0343	555.455	4.557	ug/L
⌊>	Sc	45	453789.914	453789.91				ug/L
⌈	Ti	49	241293.656	0.52	398.0461	5.995	1.506	ug/L
|	V	51	474060.184	1.02	50.2311	0.503	1.001	ug/L
|	Cr	52	432964.457	0.92	53.3947	0.314	0.588	ug/L
|	Cr	53	49081.830	0.11	51.6062	1.183	2.293	ug/L
|	Mn	55	13725847.065	29.58	1122.4984	11.280	1.005	ug/L
|	Co	59	355654.534	0.77	36.3195	0.397	1.093	ug/L
|	Ni	60	145369.507	0.31	71.1093	0.884	1.243	ug/L
|	Cu	65	856119.375	1.85	406.0782	3.766	0.927	ug/L
|	Zn	66	467932.784	1.01	377.5168	5.220	1.383	ug/L
|>	Ge	72	463955.210	463955.21				ug/L
|	As	75	18461.612	0.04	18.1783	0.117	0.644	ug/L
|	Se	77	306.005	0.00	3.1917	0.287	8.982	ug/L
|	Se	82	158.972	0.00	1.7074	0.214	12.545	ug/L
⌊	Rb	85	208211.959	0.45				mg/L
	Y	89	514720.847	166938.66				ug/L
	Rh	103	284.340	274.01				ug/L
⌈	Mo	98	29408.541	0.08	12.6706	0.130	1.028	ug/L
|	Ag	107	9268.386	0.03	2.1121	0.043	2.037	ug/L
|	Cd	114	1691.249	0.00	1.6260	0.084	5.139	ug/L
|>	In	115	353664.828	353664.83				ug/L
|	Sn	118	13263.857	0.04	3.5244	0.066	1.864	ug/L
⌊	Sb	123	8362.643	0.02	2.3210	0.027	1.168	ug/L
⌈	Ba	135	13926569.928	26.62	7880.0853	241.256	3.062	ug/L
|	Ce	140	1246303.073	2.38				ug/L
⌊>	Tb	159	523383.560	523383.56				ug/L
⌈	Ho	165	19080.116	0.04				ug/L
|	Tl	203	1897.866	0.00	0.2948	0.008	2.571	ug/L
|	Tl	205	4628.201	0.01	0.3016	0.008	2.683	ug/L
|	Pb	206	2064400.925	4.54	396.7986	8.191	2.064	ug/L
|	Pb	207	1760344.261	3.87	359.3995	5.251	1.461	ug/L
|	Pb	208	8056042.441	17.70	370.4798	6.687	1.805	ug/L
|	U	238	77831.156	0.17	2.4286	0.048	1.995	ug/L
⌊>	Bi	209	454990.117	454990.12				ug/L

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⌈	Na	23	214784642.366	473.46	25.1561	0.613	2.438	mg/L
|	Mg	24	19598740.968	43.23	3.6342	0.202	5.545	mg/L
|	K	39	70162453.574	152.91	5.4861	0.400	7.296	mg/L
|	Ca	43	741598.931	1.63	26.1491	0.634	2.425	mg/L
|	Fe	54	34592408.004	76.15	37.0280	2.161	5.837	mg/L
|	Fe	57	14057239.527	30.97	36.7619	1.059	2.881	mg/L
⌊>	Sc-1	45	453789.914	453789.91				mg/L
	Cl	35	1293879.552	1274863.48				mg/L
	Kr	83	80.334	19.67				mg/L
	Br	81	37970.020	29359.64				mg/L
	P	31	288156.124	274760.22				mg/L
	S	34	543953.165	355972.19				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		88.791			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		90.100			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		104.072			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		91.679			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Cu 65 Upper, S, EEE	Cu	65	
Zn 66 Upper, S, EEE	Zn	66	
Ba 135 Upper, S, EEE	Ba	135	
Pb 206 Upper, S, EEE	Pb	206	
Pb 208 Upper, S, EEE	Pb	208	

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102053301

Sample Date/Time: Tuesday, February 22, 2011 17:26:27
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 56
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20939.043	0.01				ug/L
|	Be	9	10.000	0.00	-0.0160	0.021	129.268	ug/L
|	Al	27	237404.910	0.78	39.0337	2.952	7.562	ug/L
⌊>	Sc	45	299837.630	299837.63				ug/L
⌈	Ti	49	2033.745	0.00	3.4924	0.307	8.790	ug/L
|	V	51	3805.381	0.00	0.1815	0.060	33.266	ug/L
|	Cr	52	17402.309	0.02	1.3292	0.010	0.766	ug/L
|	Cr	53	6696.247	0.01	7.2998	0.160	2.198	ug/L
|	Mn	55	70716.048	0.16	6.0557	0.069	1.143	ug/L
|	Co	59	1435.451	0.00	0.1457	0.003	1.929	ug/L
|	Ni	60	2161.590	0.00	1.1078	0.062	5.562	ug/L
|	Cu	65	2179.927	0.00	1.0206	0.038	3.701	ug/L
|	Zn	66	16402.277	0.04	13.3880	0.033	0.247	ug/L
|>	Ge	72	439979.718	439979.72				ug/L
|	As	75	801.664	0.00	0.9783	0.114	11.693	ug/L
|	Se	77	377.340	0.00	4.4522	0.154	3.463	ug/L
|	Se	82	285.237	0.00	3.2258	0.351	10.885	ug/L
⌊	Rb	85	7736.069	0.02				mg/L
	Y	89	294391.611	-53390.57				ug/L
	Rh	103	99.335	89.00				ug/L
⌈	Mo	98	410.108	0.00	0.1909	0.014	7.214	ug/L
|	Ag	107	31.667	-0.00	0.0045	0.000	7.037	ug/L
|	Cd	114	73.319	0.00	0.0667	0.019	29.015	ug/L
|>	In	115	343718.659	343718.66				ug/L
|	Sn	118	920.576	0.00	0.2364	0.006	2.555	ug/L
⌊	Sb	123	459.796	0.00	0.1269	0.010	7.705	ug/L
⌈	Ba	135	52982.254	0.11	32.8219	0.244	0.744	ug/L
|	Ce	140	2393.859	0.00				ug/L
⌊>	Tb	159	478192.868	478192.87				ug/L
⌈	Ho	165	43.338	0.00				ug/L
|	Tl	203	80.001	0.00	0.0110	0.001	12.186	ug/L
|	Tl	205	200.022	0.00	0.0224	0.004	19.219	ug/L
|	Pb	206	17447.078	0.04	3.4403	0.045	1.312	ug/L
|	Pb	207	14824.485	0.03	3.1138	0.018	0.571	ug/L
|	Pb	208	68836.262	0.16	3.2484	0.056	1.718	ug/L
|	U	238	987.059	0.00	0.0307	0.001	2.858	ug/L
⌊>	Bi	209	434785.354	434785.35				ug/L

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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	44633276.574	148.85	12.5223	0.118	0.939	mg/L
|	K	39	7113693.811	21.85	0.7798	0.006	0.770	mg/L
|	Ca	43	144008.935	0.48	7.6772	0.113	1.477	mg/L
|	Fe	54	365268.012	1.06	0.5188	0.020	3.906	mg/L
|	Fe	57	129443.721	0.40	0.4818	0.010	2.002	mg/L
⌊>	Sc-1	45	299837.630	299837.63				mg/L
	Cl	35	5071476.127	5052460.06				mg/L
	Kr	83	50.334	-10.33				mg/L
	Br	81	177310.478	168700.10				mg/L
	P	31	160715.464	147319.56				mg/L
	S	34	351185.576	163204.60				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		84.202			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		87.566			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		95.086			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		87.608			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102053301
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Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102053302 WG357168-01

Sample Date/Time: Tuesday, February 22, 2011 17:33:15
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 57
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	15846.055	-0.00				ug/L
|	Be	9	13.333	0.00	-0.0001	0.014	11489.604	ug/L
|	Al	27	95438.410	0.33	16.2442	0.973	5.990	ug/L
|>	Sc	45	284493.976	284493.98				ug/L
⌈	Ti	49	1243.539	0.00	2.2298	0.583	26.134	ug/L
|	V	51	2654.642	0.00	0.0677	0.039	57.124	ug/L
|	Cr	52	16340.171	0.02	1.2975	0.021	1.588	ug/L
|	Cr	53	6355.990	0.01	7.2811	0.305	4.194	ug/L
|	Mn	55	47825.915	0.11	4.2902	0.030	0.705	ug/L
|	Co	59	844.711	0.00	0.0867	0.005	5.350	ug/L
|	Ni	60	1903.200	0.00	1.0249	0.038	3.743	ug/L
|	Cu	65	1010.394	0.00	0.4616	0.010	2.125	ug/L
|	Zn	66	4473.712	0.01	3.4176	0.041	1.206	ug/L
|>	Ge	72	418865.063	418865.06				ug/L
|	As	75	1111.621	0.00	1.3550	0.115	8.510	ug/L
|	Se	77	315.338	0.00	3.7861	0.362	9.552	ug/L
|	Se	82	413.505	0.00	4.8965	0.311	6.352	ug/L
⌊	Rb	85	7204.667	0.02				mg/L
	Y	89	280991.789	-66790.39				ug/L
	Rh	103	91.335	81.00				ug/L
⌈	Mo	98	380.477	0.00	0.1876	0.014	7.232	ug/L
|	Ag	107	48.334	0.00	0.0091	0.002	21.282	ug/L
|	Cd	114	4.412	0.00	-0.0022	0.014	631.627	ug/L
|>	In	115	324527.093	324527.09				ug/L
|	Sn	118	261.203	0.00	0.0594	0.005	7.948	ug/L
⌊	Sb	123	388.044	0.00	0.1128	0.006	5.331	ug/L
⌈	Ba	135	49224.054	0.11	32.6446	0.275	0.841	ug/L
|	Ce	140	933.471	0.00				ug/L
|>	Tb	159	446627.160	446627.16				ug/L
⌈	Ho	165	20.002	0.00				ug/L
|	Tl	203	113.002	0.00	0.0173	0.002	11.308	ug/L
|	Tl	205	223.358	0.00	0.0245	0.001	2.701	ug/L
|	Pb	206	529.353	0.00	0.0433	0.003	7.032	ug/L
|	Pb	207	420.680	0.00	0.0412	0.008	18.379	ug/L
|	Pb	208	1973.762	0.00	0.0372	0.003	8.380	ug/L
|	U	238	816.708	0.00	0.0265	0.001	4.611	ug/L
|>	Bi	209	413466.757	413466.76				ug/L

Sample ID: L1102053302 WG357168-01
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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	40851460.537	143.53	12.0748	0.442	3.665	mg/L
|	K	39	6837199.185	22.16	0.7910	0.021	2.610	mg/L
|	Ca	43	135323.442	0.48	7.6051	0.224	2.947	mg/L
|	Fe	54	157079.184	0.39	0.1949	0.007	3.362	mg/L
|	Fe	57	42176.524	0.12	0.1452	0.004	2.814	mg/L
⌊>	Sc-1	45	284493.976	284493.98				mg/L
	Cl	35	4725260.747	4706244.68				mg/L
	Kr	83	58.667	-2.00				mg/L
	Br	81	257226.145	248615.77				mg/L
	P	31	144257.792	130861.89				mg/L
	S	34	347331.091	159350.11				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		80.161			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		82.677			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		88.809			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		83.312			
⌈	Na	23					

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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102053302 WG357168-01
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Method 6020 - Summary Report

Sample ID: L1102053302S WG357168-04

Sample Date/Time: Tuesday, February 22, 2011 17:40:04
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 58
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	16981.349	0.00				ug/L
|	Be	9	6271.301	0.02	25.6437	0.165	0.644	ug/L
|	Al	27	165660.956	0.57	28.6362	0.796	2.778	ug/L
⌊>	Sc	45	284235.847	284235.85				ug/L
⌈	Ti	49	466.724	0.00	0.8147	0.051	6.284	ug/L
|	V	51	231668.405	0.55	27.1490	0.649	2.391	ug/L
|	Cr	52	206174.845	0.48	27.7801	0.557	2.004	ug/L
|	Cr	53	27313.334	0.06	31.8480	1.301	4.086	ug/L
|	Mn	55	335608.759	0.80	30.4378	0.406	1.334	ug/L
|	Co	59	226446.524	0.54	25.6782	0.135	0.527	ug/L
|	Ni	60	48132.723	0.12	26.1367	0.230	0.881	ug/L
|	Cu	65	49446.805	0.12	25.9768	0.411	1.584	ug/L
|	Zn	66	31741.954	0.08	27.8906	0.256	0.917	ug/L
| >	Ge	72	417819.846	417819.85				ug/L
|	As	75	23131.761	0.06	25.2295	0.293	1.162	ug/L
|	Se	77	1754.154	0.00	25.6486	0.858	3.345	ug/L
|	Se	82	2095.452	0.01	24.7957	0.780	3.144	ug/L
⌊	Rb	85	6922.466	0.02				mg/L
	Y	89	280127.011	-67655.17				ug/L
	Rh	103	88.668	78.33				ug/L
⌈	Mo	98	358.658	0.00	0.1735	0.010	5.939	ug/L
|	Ag	107	93834.650	0.28	22.8129	0.153	0.671	ug/L
|	Cd	114	25008.896	0.08	25.7277	1.007	3.913	ug/L
| >	In	115	331829.450	331829.45				ug/L
|	Sn	118	490.145	0.00	0.1228	0.002	1.485	ug/L
⌊	Sb	123	85540.396	0.26	25.3545	0.313	1.234	ug/L
⌈	Ba	135	86679.935	0.19	56.0645	0.259	0.462	ug/L
|	Ce	140	640.085	0.00				ug/L
⌊>	Tb	159	457865.401	457865.40				ug/L
⌈	Ho	165	23.336	0.00				ug/L
|	Tl	203	159144.835	0.37	26.3100	0.705	2.679	ug/L
|	Tl	205	398658.579	0.93	26.6430	0.402	1.510	ug/L
|	Pb	206	135341.562	0.31	27.4113	0.454	1.658	ug/L
|	Pb	207	117658.188	0.27	25.3275	0.250	0.987	ug/L
|	Pb	208	550224.487	1.27	26.6720	0.370	1.386	ug/L
|	U	238	871526.866	2.02	28.7274	0.570	1.983	ug/L
⌊>	Bi	209	430770.056	430770.06				ug/L

Sample ID: L1102053302S WG357168-04
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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	42760477.810	150.50	12.6613	0.269	2.128	mg/L
|	K	39	6818414.332	22.13	0.7900	0.041	5.241	mg/L
|	Ca	43	134724.947	0.47	7.5823	0.342	4.509	mg/L
|	Fe	54	148958.161	0.36	0.1814	0.014	7.630	mg/L
|	Fe	57	38471.058	0.11	0.1302	0.009	6.822	mg/L
⌊>	Sc-1	45	284235.847	284235.85				mg/L
	Cl	35	4740885.744	4721869.67				mg/L
	Kr	83	53.667	-7.00				mg/L
	Br	81	172420.532	163810.16				mg/L
	P	31	143448.950	130053.05				mg/L
	S	34	325954.451	137973.47				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		79.961			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		84.537			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		91.044			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		86.799			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102053302S WG357168-04
Report Date/Time: Tuesday, February 22, 2011 17:42:17
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Method 6020 - Summary Report

Sample ID: L1102053302SD WG357168-05

Sample Date/Time: Tuesday, February 22, 2011 17:46:51
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 59
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17699.104	0.01				ug/L
|	Be	9	6625.533	0.02	28.1147	1.769	6.292	ug/L
|	Al	27	269534.749	0.98	48.6660	0.847	1.740	ug/L
⌊>	Sc	45	273968.909	273968.91				ug/L
⌈	Ti	49	866.791	0.00	1.5944	0.180	11.291	ug/L
|	V	51	234844.271	0.57	28.3108	0.452	1.597	ug/L
|	Cr	52	211538.618	0.50	29.3631	0.356	1.214	ug/L
|	Cr	53	29569.982	0.07	35.4554	0.791	2.230	ug/L
|	Mn	55	348105.472	0.86	32.4712	0.405	1.247	ug/L
|	Co	59	233660.001	0.58	27.2538	0.461	1.691	ug/L
|	Ni	60	49993.826	0.12	27.9214	0.379	1.357	ug/L
|	Cu	65	50850.134	0.12	27.4808	0.502	1.828	ug/L
|	Zn	66	32144.240	0.08	29.0767	0.772	2.654	ug/L
| >	Ge	72	406310.496	406310.50				ug/L
|	As	75	23895.369	0.06	26.8016	0.787	2.935	ug/L
|	Se	77	1759.488	0.00	26.5029	1.114	4.205	ug/L
|	Se	82	2215.553	0.01	26.9688	0.712	2.639	ug/L
⌊	Rb	85	7540.918	0.02				mg/L
	Y	89	269295.349	-78486.83				ug/L
	Rh	103	90.001	79.67				ug/L
⌈	Mo	98	364.284	0.00	0.1811	0.011	5.799	ug/L
|	Ag	107	98045.183	0.30	24.5334	0.435	1.772	ug/L
|	Cd	114	24706.376	0.08	26.1471	0.874	3.343	ug/L
| >	In	115	322421.782	322421.78				ug/L
|	Sn	118	244.670	0.00	0.0550	0.003	5.903	ug/L
⌊	Sb	123	87985.181	0.27	26.8435	0.565	2.103	ug/L
⌈	Ba	135	89114.210	0.20	58.7922	0.695	1.183	ug/L
|	Ce	140	1040.158	0.00				ug/L
⌊>	Tb	159	448930.084	448930.08				ug/L
⌈	Ho	165	26.669	0.00				ug/L
|	Tl	203	164831.007	0.39	27.8727	0.941	3.374	ug/L
|	Tl	205	407449.289	0.97	27.8530	0.812	2.916	ug/L
|	Pb	206	141549.956	0.34	29.3287	0.519	1.768	ug/L
|	Pb	207	122740.619	0.29	27.0282	0.513	1.897	ug/L
|	Pb	208	573812.389	1.36	28.4547	0.611	2.149	ug/L
|	U	238	909542.350	2.16	30.6793	0.627	2.045	ug/L
⌊>	Bi	209	421224.194	421224.19				ug/L

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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	43113608.278	157.37	13.2389	0.309	2.330	mg/L
|	K	39	7023342.459	23.75	0.8482	0.011	1.258	mg/L
|	Ca	43	139479.973	0.51	8.1365	0.100	1.230	mg/L
|	Fe	54	170120.207	0.46	0.2282	0.004	1.594	mg/L
|	Fe	57	46636.543	0.14	0.1714	0.006	3.583	mg/L
⌊>	Sc-1	45	273968.909	273968.91				mg/L
	Cl	35	4863702.929	4844686.86				mg/L
	Kr	83	45.001	-15.67				mg/L
	Br	81	195392.734	186782.36				mg/L
	P	31	143887.159	130491.26				mg/L
	S	34	337940.804	149959.83				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		77.759			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		82.140			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		89.267			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		84.875			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102054513

Sample Date/Time: Tuesday, February 22, 2011 17:53:37
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 60
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19335.357	0.01				ug/L
|	Be	9	8.000	0.00	-0.0225	0.008	33.442	ug/L
|	Al	27	136087.371	0.47	23.3063	0.795	3.413	ug/L
⌊>	Sc	45	285677.800	285677.80				ug/L
⌈	Ti	49	550.070	0.00	0.9153	0.144	15.713	ug/L
|	V	51	2945.586	0.00	0.0850	0.008	9.948	ug/L
|	Cr	52	15450.083	0.02	1.0671	0.021	1.978	ug/L
|	Cr	53	1803.677	0.00	1.8580	0.072	3.887	ug/L
|	Mn	55	14036.710	0.03	1.1659	0.105	9.025	ug/L
|	Co	59	290.007	0.00	0.0223	0.002	7.131	ug/L
|	Ni	60	672.696	0.00	0.3402	0.026	7.533	ug/L
|	Cu	65	445.348	0.00	0.1531	0.015	9.988	ug/L
|	Zn	66	4324.374	0.01	3.0871	1.141	36.976	ug/L
| >	Ge	72	440713.648	440713.65				ug/L
|	As	75	-51.377	0.00	0.0995	0.032	31.669	ug/L
|	Se	77	65.334	0.00	-0.0533	0.103	193.046	ug/L
|	Se	82	18.902	0.00	0.2294	0.186	81.038	ug/L
⌊	Rb	85	458.682	0.00				mg/L
	Y	89	289315.934	-58466.25				ug/L
	Rh	103	7.333	-3.00				ug/L
⌈	Mo	98	268.760	0.00	0.1208	0.008	6.369	ug/L
|	Ag	107	59.668	0.00	0.0103	0.011	107.858	ug/L
|	Cd	114	8.311	0.00	0.0010	0.005	466.766	ug/L
| >	In	115	366011.247	366011.25				ug/L
|	Sn	118	455.344	0.00	0.1007	0.008	7.896	ug/L
⌊	Sb	123	59.283	0.00	0.0111	0.002	19.818	ug/L
⌈	Ba	135	457.015	0.00	0.2827	0.017	6.182	ug/L
|	Ce	140	1330.221	0.00				ug/L
⌊>	Tb	159	502538.227	502538.23				ug/L
⌈	Ho	165	36.670	0.00				ug/L
|	Tl	203	234.338	0.00	0.0318	0.007	21.689	ug/L
|	Tl	205	673.424	0.00	0.0484	0.008	15.703	ug/L
|	Pb	206	540.020	0.00	0.0272	0.005	16.897	ug/L
|	Pb	207	443.014	0.00	0.0302	0.007	21.917	ug/L
|	Pb	208	2164.783	0.00	0.0292	0.003	10.533	ug/L
|	U	238	287.340	0.00	0.0067	0.000	4.344	ug/L
⌊>	Bi	209	492440.807	492440.81				ug/L

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⌈	Na	23	305318.670	1.00	0.0502	0.003	5.753	mg/L
|	Mg	24	111610.490	0.39	0.0289	0.001	5.048	mg/L
|	K	39	806631.490	0.94	0.0291	0.001	3.256	mg/L
|	Ca	43	1673.641	0.01	0.0833	0.003	4.169	mg/L
|	Fe	54	148827.944	0.36	0.1800	0.014	7.599	mg/L
|	Fe	57	29747.166	0.08	0.0931	0.008	8.433	mg/L
⌊>	Sc-1	45	285677.800	285677.80				mg/L
	Cl	35	70181.415	51165.35				mg/L
	Kr	83	49.667	-11.00				mg/L
	Br	81	21959.420	13349.04				mg/L
	P	31	17562.135	4166.23				mg/L
	S	34	211930.255	23949.28				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		84.343			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		93.245			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.927			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.225			
⌈	Na	23					

Sample ID: L1102054513
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102054513
Report Date/Time: Tuesday, February 22, 2011 17:55:49
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Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102054513PS WG357217-01

Sample Date/Time: Tuesday, February 22, 2011 18:00:23
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 61
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	26668.861	0.02				ug/L
|	Be	9	17819.883	0.05	62.0585	6.057	9.760	ug/L
|	Al	27	483054.249	1.43	71.5423	1.499	2.096	ug/L
⌊>	Sc	45	335341.152	335341.15				ug/L
⌈	Ti	49	640.085	0.00	0.9468	0.060	6.348	ug/L
|	V	51	585980.770	1.18	58.0731	0.444	0.765	ug/L
|	Cr	52	513397.406	1.02	59.2905	1.314	2.216	ug/L
|	Cr	53	61058.622	0.12	60.0445	0.816	1.359	ug/L
|	Mn	55	760926.815	1.53	58.1341	0.833	1.433	ug/L
|	Co	59	619551.259	1.25	59.1556	0.834	1.409	ug/L
|	Ni	60	129363.697	0.26	59.1486	1.045	1.767	ug/L
|	Cu	65	133388.115	0.27	59.0788	0.399	0.676	ug/L
|	Zn	66	67385.299	0.13	50.3034	0.146	0.291	ug/L
| >	Ge	72	496332.162	496332.16				ug/L
|	As	75	51658.540	0.10	47.3007	0.596	1.261	ug/L
|	Se	77	3611.986	0.01	45.2050	1.209	2.675	ug/L
|	Se	82	4553.400	0.01	45.3526	0.732	1.615	ug/L
⌊	Rb	85	485.017	0.00				mg/L
	Y	89	326929.821	-20852.36				ug/L
	Rh	103	24.334	14.00				ug/L
⌈	Mo	98	311.985	0.00	0.1177	0.005	4.644	ug/L
|	Ag	107	278523.649	0.64	51.4445	1.141	2.218	ug/L
|	Cd	114	63683.856	0.15	49.7371	1.329	2.672	ug/L
| >	In	115	436916.348	436916.35				ug/L
|	Sn	118	627.086	0.00	0.1189	0.005	4.251	ug/L
⌊	Sb	123	218515.074	0.50	49.2041	1.454	2.955	ug/L
⌈	Ba	135	97682.078	0.16	48.4764	0.963	1.987	ug/L
|	Ce	140	1646.967	0.00				ug/L
⌊>	Tb	159	596929.409	596929.41				ug/L
⌈	Ho	165	23.336	0.00				ug/L
|	Tl	203	465896.075	0.78	55.1823	1.506	2.730	ug/L
|	Tl	205	1142096.160	1.90	54.6909	2.158	3.946	ug/L
|	Pb	206	389342.937	0.65	56.5870	2.240	3.958	ug/L
|	Pb	207	337280.904	0.56	52.0688	0.569	1.093	ug/L
|	Pb	208	1584884.949	2.63	55.1116	1.032	1.873	ug/L
|	U	238	2300677.353	3.83	54.3614	1.095	2.015	ug/L
⌊>	Bi	209	601293.410	601293.41				ug/L

Sample ID: L1102054513PS WG357217-01
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⌈	Na	23	312007.177	0.87	0.0429	0.003	7.971	mg/L
|	Mg	24	132029.467	0.39	0.0292	0.002	8.529	mg/L
|	K	39	817231.155	0.56	0.0154	0.004	28.949	mg/L
|	Ca	43	1700.315	0.00	0.0710	0.006	8.721	mg/L
|	Fe	54	165396.976	0.33	0.1666	0.012	7.325	mg/L
|	Fe	57	35218.883	0.08	0.0940	0.004	4.257	mg/L
⌊>	Sc-1	45	335341.152	335341.15				mg/L
	Cl	35	70509.732	51493.66				mg/L
	Kr	83	42.334	-18.33				mg/L
	Br	81	15697.653	7087.28				mg/L
	P	31	27766.852	14370.95				mg/L
	S	34	245737.733	57756.76				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.987			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		111.309			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		118.696			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		121.158			
⌈	Na	23					

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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Bi 209 Int Std for sam	Bi	209	Rerun for AFCEE sample

Sample ID: L1102054513PS WG357217-01
Report Date/Time: Tuesday, February 22, 2011 18:02:35
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Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102054513SDL WG357217-02

Sample Date/Time: Tuesday, February 22, 2011 18:07:10
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 62
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	25031.330	0.02				ug/L
|	Be	9	6.667	0.00	-0.0315	0.004	13.469	ug/L
|	Al	27	44850.498	0.13	6.2818	0.211	3.365	ug/L
|>	Sc	45	329577.157	329577.16				ug/L
⌈	Ti	49	163.351	0.00	0.2033	0.039	19.230	ug/L
|	V	51	2374.980	-0.00	-0.0162	0.012	72.640	ug/L
|	Cr	52	9516.623	0.00	0.1066	0.040	37.511	ug/L
|	Cr	53	630.084	0.00	0.4561	0.136	29.733	ug/L
|	Mn	55	3722.730	0.01	0.2334	0.003	1.239	ug/L
|	Co	59	133.002	0.00	0.0034	0.001	29.552	ug/L
|	Ni	60	237.672	0.00	0.0991	0.009	9.295	ug/L
|	Cu	65	200.671	0.00	0.0169	0.007	42.178	ug/L
|	Zn	66	2700.059	0.00	1.3894	0.099	7.158	ug/L
|>	Ge	72	512653.317	512653.32				ug/L
|	As	75	-120.284	0.00	0.0465	0.046	99.820	ug/L
|	Se	77	70.667	0.00	-0.1191	0.026	21.570	ug/L
|	Se	82	12.652	0.00	0.1392	0.046	33.317	ug/L
⌊	Rb	85	125.002	0.00				mg/L
	Y	89	332762.009	-15020.17				ug/L
	Rh	103	9.000	-1.33				ug/L
⌈	Mo	98	77.348	0.00	0.0348	0.002	4.540	ug/L
|	Ag	107	31.334	-0.00	0.0027	0.001	36.894	ug/L
|	Cd	114	10.238	0.00	0.0009	0.002	226.061	ug/L
|>	In	115	454407.646	454407.65				ug/L
|	Sn	118	172.135	0.00	0.0191	0.001	5.465	ug/L
⌊	Sb	123	448.674	0.00	0.0922	0.013	14.643	ug/L
⌈	Ba	135	123.669	0.00	0.0734	0.005	6.834	ug/L
|	Ce	140	320.037	0.00				ug/L
|>	Tb	159	609564.016	609564.02				ug/L
⌈	Ho	165	0.000	-0.00				ug/L
|	Tl	203	67.001	0.00	0.0055	0.002	27.492	ug/L
|	Tl	205	146.682	0.00	0.0158	0.002	9.989	ug/L
|	Pb	206	543.354	0.00	0.0078	0.004	47.441	ug/L
|	Pb	207	466.016	0.00	0.0163	0.008	46.475	ug/L
|	Pb	208	2187.784	0.00	0.0109	0.004	40.803	ug/L
|	U	238	155.003	0.00	0.0020	0.000	13.485	ug/L
|>	Bi	209	621050.518	621050.52				ug/L

Sample ID: L1102054513SDL WG357217-02
Report Date/Time: Tuesday, February 22, 2011 18:09:22
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⌈	Na	23	120777.053	0.30	0.0128	0.000	2.703	mg/L
|	Mg	24	29422.831	0.09	0.0034	0.000	2.307	mg/L
|	K	39	614091.359	-0.02	-0.0054	0.002	28.400	mg/L
|	Ca	43	626.749	0.00	0.0201	0.004	18.637	mg/L
|	Fe	54	71760.421	0.06	0.0322	0.003	9.980	mg/L
|	Fe	57	12428.967	0.01	0.0141	0.002	11.773	mg/L
⌊>	Sc-1	45	329577.157	329577.16				mg/L
	Cl	35	31115.671	12099.60				mg/L
	Kr	83	40.000	-20.67				mg/L
	Br	81	12000.534	3390.16				mg/L
	P	31	15308.415	1912.51				mg/L
	S	34	242208.176	54227.20				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		98.110			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		115.765			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		121.208			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		125.139			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Tb 159 Int Std for sam	Tb	159	Rerun for AFCEE sample
Bi 209 Int Std for sam	Bi	209	Rerun for AFCEE sample

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 22, 2011 18:13:56
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22041.019	0.01				ug/L
|	Be	9	16058.221	0.05	61.5666	4.240	6.887	ug/L
|	Al	27	311357.476	1.02	50.7028	1.706	3.365	ug/L
⌊>	Sc	45	304197.649	304197.65				ug/L
⌈	Ti	49	65705.042	0.14	103.3565	0.833	0.806	ug/L
|	V	51	512459.354	1.05	51.8085	1.253	2.419	ug/L
|	Cr	52	433761.725	0.88	50.9944	1.539	3.018	ug/L
|	Cr	53	50592.775	0.10	50.7545	1.441	2.838	ug/L
|	Mn	55	654275.649	1.34	51.0064	1.884	3.693	ug/L
|	Co	59	542674.454	1.12	52.8816	1.468	2.777	ug/L
|	Ni	60	113426.020	0.23	52.9234	1.255	2.372	ug/L
|	Cu	65	116697.255	0.24	52.7441	0.955	1.810	ug/L
|	Zn	66	68145.463	0.14	51.9388	0.980	1.887	ug/L
| >	Ge	72	486310.967	486310.97				ug/L
|	As	75	52152.519	0.11	48.7299	0.426	0.874	ug/L
|	Se	77	3890.757	0.01	49.7897	0.890	1.788	ug/L
|	Se	82	4853.242	0.01	49.3312	0.557	1.129	ug/L
⌊	Rb	85	2016.557	0.00				mg/L
	Y	89	312589.051	-35193.13				ug/L
	Rh	103	25.334	15.00				ug/L
⌈	Mo	98	250726.634	0.62	94.4017	1.071	1.135	ug/L
|	Ag	107	254285.120	0.63	50.7296	0.710	1.400	ug/L
|	Cd	114	59366.656	0.15	50.1029	0.991	1.977	ug/L
| >	In	115	404400.757	404400.76				ug/L
|	Sn	118	211148.579	0.52	49.2692	0.438	0.889	ug/L
⌊	Sb	123	201700.195	0.50	49.0508	0.384	0.782	ug/L
⌈	Ba	135	86737.838	0.16	46.5521	1.341	2.880	ug/L
|	Ce	140	56.673	0.00				ug/L
⌊>	Tb	159	551914.159	551914.16				ug/L
⌈	Ho	165	6.667	-0.00				ug/L
|	Tl	203	391970.529	0.71	50.8564	1.562	3.071	ug/L
|	Tl	205	967624.876	1.77	50.8039	4.465	8.788	ug/L
|	Pb	206	317987.020	0.58	50.6444	3.126	6.173	ug/L
|	Pb	207	293906.363	0.54	49.7295	2.307	4.639	ug/L
|	Pb	208	1327464.617	2.42	50.5776	2.151	4.253	ug/L
|	U	238	1976017.120	3.60	51.1591	2.011	3.930	ug/L
⌊>	Bi	209	548932.967	548932.97				ug/L

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Na	23	29942675.507	98.50	5.2308	0.234	4.480	mg/L	
Mg	24	18880407.196	62.14	5.2253	0.195	3.724	mg/L	
K	39	44837657.050	145.77	5.2296	0.315	6.019	mg/L	
Ca	43	99590.213	0.33	5.2375	0.299	5.699	mg/L	
Fe	54	3202804.080	10.39	5.0554	0.319	6.301	mg/L	
Fe	57	1356406.269	4.44	5.2760	0.447	8.477	mg/L	
> Sc-1	45	304197.649	304197.65				mg/L	
Cl	35	21336.080	2320.01				mg/L	
Kr	83	38.667	-22.00				mg/L	
Br	81	10421.429	1811.05				mg/L	
P	31	11306.402	-2089.50				mg/L	
S	34	227643.309	39662.33				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	103.617				
Cr	52	101.989				
Cr	53					
Mn	55	102.013				
Co	59	105.763				
Ni	60	105.847				
Cu	65	105.488				
Zn	66	103.878				
> Ge	72		93.069			
As	75	97.460				
Se	77					
Se	82	98.662				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	101.459				
Cd	114	100.206				
> In	115		103.025			
Sn	118					
Sb	123	98.102				
Ba	135	93.104				
Ce	140					
> Tb	159		109.745			
Ho	165					
Tl	203	101.713				
Tl	205					
Pb	206					
Pb	207					
Pb	208	101.155				
U	238	102.318				
> Bi	209		110.608			
Na	23					

Sample ID: QC Std 6
Report Date/Time: Tuesday, February 22, 2011 18:16:09

Approved: February 23, 2011

	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 22, 2011 18:21:12
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23427.425	0.02				ug/L
|	Be	9	10.000	0.00	-0.0178	0.015	86.946	ug/L
|	Al	27	3717.366	0.00	0.0756	0.091	120.896	ug/L
⌊>	Sc	45	312990.709	312990.71				ug/L
⌈	Ti	49	56.672	0.00	0.0492	0.019	37.883	ug/L
|	V	51	2127.628	-0.00	-0.0288	0.007	22.693	ug/L
|	Cr	52	7271.049	-0.00	-0.1037	0.022	21.162	ug/L
|	Cr	53	340.040	0.00	0.1982	0.013	6.777	ug/L
|	Mn	55	350.676	0.00	-0.0148	0.000	1.053	ug/L
|	Co	59	52.334	-0.00	-0.0038	0.001	20.136	ug/L
|	Ni	60	49.001	0.00	0.0168	0.003	20.800	ug/L
|	Cu	65	127.002	0.00	-0.0117	0.003	25.668	ug/L
|	Zn	66	559.021	0.00	-0.1543	0.029	18.590	ug/L
|>	Ge	72	486072.762	486072.76				ug/L
|	As	75	-113.731	0.00	0.0467	0.050	106.963	ug/L
|	Se	77	56.667	-0.00	-0.2537	0.069	27.041	ug/L
|	Se	82	11.661	0.00	0.1358	0.065	47.537	ug/L
⌊	Rb	85	22.334	0.00				mg/L
	Y	89	312515.610	-35266.57				ug/L
	Rh	103	8.000	-2.33				ug/L
⌈	Mo	98	97.650	0.00	0.0460	0.005	9.960	ug/L
|	Ag	107	28.334	-0.00	0.0028	0.000	16.520	ug/L
|	Cd	114	-2.133	-0.00	-0.0086	0.002	20.694	ug/L
|>	In	115	400878.193	400878.19				ug/L
|	Sn	118	279.604	0.00	0.0492	0.003	7.111	ug/L
⌊	Sb	123	91.367	0.00	0.0175	0.004	22.356	ug/L
⌈	Ba	135	21.667	0.00	0.0250	0.002	6.948	ug/L
|	Ce	140	20.002	-0.00				ug/L
⌊>	Tb	159	548062.611	548062.61				ug/L
⌈	Ho	165	6.667	-0.00				ug/L
|	Tl	203	45.001	0.00	0.0036	0.001	27.672	ug/L
|	Tl	205	103.344	0.00	0.0144	0.001	10.092	ug/L
|	Pb	206	453.348	0.00	0.0032	0.003	102.220	ug/L
|	Pb	207	418.346	0.00	0.0171	0.005	26.779	ug/L
|	Pb	208	1845.085	0.00	0.0072	0.002	34.529	ug/L
|	U	238	120.669	0.00	0.0016	0.000	22.786	ug/L
⌊>	Bi	209	551277.794	551277.79				ug/L

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⌈	Na	23	38491.159	0.06	-0.0001	0.000	50.161	mg/L
|	Mg	24	806.781	0.00	-0.0038	0.000	1.337	mg/L
|	K	39	560517.119	-0.09	-0.0080	0.001	6.585	mg/L
|	Ca	43	196.688	-0.00	-0.0003	0.003	852.249	mg/L
|	Fe	54	43792.475	-0.02	-0.0056	0.003	61.428	mg/L
|	Fe	57	6542.797	-0.01	-0.0059	0.001	14.790	mg/L
⌊>	Sc-1	45	312990.709	312990.71				mg/L
	Cl	35	20307.265	1291.20				mg/L
	Kr	83	39.000	-21.67				mg/L
	Br	81	9278.970	668.59				mg/L
	P	31	10863.916	-2531.99				mg/L
	S	34	220430.232	32449.25				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.024			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		102.128			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		108.979			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		111.080			
⌈	Na	23					

Sample ID: QC Std 7
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
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Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102054712

Sample Date/Time: Tuesday, February 22, 2011 18:27:58
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 63
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	24931.276	0.02				ug/L
|	Be	9	8.667	0.00	-0.0246	0.017	69.276	ug/L
|	Al	27	28273.609	0.08	3.7861	0.587	15.492	ug/L
⌊>	Sc	45	328872.988	328872.99				ug/L
⌈	Ti	49	203.356	0.00	0.2781	0.099	35.459	ug/L
|	V	51	2573.815	0.00	0.0150	0.010	63.947	ug/L
|	Cr	52	11544.109	0.01	0.4006	0.018	4.392	ug/L
|	Cr	53	753.438	0.00	0.6100	0.126	20.604	ug/L
|	Mn	55	2818.760	0.01	0.1767	0.018	10.194	ug/L
|	Co	59	149.003	0.00	0.0056	0.001	25.551	ug/L
|	Ni	60	435.347	0.00	0.1960	0.003	1.444	ug/L
|	Cu	65	362.010	0.00	0.0937	0.016	17.128	ug/L
|	Zn	66	2281.950	0.00	1.1644	0.053	4.591	ug/L
|>	Ge	72	488812.729	488812.73				ug/L
|	As	75	-135.064	0.00	0.0270	0.047	174.516	ug/L
|	Se	77	76.667	0.00	0.0020	0.176	8763.571	ug/L
|	Se	82	7.658	0.00	0.0940	0.066	70.670	ug/L
⌊	Rb	85	106.002	0.00				mg/L
	Y	89	318118.822	-29663.36				ug/L
	Rh	103	9.333	-1.00				ug/L
⌈	Mo	98	158.943	0.00	0.0656	0.002	2.937	ug/L
|	Ag	107	25.667	-0.00	0.0019	0.001	56.604	ug/L
|	Cd	114	5.240	0.00	-0.0025	0.003	126.963	ug/L
|>	In	115	427379.609	427379.61				ug/L
|	Sn	118	1009.251	0.00	0.2062	0.010	4.616	ug/L
⌊	Sb	123	120.244	0.00	0.0228	0.002	9.855	ug/L
⌈	Ba	135	224.338	0.00	0.1260	0.014	11.357	ug/L
|	Ce	140	100.011	0.00				ug/L
⌊>	Tb	159	590142.100	590142.10				ug/L
⌈	Ho	165	16.668	-0.00				ug/L
|	Tl	203	29.334	0.00	0.0014	0.001	59.751	ug/L
|	Tl	205	66.674	0.00	0.0123	0.001	6.518	ug/L
|	Pb	206	722.033	0.00	0.0398	0.005	13.809	ug/L
|	Pb	207	614.692	0.00	0.0448	0.003	6.596	ug/L
|	Pb	208	2844.521	0.00	0.0396	0.004	9.591	ug/L
|	U	238	87.001	0.00	0.0006	0.000	42.482	ug/L
⌊>	Bi	209	581572.535	581572.54				ug/L

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⌈	Na	23	129172.190	0.33	0.0142	0.001	8.163	mg/L
|	Mg	24	16041.129	0.05	0.0000	0.000	77.068	mg/L
|	K	39	598155.035	-0.06	-0.0070	0.002	22.068	mg/L
|	Ca	43	610.080	0.00	0.0194	0.001	3.851	mg/L
|	Fe	54	106108.263	0.16	0.0833	0.005	6.004	mg/L
|	Fe	57	9455.419	0.00	0.0035	0.002	67.150	mg/L
⌊>	Sc-1	45	328872.988	328872.99				mg/L
	Cl	35	25058.696	6042.63				mg/L
	Kr	83	39.334	-21.33				mg/L
	Br	81	12071.284	3460.91				mg/L
	P	31	25786.744	12390.84				mg/L
	S	34	230338.187	42357.21				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.548			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		108.879			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		117.347			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		117.185			
⌈	Na	23					

Sample ID: L1102054712
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
_>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: F BLANK

Sample Date/Time: Tuesday, February 22, 2011 18:34:45
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 64
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21456.382	0.01				ug/L
|	Be	9	6.667	0.00	-0.0295	0.004	14.158	ug/L
|	Al	27	4050.840	0.01	0.1463	0.116	79.122	ug/L
⌊>	Sc	45	303539.602	303539.60				ug/L
⌈	Ti	49	46.671	-0.00	0.0336	0.024	72.713	ug/L
|	V	51	2232.897	-0.00	-0.0179	0.008	46.757	ug/L
|	Cr	52	7226.016	-0.00	-0.1082	0.018	16.412	ug/L
|	Cr	53	260.029	0.00	0.1181	0.002	1.568	ug/L
|	Mn	55	510.685	0.00	-0.0023	0.002	71.759	ug/L
|	Co	59	55.334	-0.00	-0.0035	0.000	11.137	ug/L
|	Ni	60	60.334	0.00	0.0221	0.002	8.725	ug/L
|	Cu	65	116.002	0.00	-0.0167	0.007	43.271	ug/L
|	Zn	66	1617.480	0.00	0.6633	0.038	5.792	ug/L
|>	Ge	72	485503.115	485503.12				ug/L
|	As	75	-114.263	0.00	0.0460	0.067	146.811	ug/L
|	Se	77	50.000	-0.00	-0.3398	0.165	48.578	ug/L
|	Se	82	7.244	0.00	0.0912	0.165	180.715	ug/L
⌊	Rb	85	30.334	0.00				mg/L
	Y	89	304350.967	-43431.22				ug/L
	Rh	103	7.333	-3.00				ug/L
⌈	Mo	98	46.530	0.00	0.0270	0.002	8.313	ug/L
|	Ag	107	15.333	-0.00	0.0003	0.000	159.321	ug/L
|	Cd	114	3.859	-0.00	-0.0034	0.002	44.344	ug/L
|>	In	115	392491.013	392491.01				ug/L
|	Sn	118	126.934	0.00	0.0139	0.001	5.848	ug/L
⌊	Sb	123	46.453	-0.00	0.0068	0.003	45.059	ug/L
⌈	Ba	135	24.000	0.00	0.0265	0.003	10.476	ug/L
|	Ce	140	30.003	0.00				ug/L
⌊>	Tb	159	540964.864	540964.86				ug/L
⌈	Ho	165	3.334	-0.00				ug/L
|	Tl	203	39.000	0.00	0.0030	0.001	50.674	ug/L
|	Tl	205	73.341	0.00	0.0129	0.001	11.301	ug/L
|	Pb	206	452.348	0.00	0.0043	0.005	116.537	ug/L
|	Pb	207	370.011	0.00	0.0100	0.001	14.714	ug/L
|	Pb	208	1735.743	0.00	0.0042	0.001	23.738	ug/L
|	U	238	18.334	-0.00	-0.0011	0.000	5.953	ug/L
⌊>	Bi	209	542571.724	542571.72				ug/L

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⌈	Na	23	50230.895	0.10	0.0021	0.000	16.579	mg/L
|	Mg	24	1713.652	0.00	-0.0036	0.000	0.598	mg/L
|	K	39	570498.810	-0.00	-0.0048	0.002	35.202	mg/L
|	Ca	43	243.361	-0.00	0.0025	0.003	105.629	mg/L
|	Fe	54	30947.669	-0.06	-0.0241	0.003	14.491	mg/L
|	Fe	57	6833.018	-0.00	-0.0040	0.001	26.916	mg/L
⌊>	Sc-1	45	303539.602	303539.60				mg/L
	Cl	35	18899.178	-116.89				mg/L
	Kr	83	48.667	-12.00				mg/L
	Br	81	9060.109	449.73				mg/L
	P	31	10403.416	-2992.49				mg/L
	S	34	217175.627	29194.65				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		92.914			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.991			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		107.568			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		109.326			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Tuesday, February 22, 2011 18:41:32
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22542.237	0.02				ug/L
|	Be	9	7.333	0.00	-0.0264	0.025	95.131	ug/L
|	Al	27	28321629.271	95.48	4773.2209	173.719	3.639	ug/L
⌊>	Sc	45	296669.917	296669.92				ug/L
⌈	Ti	49	62561.413	0.13	100.0466	3.091	3.090	ug/L
|	V	51	1817.301	-0.00	-0.0574	0.012	21.276	ug/L
|	Cr	52	7665.013	-0.00	-0.0419	0.007	16.328	ug/L
|	Cr	53	1446.917	0.00	1.3364	0.217	16.253	ug/L
|	Mn	55	4103.550	0.01	0.2833	0.003	0.928	ug/L
|	Co	59	2098.241	0.00	0.1990	0.003	1.268	ug/L
|	Ni	60	1292.097	0.00	0.6068	0.037	6.142	ug/L
|	Cu	65	930.386	0.00	0.3588	0.028	7.895	ug/L
|	Zn	66	1026.730	0.00	0.2188	0.032	14.835	ug/L
| >	Ge	72	478401.943	478401.94				ug/L
|	As	75	-159.802	0.00	0.0009	0.031	3395.198	ug/L
|	Se	77	122.667	0.00	0.6339	0.075	11.794	ug/L
|	Se	82	5.241	0.00	0.0709	0.037	51.844	ug/L
⌊	Rb	85	1761.839	0.00				mg/L
	Y	89	290082.590	-57699.59				ug/L
	Rh	103	14.333	4.00				ug/L
⌈	Mo	98	234686.570	0.61	92.7236	1.079	1.163	ug/L
|	Ag	107	61.667	0.00	0.0100	0.001	9.792	ug/L
|	Cd	114	95.161	0.00	0.0775	0.031	40.558	ug/L
| >	In	115	385370.852	385370.85				ug/L
|	Sn	118	428.809	0.00	0.0884	0.002	2.374	ug/L
⌊	Sb	123	150.783	0.00	0.0336	0.002	6.894	ug/L
⌈	Ba	135	56.667	0.00	0.0458	0.005	11.434	ug/L
|	Ce	140	216.691	0.00				ug/L
⌊>	Tb	159	515287.412	515287.41				ug/L
⌈	Ho	165	20.002	0.00				ug/L
|	Tl	203	118.335	0.00	0.0145	0.002	14.355	ug/L
|	Tl	205	286.700	0.00	0.0253	0.003	13.672	ug/L
|	Pb	206	488.017	0.00	0.0157	0.003	16.337	ug/L
|	Pb	207	395.678	0.00	0.0193	0.002	11.795	ug/L
|	Pb	208	1865.753	0.00	0.0145	0.002	15.284	ug/L
|	U	238	18.667	0.00	-0.0010	0.000	5.729	ug/L
⌊>	Bi	209	505386.092	505386.09				ug/L

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⌈	Na	23	76106179.745	256.48	13.6258	0.239	1.755	mg/L
|	Mg	24	18741569.576	63.18	5.3125	0.167	3.145	mg/L
|	K	39	44735450.128	148.93	5.3433	0.126	2.360	mg/L
|	Ca	43	275820.058	0.93	14.8693	0.362	2.438	mg/L
|	Fe	54	7838111.655	26.26	12.7733	0.385	3.011	mg/L
|	Fe	57	3183217.377	10.71	12.7092	0.418	3.286	mg/L
⌊>	Sc-1	45	296669.917	296669.92				mg/L
	Cl	35	2063980.938	2044964.87				mg/L
	Kr	83	49.001	-11.67				mg/L
	Br	81	8316.124	-294.25				mg/L
	P	31	1813929.268	1800533.37				mg/L
	S	34	387843.532	199862.55				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		91.555			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		98.177			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.462			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		101.833			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 4
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Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Tuesday, February 22, 2011 18:48:20
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23678.006	0.02				ug/L
|	Be	9	31425.973	0.10	119.7105	2.866	2.394	ug/L
|	Al	27	27631053.678	90.41	4519.6078	146.754	3.247	ug/L
⌊>	Sc	45	305720.839	305720.84				ug/L
⌈	Ti	49	63061.197	0.13	101.2990	1.134	1.119	ug/L
|	V	51	996668.068	2.09	103.1355	1.095	1.062	ug/L
|	Cr	52	843877.964	1.76	102.2712	1.056	1.032	ug/L
|	Cr	53	101509.443	0.21	104.1465	1.344	1.291	ug/L
|	Mn	55	1312786.710	2.76	104.5602	0.774	0.741	ug/L
|	Co	59	1040524.616	2.18	103.5470	1.852	1.788	ug/L
|	Ni	60	215563.480	0.45	102.7249	1.199	1.167	ug/L
|	Cu	65	226942.619	0.48	104.8227	2.154	2.055	ug/L
|	Zn	66	131890.743	0.28	103.2272	0.268	0.260	ug/L
|>	Ge	72	476207.311	476207.31				ug/L
|	As	75	102431.827	0.22	97.5885	1.290	1.322	ug/L
|	Se	77	7502.147	0.02	99.0165	2.827	2.855	ug/L
|	Se	82	9140.905	0.02	94.8790	2.030	2.140	ug/L
⌊	Rb	85	1809.849	0.00				mg/L
	Y	89	291523.739	-56258.44				ug/L
	Rh	103	52.001	41.67				ug/L
⌈	Mo	98	234517.083	0.59	89.6335	0.765	0.853	ug/L
|	Ag	107	397410.981	1.00	80.5283	6.555	8.139	ug/L
|	Cd	114	119647.092	0.30	102.4870	2.653	2.588	ug/L
|>	In	115	398375.212	398375.21				ug/L
|	Sn	118	494.279	0.00	0.1005	0.002	1.793	ug/L
⌊	Sb	123	390028.258	0.98	96.2985	1.207	1.253	ug/L
⌈	Ba	135	169196.051	0.32	93.5422	0.845	0.904	ug/L
|	Ce	140	270.031	0.00				ug/L
⌊>	Tb	159	535617.728	535617.73				ug/L
⌈	Ho	165	16.668	-0.00				ug/L
|	Tl	203	746103.935	1.45	103.5447	0.992	0.958	ug/L
|	Tl	205	1816055.164	3.54	101.8728	1.645	1.615	ug/L
|	Pb	206	628905.546	1.23	107.1640	2.380	2.221	ug/L
|	Pb	207	551904.157	1.08	99.9158	1.607	1.608	ug/L
|	Pb	208	2542877.248	4.95	103.6722	0.348	0.336	ug/L
|	U	238	3702128.797	7.22	102.5084	1.716	1.674	ug/L
⌊>	Bi	209	512950.542	512950.54				ug/L

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⌈	Na	23	74309378.639	242.99	12.9091	0.526	4.074	mg/L
|	Mg	24	18765715.249	61.40	5.1630	0.114	2.210	mg/L
|	K	39	45468221.790	146.87	5.2692	0.082	1.550	mg/L
|	Ca	43	286676.999	0.94	14.9957	0.075	0.503	mg/L
|	Fe	54	7768367.929	25.25	12.2816	0.106	0.859	mg/L
|	Fe	57	3175314.006	10.36	12.2984	0.149	1.213	mg/L
⌊>	Sc-1	45	305720.839	305720.84				mg/L
	Cl	35	2091085.203	2072069.13				mg/L
	Kr	83	46.667	-14.00				mg/L
	Br	81	7940.486	-669.89				mg/L
	P	31	1807702.920	1794307.02				mg/L
	S	34	386120.008	198139.03				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	103.135				
|	Cr	52	102.271				
|	Cr	53					
|	Mn	55	104.560				
|	Co	59	103.547				
|	Ni	60	102.725				
|	Cu	65	104.823				
|	Zn	66	103.227				
|>	Ge	72		91.135			
|	As	75	97.588				
|	Se	77					
|	Se	82	94.879				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	80.528				
|	Cd	114	102.487				
|>	In	115		101.490			
|	Sn	118					
⌊	Sb	123	96.299				
⌈	Ba	135	93.542				
|	Ce	140					
⌊>	Tb	159		106.505			
⌈	Ho	165					
|	Tl	203	103.545				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	103.672				
|	U	238	102.508				
⌊>	Bi	209		103.358			
⌈	Na	23					

Sample ID: QC Std 5
Report Date/Time: Tuesday, February 22, 2011 18:50:33

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 5
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 22, 2011 18:55:08
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23244.141	0.01				ug/L
|	Be	9	15693.654	0.05	57.0557	0.974	1.707	ug/L
|	Al	27	326169.478	1.01	50.4878	2.582	5.114	ug/L
⌊>	Sc	45	320045.247	320045.25				ug/L
⌈	Ti	49	67027.259	0.14	104.5665	1.589	1.519	ug/L
|	V	51	505962.755	1.03	50.7245	0.452	0.890	ug/L
|	Cr	52	432182.017	0.86	50.3884	1.898	3.767	ug/L
|	Cr	53	50840.700	0.10	50.5927	1.814	3.585	ug/L
|	Mn	55	658812.124	1.34	50.9394	0.769	1.511	ug/L
|	Co	59	538477.226	1.10	52.0427	0.879	1.690	ug/L
|	Ni	60	111728.482	0.23	51.7048	0.842	1.629	ug/L
|	Cu	65	116917.020	0.24	52.4105	0.933	1.780	ug/L
|	Zn	66	68641.128	0.14	51.8870	0.820	1.580	ug/L
| >	Ge	72	490386.656	490386.66				ug/L
|	As	75	50951.195	0.10	47.2232	0.884	1.871	ug/L
|	Se	77	3907.431	0.01	49.6094	3.390	6.834	ug/L
|	Se	82	4724.088	0.01	47.6288	1.224	2.569	ug/L
⌊	Rb	85	2001.554	0.00				mg/L
	Y	89	307087.731	-40694.45				ug/L
	Rh	103	18.667	8.33				ug/L
⌈	Mo	98	244378.761	0.61	93.3194	2.714	2.908	ug/L
|	Ag	107	248580.102	0.62	50.2919	1.078	2.144	ug/L
|	Cd	114	58360.208	0.15	49.9268	1.325	2.655	ug/L
| >	In	115	398880.597	398880.60				ug/L
|	Sn	118	208929.176	0.52	49.4326	0.699	1.414	ug/L
⌊	Sb	123	199977.001	0.50	49.3119	0.467	0.946	ug/L
⌈	Ba	135	85462.215	0.15	45.4734	0.521	1.145	ug/L
|	Ce	140	50.005	0.00				ug/L
⌊>	Tb	159	556591.718	556591.72				ug/L
⌈	Ho	165	13.335	-0.00				ug/L
|	Tl	203	383311.473	0.69	49.4675	0.746	1.507	ug/L
|	Tl	205	921405.906	1.67	48.0790	1.188	2.471	ug/L
|	Pb	206	308641.796	0.56	48.8665	0.484	0.990	ug/L
|	Pb	207	291822.199	0.53	49.1071	1.248	2.542	ug/L
|	Pb	208	1298844.762	2.35	49.2163	0.845	1.717	ug/L
|	U	238	1967580.965	3.57	50.6798	1.516	2.991	ug/L
⌊>	Bi	209	551642.384	551642.38				ug/L

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Na	23	30924525.818	96.64	5.1324	0.184	3.594	mg/L	
Mg	24	19173173.481	59.95	5.0408	0.143	2.832	mg/L	
K	39	46164614.717	142.51	5.1128	0.216	4.229	mg/L	
Ca	43	98698.095	0.31	4.9308	0.277	5.622	mg/L	
Fe	54	3194728.656	9.83	4.7861	0.272	5.689	mg/L	
Fe	57	1353367.184	4.20	4.9922	0.198	3.965	mg/L	
> Sc-1	45	320045.247	320045.25				mg/L	
Cl	35	21555.881	2539.81				mg/L	
Kr	83	49.667	-11.00				mg/L	
Br	81	8089.277	-521.10				mg/L	
P	31	11726.222	-1669.68				mg/L	
S	34	232064.569	44083.59				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	101.449				
Cr	52	100.777				
Cr	53					
Mn	55	101.879				
Co	59	104.085				
Ni	60	103.410				
Cu	65	104.821				
Zn	66	103.774				
> Ge	72		93.849			
As	75	94.446				
Se	77					
Se	82	95.258				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	100.584				
Cd	114	99.854				
> In	115		101.619			
Sn	118					
Sb	123	98.624				
Ba	135	90.947				
Ce	140					
> Tb	159		110.675			
Ho	165					
Tl	203	98.935				
Tl	205					
Pb	206					
Pb	207					
Pb	208	98.433				
U	238	101.360				
> Bi	209		111.154			
Na	23					

Sample ID: QC Std 6
Report Date/Time: Tuesday, February 22, 2011 18:57:20

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\└>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Tuesday, February 22, 2011 18:57:20

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 22, 2011 19:02:24
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20855.375	0.01				ug/L
|	Be	9	8.000	0.00	-0.0261	0.013	49.151	ug/L
|	Al	27	4034.163	0.00	0.1070	0.112	104.521	ug/L
⌊>	Sc	45	322208.896	322208.90				ug/L
⌈	Ti	49	46.671	-0.00	0.0325	0.050	153.660	ug/L
|	V	51	2160.131	-0.00	-0.0280	0.003	12.314	ug/L
|	Cr	52	7475.535	-0.00	-0.0891	0.013	14.240	ug/L
|	Cr	53	360.042	0.00	0.2145	0.002	1.049	ug/L
|	Mn	55	379.678	0.00	-0.0129	0.003	20.280	ug/L
|	Co	59	53.667	-0.00	-0.0037	0.000	0.937	ug/L
|	Ni	60	41.667	-0.00	0.0131	0.001	11.123	ug/L
|	Cu	65	125.669	0.00	-0.0130	0.004	28.547	ug/L
|	Zn	66	543.687	0.00	-0.1707	0.045	26.476	ug/L
|>	Ge	72	491433.507	491433.51				ug/L
|	As	75	-143.414	0.00	0.0200	0.061	307.200	ug/L
|	Se	77	44.667	-0.00	-0.4169	0.018	4.328	ug/L
|	Se	82	-9.076	-0.00	-0.0753	0.199	263.756	ug/L
⌊	Rb	85	22.000	-0.00				mg/L
	Y	89	312278.888	-35503.29				ug/L
	Rh	103	6.333	-4.00				ug/L
⌈	Mo	98	140.605	0.00	0.0620	0.005	8.477	ug/L
|	Ag	107	28.667	-0.00	0.0028	0.000	16.160	ug/L
|	Cd	114	-3.738	-0.00	-0.0099	0.002	15.974	ug/L
|>	In	115	402580.237	402580.24				ug/L
|	Sn	118	253.070	0.00	0.0427	0.004	8.597	ug/L
⌊	Sb	123	274.417	0.00	0.0621	0.004	6.760	ug/L
⌈	Ba	135	24.000	0.00	0.0261	0.004	14.709	ug/L
|	Ce	140	26.669	-0.00				ug/L
⌊>	Tb	159	555297.889	555297.89				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	42.334	0.00	0.0034	0.000	3.570	ug/L
|	Tl	205	93.343	0.00	0.0139	0.004	28.989	ug/L
|	Pb	206	437.347	0.00	0.0024	0.005	227.363	ug/L
|	Pb	207	371.677	0.00	0.0108	0.003	27.977	ug/L
|	Pb	208	1742.077	0.00	0.0050	0.001	11.170	ug/L
|	U	238	96.335	0.00	0.0010	0.001	55.996	ug/L
⌊>	Bi	209	538033.190	538033.19				ug/L

Sample ID: QC Std 7
Report Date/Time: Tuesday, February 22, 2011 19:04:35
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⌈	Na	23	29526.489	0.03	-0.0018	0.000	3.652	mg/L
|	Mg	24	853.455	0.00	-0.0038	0.000	0.681	mg/L
|	K	39	552525.514	-0.17	-0.0107	0.001	9.060	mg/L
|	Ca	43	210.023	-0.00	0.0001	0.002	1822.200	mg/L
|	Fe	54	43743.119	-0.03	-0.0077	0.001	17.917	mg/L
|	Fe	57	6742.949	-0.01	-0.0059	0.001	19.490	mg/L
⌊>	Sc-1	45	322208.896	322208.90				mg/L
	Cl	35	19686.025	669.96				mg/L
	Kr	83	47.001	-13.67				mg/L
	Br	81	7936.492	-673.88				mg/L
	P	31	11050.105	-2345.80				mg/L
	S	34	225445.211	37464.23				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.049			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		102.562			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		110.418			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		108.412			
⌈	Na	23					

Sample ID: QC Std 7
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\└>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Tuesday, February 22, 2011 19:04:35

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Tuesday, February 22, 2011 19:09:10
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 9
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21105.592	0.01				ug/L
|	Be	9	6.000	0.00	-0.0322	0.013	41.827	ug/L
|	Al	27	2833.742	0.00	-0.0554	0.104	187.694	ug/L
⌊>	Sc	45	308121.008	308121.01				ug/L
⌈	Ti	49	73.341	0.00	0.0736	0.034	45.743	ug/L
|	V	51	6224.976	0.01	0.3759	0.014	3.780	ug/L
|	Cr	52	14533.033	0.01	0.7347	0.032	4.290	ug/L
|	Cr	53	1123.509	0.00	0.9654	0.089	9.199	ug/L
|	Mn	55	7720.724	0.01	0.5495	0.016	2.888	ug/L
|	Co	59	4654.463	0.01	0.4366	0.004	0.954	ug/L
|	Ni	60	3909.137	0.01	1.7858	0.079	4.399	ug/L
|	Cu	65	2031.894	0.00	0.8342	0.049	5.828	ug/L
|	Zn	66	9167.292	0.02	6.3541	0.128	2.011	ug/L
|>	Ge	72	495219.599	495219.60				ug/L
|	As	75	264.737	0.00	0.3949	0.050	12.650	ug/L
|	Se	77	82.667	0.00	0.0657	0.027	40.861	ug/L
|	Se	82	32.928	0.00	0.3456	0.036	10.546	ug/L
⌊	Rb	85	17.667	-0.00				mg/L
	Y	89	312058.951	-35723.23				ug/L
	Rh	103	5.000	-5.33				ug/L
⌈	Mo	98	79.088	0.00	0.0393	0.002	4.307	ug/L
|	Ag	107	2104.909	0.01	0.4251	0.012	2.727	ug/L
|	Cd	114	263.663	0.00	0.2201	0.012	5.517	ug/L
|>	In	115	396761.753	396761.75				ug/L
|	Sn	118	155.335	0.00	0.0203	0.001	2.521	ug/L
⌊	Sb	123	1692.363	0.00	0.4145	0.011	2.643	ug/L
⌈	Ba	135	1350.105	0.00	0.7642	0.017	2.169	ug/L
|	Ce	140	13.335	-0.00				ug/L
⌊>	Tb	159	532458.568	532458.57				ug/L
⌈	Ho	165	6.667	-0.00				ug/L
|	Tl	203	694.031	0.00	0.0906	0.005	5.040	ug/L
|	Tl	205	1536.939	0.00	0.0921	0.009	9.542	ug/L
|	Pb	206	2843.099	0.00	0.3982	0.013	3.220	ug/L
|	Pb	207	2707.060	0.00	0.4189	0.013	3.078	ug/L
|	Pb	208	12167.752	0.02	0.4152	0.013	3.156	ug/L
|	U	238	16193.274	0.03	0.4306	0.025	5.810	ug/L
⌊>	Bi	209	532703.833	532703.83				ug/L

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⌈	Na	23	23032.162	0.01	-0.0027	0.000	3.165	mg/L
|	Mg	24	480.060	0.00	-0.0039	0.000	0.250	mg/L
|	K	39	550591.339	-0.09	-0.0080	0.004	44.518	mg/L
|	Ca	43	156.684	-0.00	-0.0021	0.003	149.258	mg/L
|	Fe	54	42937.907	-0.02	-0.0057	0.006	111.097	mg/L
|	Fe	57	6562.812	-0.01	-0.0053	0.003	55.027	mg/L
⌊>	Sc-1	45	308121.008	308121.01				mg/L
	Cl	35	19271.889	255.82				mg/L
	Kr	83	46.667	-14.00				mg/L
	Br	81	7931.144	-679.23				mg/L
	P	31	11269.692	-2126.21				mg/L
	S	34	215014.669	27033.69				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	93.977				
|	Cr	52	91.836				
|	Cr	53					
|	Mn	55	109.898				
|	Co	59	109.148				
|	Ni	60	111.614				
|	Cu	65	104.281				
|	Zn	66	101.666				
|>	Ge	72		94.774			
|	As	75	98.735				
|	Se	77					
|	Se	82	86.396				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	106.272				
|	Cd	114	110.032				
|>	In	115		101.079			
|	Sn	118					
⌊	Sb	123	103.633				
⌈	Ba	135	101.895				
|	Ce	140					
⌊>	Tb	159		105.876			
⌈	Ho	165					
|	Tl	203	113.237				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	103.811				
|	U	238	107.641				
⌊>	Bi	209		107.338			
⌈	Na	23					

Sample ID: QC Std 8
Report Date/Time: Tuesday, February 22, 2011 19:11:24
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Approved: February 23, 2011

	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 8
Report Date/Time: Tuesday, February 22, 2011 19:11:24
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Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: PBS 15 WG356440-01

Sample Date/Time: Tuesday, February 22, 2011 19:15:59
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 65
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	25182.144	0.03				ug/L
|	Be	9	8.667	0.00	-0.0216	0.005	21.208	ug/L
|	Al	27	17465.262	0.05	2.3777	0.176	7.399	ug/L
⌊>	Sc	45	301599.551	301599.55				ug/L
⌈	Ti	49	5078.468	0.01	8.7898	0.695	7.908	ug/L
|	V	51	-5726.810	-0.02	-0.8871	0.250	28.147	ug/L
|	Cr	52	12647.121	0.01	0.6983	0.048	6.945	ug/L
|	Cr	53	49279.672	0.11	54.6310	3.789	6.936	ug/L
|	Mn	55	1119.074	0.00	0.0542	0.005	8.325	ug/L
|	Co	59	88.001	0.00	0.0006	0.001	213.729	ug/L
|	Ni	60	247.006	0.00	0.1211	0.005	4.217	ug/L
|	Cu	65	262.006	0.00	0.0617	0.002	3.471	ug/L
|	Zn	66	3356.930	0.01	2.2723	0.060	2.637	ug/L
| >	Ge	72	440341.696	440341.70				ug/L
|	As	75	-473.567	-0.00	-0.3336	0.267	79.983	ug/L
|	Se	77	2311.601	0.01	32.3239	0.645	1.995	ug/L
|	Se	82	-6.157	-0.00	-0.0517	0.119	229.679	ug/L
⌊	Rb	85	36.667	0.00				mg/L
	Y	89	277886.783	-69895.40				ug/L
	Rh	103	6.333	-4.00				ug/L
⌈	Mo	98	79.754	0.00	0.0409	0.002	4.349	ug/L
|	Ag	107	440.014	0.00	0.0906	0.013	13.969	ug/L
|	Cd	114	-4.883	-0.00	-0.0111	0.002	19.860	ug/L
| >	In	115	380148.013	380148.01				ug/L
|	Sn	118	1442.106	0.00	0.3417	0.060	17.630	ug/L
⌊	Sb	123	670.896	0.00	0.1688	0.018	10.707	ug/L
⌈	Ba	135	70.001	0.00	0.0518	0.006	11.420	ug/L
|	Ce	140	116.679	0.00				ug/L
⌊>	Tb	159	537814.206	537814.21				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	70.001	0.00	0.0074	0.003	34.735	ug/L
|	Tl	205	163.351	0.00	0.0180	0.002	10.492	ug/L
|	Pb	206	715.366	0.00	0.0512	0.002	3.830	ug/L
|	Pb	207	602.691	0.00	0.0541	0.012	22.408	ug/L
|	Pb	208	2840.522	0.00	0.0512	0.008	15.329	ug/L
|	U	238	55.667	0.00	-0.0000	0.000	127.805	ug/L
⌊>	Bi	209	521624.106	521624.11				ug/L

Sample ID: PBS 15 WG356440-01
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⌈	Na	23	128963.747	0.36	0.0160	0.002	11.067	mg/L
|	Mg	24	14101.378	0.05	-0.0001	0.000	256.657	mg/L
|	K	39	564633.110	-0.01	-0.0051	0.001	18.754	mg/L
|	Ca	43	363.376	0.00	0.0090	0.002	24.013	mg/L
|	Fe	54	78923.959	0.10	0.0536	0.003	6.527	mg/L
|	Fe	57	7089.889	-0.00	-0.0028	0.001	25.520	mg/L
⌊>	Sc-1	45	301599.551	301599.55				mg/L
	Cl	35	60197977.484	60178961.41				mg/L
	Kr	83	56.334	-4.33				mg/L
	Br	81	10683.706	2073.33				mg/L
	P	31	16686.625	3290.72				mg/L
	S	34	211209.758	23228.78				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		84.272			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.847			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		106.941			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		105.105			
⌈	Na	23					

Sample ID: PBS 15 WG356440-01
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
V 51 Lower	V	51	

Sample ID: PBS 15 WG356440-01
Report Date/Time: Tuesday, February 22, 2011 19:18:12
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Method 6020 - Summary Report

Sample ID: L1102000237

Sample Date/Time: Tuesday, February 22, 2011 19:22:47
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 66
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

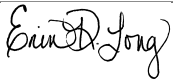
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	28540.687	0.04				ug/L
|	Be	9	8380.870	0.03	33.3606	3.585	10.745	ug/L
|	Al	27	176681.118	0.60	29.7574	1.989	6.685	ug/L
⌊>	Sc	45	292281.509	292281.51				ug/L
⌈	Ti	49	4995.082	0.01	8.7738	0.409	4.661	ug/L
|	V	51	225707.100	0.52	25.4606	0.601	2.362	ug/L
|	Cr	52	218029.495	0.49	28.3158	0.342	1.206	ug/L
|	Cr	53	76455.638	0.18	86.1098	3.026	3.514	ug/L
|	Mn	55	319859.808	0.74	27.9412	0.463	1.656	ug/L
|	Co	59	261784.749	0.60	28.5996	0.214	0.747	ug/L
|	Ni	60	55271.237	0.13	28.9152	0.557	1.925	ug/L
|	Cu	65	56913.406	0.13	28.8116	0.251	0.872	ug/L
|	Zn	66	34888.781	0.08	29.5661	0.422	1.428	ug/L
|>	Ge	72	433709.201	433709.20				ug/L
|	As	75	22411.909	0.05	23.5596	0.113	0.480	ug/L
|	Se	77	3909.431	0.01	56.2239	1.781	3.167	ug/L
|	Se	82	1894.773	0.00	21.6047	0.579	2.679	ug/L
⌊	Rb	85	48.334	0.00				mg/L
	Y	89	267498.609	-80283.57				ug/L
	Rh	103	17.667	7.33				ug/L
⌈	Mo	98	66.128	0.00	0.0347	0.005	14.052	ug/L
|	Ag	107	114263.396	0.29	23.6261	0.354	1.496	ug/L
|	Cd	114	28927.721	0.07	25.3007	0.341	1.349	ug/L
|>	In	115	390166.334	390166.33				ug/L
|	Sn	118	983.248	0.00	0.2212	0.009	4.102	ug/L
⌊	Sb	123	96328.108	0.25	24.2786	0.369	1.519	ug/L
⌈	Ba	135	41317.268	0.08	22.2833	0.077	0.345	ug/L
|	Ce	140	90.009	0.00				ug/L
⌊>	Tb	159	549296.776	549296.78				ug/L
⌈	Ho	165	30.003	0.00				ug/L
|	Tl	203	192718.285	0.37	26.1606	0.489	1.870	ug/L
|	Tl	205	457374.956	0.87	25.1040	1.050	4.184	ug/L
|	Pb	206	161659.678	0.31	26.8920	0.435	1.617	ug/L
|	Pb	207	145495.767	0.28	25.7251	0.446	1.735	ug/L
|	Pb	208	670806.315	1.28	26.7063	0.165	0.618	ug/L
|	U	238	1016303.635	1.94	27.5262	0.192	0.697	ug/L
⌊>	Bi	209	524368.667	524368.67				ug/L

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⌈	Na	23	126526.979	0.37	0.0164	0.002	13.309	mg/L
|	Mg	24	15196.394	0.05	0.0003	0.000	33.820	mg/L
|	K	39	556443.659	0.03	-0.0039	0.003	68.712	mg/L
|	Ca	43	406.716	0.00	0.0121	0.007	54.161	mg/L
|	Fe	54	79600.938	0.11	0.0588	0.005	8.040	mg/L
|	Fe	57	7226.674	-0.00	-0.0013	0.003	233.350	mg/L
⌊>	Sc-1	45	292281.509	292281.51				mg/L
	Cl	35	57253254.476	57234238.41				mg/L
	Kr	83	50.001	-10.67				mg/L
	Br	81	10141.810	1531.43				mg/L
	P	31	16030.900	2635.00				mg/L
	S	34	203212.319	15231.34				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		83.002			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.399			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		109.225			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		105.658			
⌈	Na	23					

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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: L1102000238

Sample Date/Time: Tuesday, February 22, 2011 19:29:35
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 67
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

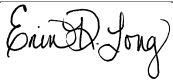
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	30078.524	0.04				ug/L
|	Be	9	8597.698	0.03	34.1053	1.699	4.981	ug/L
|	Al	27	220572.828	0.74	37.1128	1.891	5.094	ug/L
⌊>	Sc	45	293466.060	293466.06				ug/L
⌈	Ti	49	4935.045	0.01	8.4554	0.256	3.022	ug/L
|	V	51	229314.610	0.51	25.2332	1.148	4.548	ug/L
|	Cr	52	213692.198	0.46	27.0318	0.447	1.653	ug/L
|	Cr	53	77302.026	0.17	84.9313	1.304	1.535	ug/L
|	Mn	55	318567.448	0.72	27.1472	0.278	1.026	ug/L
|	Co	59	261343.456	0.59	27.8555	0.646	2.318	ug/L
|	Ni	60	55304.063	0.12	28.2245	0.128	0.454	ug/L
|	Cu	65	58069.713	0.13	28.6781	0.259	0.902	ug/L
|	Zn	66	33925.455	0.08	28.0187	0.194	0.691	ug/L
| >	Ge	72	444564.774	444564.77				ug/L
|	As	75	21499.549	0.05	22.0582	0.133	0.604	ug/L
|	Se	77	3969.454	0.01	55.6817	0.229	0.411	ug/L
|	Se	82	1853.488	0.00	20.6198	0.399	1.934	ug/L
⌊	Rb	85	64.001	0.00				mg/L
	Y	89	272086.043	-75696.14				ug/L
	Rh	103	16.334	6.00				ug/L
⌈	Mo	98	56.165	0.00	0.0307	0.002	5.451	ug/L
|	Ag	107	113120.166	0.29	23.2094	0.171	0.737	ug/L
|	Cd	114	28744.349	0.07	24.9522	1.049	4.205	ug/L
| >	In	115	393224.803	393224.80				ug/L
|	Sn	118	506.279	0.00	0.1049	0.002	1.621	ug/L
⌊	Sb	123	96690.672	0.25	24.1875	0.513	2.121	ug/L
⌈	Ba	135	41967.968	0.07	21.7381	0.333	1.530	ug/L
|	Ce	140	300.035	0.00				ug/L
⌊>	Tb	159	572020.522	572020.52				ug/L
⌈	Ho	165	6.667	-0.00				ug/L
|	Tl	203	197346.972	0.37	26.1766	0.029	0.110	ug/L
|	Tl	205	471740.071	0.88	25.3035	0.721	2.850	ug/L
|	Pb	206	167786.486	0.31	27.2782	0.882	3.232	ug/L
|	Pb	207	148338.614	0.28	25.6310	0.920	3.591	ug/L
|	Pb	208	694156.994	1.29	27.0084	0.725	2.685	ug/L
|	U	238	1028063.563	1.92	27.2099	0.325	1.196	ug/L
⌊>	Bi	209	536632.579	536632.58				ug/L

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⌈	Na	23	84434.357	0.22	0.0087	0.002	18.360	mg/L
|	Mg	24	23690.411	0.08	0.0027	0.000	9.754	mg/L
|	K	39	524403.691	-0.09	-0.0081	0.003	35.649	mg/L
|	Ca	43	586.743	0.00	0.0216	0.002	7.272	mg/L
|	Fe	54	84138.767	0.13	0.0660	0.009	13.707	mg/L
|	Fe	57	8524.486	0.00	0.0039	0.003	67.067	mg/L
⌊>	Sc-1	45	293466.060	293466.06				mg/L
	Cl	35	55560122.498	55541106.43				mg/L
	Kr	83	43.334	-17.33				mg/L
	Br	81	10400.741	1790.37				mg/L
	P	31	15571.542	2175.64				mg/L
	S	34	202501.027	14520.05				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		85.080			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.178			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		113.743			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		108.129			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102000239

Sample Date/Time: Tuesday, February 22, 2011 19:36:24
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 68
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	29276.206	0.04				ug/L
|	Be	9	8748.492	0.03	34.1291	0.564	1.653	ug/L
|	Al	27	163628.732	0.54	26.9184	0.693	2.574	ug/L
⌊>	Sc	45	298111.724	298111.72				ug/L
⌈	Ti	49	4701.576	0.01	8.1556	0.359	4.406	ug/L
|	V	51	223778.582	0.50	24.9280	0.166	0.668	ug/L
|	Cr	52	215468.977	0.47	27.6131	0.436	1.579	ug/L
|	Cr	53	91314.164	0.21	101.5901	0.643	0.633	ug/L
|	Mn	55	314020.015	0.71	27.0964	0.815	3.009	ug/L
|	Co	59	263296.798	0.60	28.4152	0.784	2.758	ug/L
|	Ni	60	55672.202	0.13	28.7715	1.183	4.113	ug/L
|	Cu	65	57166.539	0.13	28.5820	0.456	1.595	ug/L
|	Zn	66	33885.995	0.08	28.3376	0.065	0.231	ug/L
|>	Ge	72	439138.797	439138.80				ug/L
|	As	75	22004.690	0.05	22.8504	0.134	0.587	ug/L
|	Se	77	4472.333	0.01	63.6549	1.285	2.019	ug/L
|	Se	82	1901.809	0.00	21.4183	0.393	1.833	ug/L
⌊	Rb	85	40.000	0.00				mg/L
	Y	89	262486.246	-85295.94				ug/L
	Rh	103	20.667	10.33				ug/L
⌈	Mo	98	48.014	0.00	0.0273	0.002	8.624	ug/L
|	Ag	107	115420.111	0.29	23.3378	0.492	2.108	ug/L
|	Cd	114	28085.423	0.07	24.0259	1.098	4.571	ug/L
|>	In	115	399145.289	399145.29				ug/L
|	Sn	118	816.967	0.00	0.1768	0.017	9.541	ug/L
⌊	Sb	123	97891.081	0.25	24.1266	0.508	2.106	ug/L
⌈	Ba	135	40634.139	0.07	21.2054	0.525	2.476	ug/L
|	Ce	140	53.339	0.00				ug/L
⌊>	Tb	159	567801.071	567801.07				ug/L
⌈	Ho	165	13.335	-0.00				ug/L
|	Tl	203	192824.376	0.36	25.3705	0.199	0.786	ug/L
|	Tl	205	481991.424	0.89	25.6424	0.441	1.719	ug/L
|	Pb	206	166372.567	0.31	26.8260	0.196	0.730	ug/L
|	Pb	207	146095.578	0.27	25.0370	0.613	2.449	ug/L
|	Pb	208	681322.261	1.26	26.2904	0.433	1.648	ug/L
|	U	238	1012987.012	1.87	26.5941	0.212	0.797	ug/L
⌊>	Bi	209	540998.272	540998.27				ug/L

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⌈	Na	23	80524.490	0.20	0.0077	0.001	7.073	mg/L
|	Mg	24	7213.331	0.02	-0.0020	0.000	7.666	mg/L
|	K	39	524838.739	-0.12	-0.0091	0.000	2.575	mg/L
|	Ca	43	366.710	0.00	0.0094	0.002	25.097	mg/L
|	Fe	54	70807.115	0.08	0.0418	0.004	9.655	mg/L
|	Fe	57	6853.036	-0.00	-0.0034	0.001	34.338	mg/L
⌊>	Sc-1	45	298111.724	298111.72				mg/L
	Cl	35	64756100.493	64737084.42				mg/L
	Kr	83	46.001	-14.67				mg/L
	Br	81	9865.532	1255.16				mg/L
	P	31	14457.836	1061.93				mg/L
	S	34	210491.551	22510.57				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		84.041			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		101.686			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		112.904			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		109.009			
⌈	Na	23					

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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102000240

Sample Date/Time: Tuesday, February 22, 2011 19:43:12
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 69
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	28189.710	0.04				ug/L
|	Be	9	8712.463	0.03	34.7597	1.651	4.750	ug/L
|	Al	27	155889.129	0.53	26.2072	0.377	1.437	ug/L
⌊>	Sc	45	291660.376	291660.38				ug/L
⌈	Ti	49	4734.928	0.01	8.2672	0.231	2.797	ug/L
|	V	51	212764.761	0.48	23.8479	0.845	3.544	ug/L
|	Cr	52	214952.498	0.48	27.7347	0.126	0.455	ug/L
|	Cr	53	91532.998	0.21	102.5156	2.925	2.853	ug/L
|	Mn	55	310701.593	0.71	26.9816	0.583	2.162	ug/L
|	Co	59	259631.843	0.60	28.2007	0.630	2.234	ug/L
|	Ni	60	55281.945	0.13	28.7534	0.398	1.383	ug/L
|	Cu	65	57222.157	0.13	28.8008	0.243	0.842	ug/L
|	Zn	66	33595.676	0.08	28.2812	0.144	0.509	ug/L
| >	Ge	72	436237.914	436237.91				ug/L
|	As	75	21813.185	0.05	22.8033	0.904	3.963	ug/L
|	Se	77	4567.710	0.01	65.4681	0.276	0.422	ug/L
|	Se	82	1853.443	0.00	21.0092	0.867	4.129	ug/L
⌊	Rb	85	31.667	0.00				mg/L
	Y	89	257789.381	-89992.80				ug/L
	Rh	103	16.334	6.00				ug/L
⌈	Mo	98	208.351	0.00	0.0891	0.008	8.690	ug/L
|	Ag	107	114807.302	0.29	23.3914	0.529	2.263	ug/L
|	Cd	114	28941.972	0.07	24.9424	0.558	2.238	ug/L
| >	In	115	395979.468	395979.47				ug/L
|	Sn	118	486.145	0.00	0.0993	0.001	0.972	ug/L
⌊	Sb	123	97963.854	0.25	24.3297	0.364	1.498	ug/L
⌈	Ba	135	41439.109	0.07	21.8855	0.774	3.536	ug/L
|	Ce	140	56.673	0.00				ug/L
⌊>	Tb	159	561200.052	561200.05				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	193094.718	0.36	25.9060	0.458	1.768	ug/L
|	Tl	205	473161.524	0.89	25.6656	0.613	2.389	ug/L
|	Pb	206	166680.992	0.31	27.4050	0.493	1.800	ug/L
|	Pb	207	143080.174	0.27	25.0007	0.487	1.947	ug/L
|	Pb	208	668558.628	1.26	26.3033	0.301	1.146	ug/L
|	U	238	1014267.734	1.91	27.1450	0.163	0.599	ug/L
⌊>	Bi	209	530666.488	530666.49				ug/L

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⌈	Na	23	65037.447	0.16	0.0052	0.000	4.742	mg/L
|	Mg	24	9398.698	0.03	-0.0014	0.000	7.152	mg/L
|	K	39	511309.718	-0.13	-0.0093	0.001	15.886	mg/L
|	Ca	43	373.378	0.00	0.0102	0.004	34.340	mg/L
|	Fe	54	73523.410	0.09	0.0490	0.010	19.587	mg/L
|	Fe	57	6412.700	-0.00	-0.0046	0.002	39.383	mg/L
⌊>	Sc-1	45	291660.376	291660.38				mg/L
	Cl	35	65188931.224	65169915.15				mg/L
	Kr	83	48.667	-12.00				mg/L
	Br	81	10606.290	1995.91				mg/L
	P	31	15347.839	1951.94				mg/L
	S	34	201567.297	13586.32				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		83.486			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.880			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		111.592			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		106.927			
⌈	Na	23					

Sample ID: L1102000240
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102000240
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Method 6020 - Summary Report

Sample ID: L1101070708

Sample Date/Time: Tuesday, February 22, 2011 19:50:02
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 70
Method File: C:\elandata\Method\6020a.mth
Sample Description: 25

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22742.532	0.02				ug/L
|	Be	9	3195.845	0.01	12.0447	1.174	9.745	ug/L
|	Al	27	4843313.781	15.73	786.3247	64.788	8.239	ug/L
⌊>	Sc	45	308685.334	308685.33				ug/L
⌈	Ti	49	7426.840	0.02	11.6060	0.909	7.832	ug/L
|	V	51	102699.942	0.21	10.1437	0.210	2.075	ug/L
|	Cr	52	87884.708	0.16	9.5102	0.158	1.657	ug/L
|	Cr	53	17567.196	0.04	17.4649	1.142	6.539	ug/L
|	Mn	55	732024.459	1.50	56.8298	0.406	0.714	ug/L
|	Co	59	148327.800	0.30	14.3840	0.108	0.748	ug/L
|	Ni	60	27708.949	0.06	12.8710	0.284	2.208	ug/L
|	Cu	65	20276.071	0.04	9.0688	0.150	1.650	ug/L
|	Zn	66	43671.260	0.09	32.9309	0.194	0.590	ug/L
|>	Ge	72	488424.489	488424.49				ug/L
|	As	75	13877.033	0.03	13.0217	0.277	2.130	ug/L
|	Se	77	1912.850	0.00	23.8582	0.664	2.781	ug/L
|	Se	82	2205.209	0.00	22.3276	1.029	4.610	ug/L
⌊	Rb	85	16627.646	0.03				mg/L
	Y	89	308995.508	-38786.68				ug/L
	Rh	103	11.000	0.67				ug/L
⌈	Mo	98	21705.981	0.05	8.2563	0.229	2.774	ug/L
|	Ag	107	27584.938	0.07	5.5547	0.135	2.434	ug/L
|	Cd	114	14869.725	0.04	12.6593	0.551	4.351	ug/L
|>	In	115	400587.214	400587.21				ug/L
|	Sn	118	55411.548	0.14	13.0394	0.119	0.914	ug/L
⌊	Sb	123	93625.411	0.23	22.9835	0.129	0.563	ug/L
⌈	Ba	135	53624.941	0.10	29.2234	0.523	1.789	ug/L
|	Ce	140	69336.482	0.13				ug/L
⌊>	Tb	159	543591.609	543591.61				ug/L
⌈	Ho	165	660.088	0.00				ug/L
|	Tl	203	182086.427	0.33	23.7288	0.403	1.697	ug/L
|	Tl	205	439557.429	0.80	23.1625	1.260	5.441	ug/L
|	Pb	206	89817.256	0.16	14.3110	0.564	3.939	ug/L
|	Pb	207	80606.086	0.15	13.6570	0.153	1.122	ug/L
|	Pb	208	369576.937	0.67	14.0960	0.154	1.096	ug/L
|	U	238	3569.673	0.01	0.0913	0.003	3.369	ug/L
⌊>	Bi	209	546188.991	546188.99				ug/L

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⌈	Na	23	434175.157	1.34	0.0682	0.004	6.012	mg/L
|	Mg	24	1134478.437	3.68	0.3057	0.012	4.048	mg/L
|	K	39	2094538.149	4.92	0.1718	0.014	8.122	mg/L
|	Ca	43	21351.592	0.07	1.0976	0.034	3.055	mg/L
|	Fe	54	1160592.820	3.61	1.7585	0.109	6.215	mg/L
|	Fe	57	472706.496	1.51	1.7929	0.153	8.525	mg/L
⌊>	Sc-1	45	308685.334	308685.33				mg/L
	Cl	35	1750561.636	1731545.57				mg/L
	Kr	83	46.001	-14.67				mg/L
	Br	81	7198.595	-1411.78				mg/L
	P	31	16828.153	3432.25				mg/L
	S	34	201199.602	13218.62				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.474			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		102.054			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		108.090			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		110.055			
⌈	Na	23					

Sample ID: L1101070708
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
_>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1101070708
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Tuesday, February 22, 2011 19:56:50
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23945.573	0.02				ug/L
|	Be	9	15806.492	0.05	59.0827	2.025	3.427	ug/L
|	Al	27	317911.705	1.01	50.5348	1.891	3.743	ug/L
⌊>	Sc	45	311321.812	311321.81				ug/L
⌈	Ti	49	65037.595	0.14	103.6274	4.449	4.293	ug/L
|	V	51	506697.126	1.05	51.9003	1.288	2.482	ug/L
|	Cr	52	436636.602	0.89	52.0333	1.789	3.438	ug/L
|	Cr	53	52737.303	0.11	53.6105	1.253	2.337	ug/L
|	Mn	55	640399.780	1.33	50.5751	0.437	0.864	ug/L
|	Co	59	532570.696	1.11	52.5755	0.616	1.172	ug/L
|	Ni	60	111394.917	0.23	52.6574	1.266	2.404	ug/L
|	Cu	65	114194.141	0.24	52.2838	0.329	0.628	ug/L
|	Zn	66	67106.765	0.14	51.8159	0.986	1.903	ug/L
|>	Ge	72	480086.752	480086.75				ug/L
|	As	75	51080.383	0.11	48.3503	0.282	0.583	ug/L
|	Se	77	3852.742	0.01	49.9573	1.860	3.724	ug/L
|	Se	82	4724.447	0.01	48.6411	0.914	1.879	ug/L
⌊	Rb	85	1973.548	0.00				mg/L
	Y	89	301131.571	-46650.61				ug/L
	Rh	103	28.667	18.33				ug/L
⌈	Mo	98	243871.956	0.61	93.5706	0.580	0.620	ug/L
|	Ag	107	244858.144	0.62	49.7824	0.073	0.148	ug/L
|	Cd	114	58968.469	0.15	50.7256	2.401	4.733	ug/L
|>	In	115	396836.284	396836.28				ug/L
|	Sn	118	204156.837	0.51	48.5473	0.589	1.214	ug/L
⌊	Sb	123	200103.926	0.50	49.5966	0.869	1.753	ug/L
⌈	Ba	135	85111.517	0.15	45.8857	0.231	0.502	ug/L
|	Ce	140	53.339	0.00				ug/L
⌊>	Tb	159	549329.133	549329.13				ug/L
⌈	Ho	165	30.003	0.00				ug/L
|	Tl	203	388951.343	0.72	50.9428	0.257	0.504	ug/L
|	Tl	205	931960.523	1.71	49.3403	0.961	1.947	ug/L
|	Pb	206	308261.088	0.57	49.5310	0.288	0.582	ug/L
|	Pb	207	291762.974	0.54	49.8186	0.576	1.156	ug/L
|	Pb	208	1316173.478	2.42	50.6109	0.236	0.465	ug/L
|	U	238	1994751.173	3.67	52.1286	0.723	1.388	ug/L
⌊>	Bi	209	543497.199	543497.20				ug/L

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⌈	Na	23	30011841.072	96.33	5.1160	0.216	4.225	mg/L
|	Mg	24	18762697.040	60.27	5.0678	0.022	0.437	mg/L
|	K	39	45057661.781	142.85	5.1250	0.115	2.241	mg/L
|	Ca	43	97348.050	0.31	4.9934	0.104	2.076	mg/L
|	Fe	54	3254659.173	10.29	5.0092	0.060	1.200	mg/L
|	Fe	57	1322697.663	4.22	5.0127	0.101	2.007	mg/L
⌊>	Sc-1	45	311321.812	311321.81				mg/L
	Cl	35	61182.607	42166.54				mg/L
	Kr	83	46.667	-14.00				mg/L
	Br	81	7356.038	-1254.34				mg/L
	P	31	11594.780	-1801.12				mg/L
	S	34	231614.183	43633.21				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	103.801				
|	Cr	52	104.067				
|	Cr	53					
|	Mn	55	101.150				
|	Co	59	105.151				
|	Ni	60	105.315				
|	Cu	65	104.568				
|	Zn	66	103.632				
|>	Ge	72		91.878			
|	As	75	96.701				
|	Se	77					
|	Se	82	97.282				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	99.565				
|	Cd	114	101.451				
|>	In	115		101.098			
|	Sn	118					
⌊	Sb	123	99.193				
⌈	Ba	135	91.771				
|	Ce	140					
⌊>	Tb	159		109.231			
⌈	Ho	165					
|	Tl	203	101.886				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	101.222				
|	U	238	104.257				
⌊>	Bi	209		109.513			
⌈	Na	23					

Sample ID: QC Std 6
Report Date/Time: Tuesday, February 22, 2011 19:59:02
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Tuesday, February 22, 2011 19:59:02
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Approved: February 23, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Tuesday, February 22, 2011 20:04:05
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22709.132	0.01				ug/L
|	Be	9	6.000	0.00	-0.0330	0.014	43.713	ug/L
|	Al	27	3967.455	0.00	0.1101	0.035	31.985	ug/L
⌊>	Sc	45	315087.876	315087.88				ug/L
⌈	Ti	49	83.342	0.00	0.0911	0.080	88.297	ug/L
|	V	51	1647.638	-0.00	-0.0777	0.008	9.948	ug/L
|	Cr	52	7639.328	-0.00	-0.0597	0.020	33.993	ug/L
|	Cr	53	3420.929	0.01	3.3001	0.250	7.581	ug/L
|	Mn	55	342.343	0.00	-0.0154	0.001	6.060	ug/L
|	Co	59	62.334	0.00	-0.0028	0.001	25.788	ug/L
|	Ni	60	44.334	-0.00	0.0146	0.001	6.189	ug/L
|	Cu	65	107.668	0.00	-0.0205	0.008	36.724	ug/L
|	Zn	66	588.690	0.00	-0.1316	0.014	11.005	ug/L
|>	Ge	72	486057.163	486057.16				ug/L
|	As	75	-139.237	0.00	0.0224	0.030	133.527	ug/L
|	Se	77	86.667	0.00	0.1376	0.130	94.708	ug/L
|	Se	82	2.252	0.00	0.0397	0.097	243.511	ug/L
⌊	Rb	85	18.667	-0.00				mg/L
	Y	89	312888.544	-34893.64				ug/L
	Rh	103	5.667	-4.67				ug/L
⌈	Mo	98	126.162	0.00	0.0573	0.010	17.983	ug/L
|	Ag	107	27.334	-0.00	0.0026	0.000	18.640	ug/L
|	Cd	114	-3.071	-0.00	-0.0094	0.003	27.595	ug/L
|>	In	115	398125.742	398125.74				ug/L
|	Sn	118	342.006	0.00	0.0645	0.004	6.264	ug/L
⌊	Sb	123	66.409	0.00	0.0115	0.001	6.889	ug/L
⌈	Ba	135	24.334	0.00	0.0265	0.002	7.718	ug/L
|	Ce	140	26.669	-0.00				ug/L
⌊>	Tb	159	547660.388	547660.39				ug/L
⌈	Ho	165	23.336	0.00				ug/L
|	Tl	203	320.675	0.00	0.0393	0.004	9.636	ug/L
|	Tl	205	730.100	0.00	0.0472	0.007	15.796	ug/L
|	Pb	206	477.350	0.00	0.0071	0.007	91.569	ug/L
|	Pb	207	385.678	0.00	0.0117	0.004	37.550	ug/L
|	Pb	208	1845.419	0.00	0.0074	0.004	59.171	ug/L
|	U	238	89.001	0.00	0.0007	0.001	76.188	ug/L
⌊>	Bi	209	550887.913	550887.91				ug/L

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⌈	Na	23	21762.513	0.00	-0.0030	0.000	4.008	mg/L
|	Mg	24	616.748	0.00	-0.0039	0.000	0.674	mg/L
|	K	39	546647.328	-0.15	-0.0100	0.001	10.006	mg/L
|	Ca	43	240.027	-0.00	0.0018	0.002	119.644	mg/L
|	Fe	54	45610.442	-0.02	-0.0033	0.003	102.781	mg/L
|	Fe	57	6839.691	-0.01	-0.0049	0.001	21.477	mg/L
⌊>	Sc-1	45	315087.876	315087.88				mg/L
	Cl	35	49265.067	30249.00				mg/L
	Kr	83	47.667	-13.00				mg/L
	Br	81	7411.414	-1198.96				mg/L
	P	31	10724.416	-2671.49				mg/L
	S	34	223663.631	35682.65				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.021			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		101.427			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		108.899			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		111.002			
⌈	Na	23					

Sample ID: QC Std 7
Report Date/Time: Tuesday, February 22, 2011 20:06:16
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Tuesday, February 22, 2011 20:06:16
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2.2.3 Metals CVAA Data (Mercury)

2.2.3.1 Summary Data

Login Number: L11020492

Department: Metals - AA

Analyst: Pierce Morris

METHOD

Preparation: SW-846 7470

Analysis: SW-846 7470

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG357245 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 22022
Approved By: Sheri Pfalzgraf

LABORATORY REPORT

L11020492

03/03/11 15:59

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-POND-21711-W	L11020492-01	7470A	1	18-FEB-11
SWMU-57-POND-21711-W	L11020492-02	7470A	1	18-FEB-11

Microbac Laboratories Inc.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number:	**L11020492-01**	PrePrep Method:	**1311**	Instrument:	**HYDRA**
Client ID:	**SWMU-57-POND-21711-W**	Prep Method:	**7470A**	Prep Date:	**02/22/2011 09:28**
Matrix:	**Leachate**	Analytical Method:	**7470A**	Cal Date:	**02/23/2011 08:44**
Workgroup Number:	**WG357245**	Analyst:	**PDM**	Run Date:	**02/23/2011 09:44**
Collect Date:	**02/17/2011 14:45**	Dilution:	**1**	File ID:	**HY.022311.094404**
Sample Tag:	**01**	Units:	**mg/L**		

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	**7439-97-6**		**U**	**.002**	**.001**	**D009**	**.2**

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number:	L11020492-02	PrePrep Method:	NONE	Instrument:	HYDRA
Client ID:	SWMU-57-POND-21711-W	Prep Method:	7470A	Prep Date:	02/22/2011 09:28
Matrix:	Water	Analytical Method:	7470A	Cal Date:	02/23/2011 08:44
Workgroup Number:	WG357245	Analyst:	PDM	Run Date:	02/23/2011 09:45
Collect Date:	02/17/2011 14:45	Dilution:	1	File ID:	HY.022311.094547
Sample Tag:	01	Units:	mg/L		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Mercury	7439-97-6		U	0.000200	0.000100

U Analyte was not detected. The concentration is below the reported LOD.

2.2.3.2 QC Summary

Example Cold Vapor Mercury Calculations
Hydra AA Mercury Analyzer

1.0 Initial Calibration (ICAL) Parameters
The system performs linear regression from data consisting of a blank and five standards.

2.0 Calculating the concentration (C) of an element in water using data from run log and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted to Volume (mL)	40
Vi = Aliquot Volume (mL)	40
D = Manual dilution factor, if required (10X = 10)	1
Cx = Concentration of element in ppb (ug/L)	0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Ws} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted to volume (mL)	40
Ws = Aliquot weight (g)	0.6
D = Manual dilution factor	1
Cx = Concentration of element in ug/kg	6.67

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

1 Cx = Concentration calculated as received (wet basis)	6.67
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (ug/kg)	8.33

8.33 ug/kg = 0.00833 mg/kg

TCLP Non-Volatile

Analyst(s): Ruc
Date: 02-21-11
Filter Lot #: H11368979

Agitator Speed 30 ± 2 rpm ☑

Analyst/Date		Analyst/Date	
Ruc 2-21-11		Ruc 2.22.11	
Time On	Temp On °C	Time Off	Temp Off °C
1400	23	715	23

Jug #	Sample #	Tests	Method	Fluid #	Matrix*	%Solid	Size Reduction Yes	Size Reduction No	Int. Wt. (g)	Fluid Vol. (mL)
D	02-408-04	ME	1311	FI-814	S/S	100		✓	100.00	2000
D	05	"	"	"	"	"		"	100.02	"
G9	02-491-01	SV	"	"	S	"		"	100.05	"
G14	02-521-01	Pest Herb	"	"	S/S	"		"	100.08	"
G29	02-535-01	"	"	F2-271	S	"		"	25.01 *	500
N/A	FBLK(1)	"	"	FI-814	N/A	N/A		"	2000	2000
"	FBLK(2)	"	"	F2-271	N/A	N/A		"	"	"
"	02-408-01	"	"	Filtered	W	<.5		"	100	100
"	02	"	"	"	W	"		"	"	"
"	02-492-01	"	"	"	W	"		"	"	"
D	02-489-02	ME	1312	SFI-355	S/S	100		✓	100.03	2000
D	04	"	"	"	"	"		✓	100.02	"
D	06	"	"	"	"	"		✓	100.08	"
N/A	FBLK	"	"	"	N/A	N/A		✓	2000	"

Ruc 2-21-11

*Matrix Code = (S-solid) (SS-sand, soil or sludge) (P-paint) (O-organic) (W-water or waste)
Agitator speed is 30 ± 2 rpm unless otherwise noted.

Comments: * SK 02-535-01 had only ~64g of MATERIAL - Notified TSR(A.B.) And was instructed to Proceed w/Reduced Volume - Ruc 2-21-11
Filtered SK(S) Processed @ 8:30 - Ruc

Peer Review By: _____ Supervisor Review: _____

Microbac Laboratories Inc.
Metals Digest Log

Workgroup: WG357194
Analyst: REK
Spike Analyst: REK
Method: 7470A
Run Date: 02/22/2011 09:28
Hotblock Start Temp: 95 @ 09:20
Hotblock End Temp: 95.3 @ 11:20

SOP: ME404 Revison 12
Spike Solution: STD44085
Spike Witness: VC
H2SO4 Lot #: COA14202
HNO3 Lot #: COA15168
Digestion Tubes Lot #: COA15251
K2S2O8 1:1 Lot #: RGT15459
KMnO4 1:1 Lot #: RGT15577
Mercury Water ICV Lot #: STD44087
HG H2O STDS 10PPM Lot #: STD44093

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG357194-03	BLANK	1	40 mL	40 mL		
2	WG357119-01	FBLK	18	40 mL	40 mL		
3	WG357124-01	FBLK1	17	4 mL	40 mL		
4	WG357124-02	FBLK2	17	4 mL	40 mL		
5	WG357194-04	LCS	1	40 mL	40 mL	4 mL	
6	L11020408-01	SAMP	17	4 mL	40 mL		02/25/11
7	L11020408-02	SAMP	17	4 mL	40 mL		02/25/11
8	L11020408-04	SAMP	17	4 mL	40 mL		02/25/11
9	L11020408-05	SAMP	17	4 mL	40 mL		02/25/11
10	L11020489-02	SAMP	18	40 mL	40 mL		02/25/11
11	L11020489-04	SAMP	18	40 mL	40 mL		02/25/11
12	L11020489-06	SAMP	18	40 mL	40 mL		02/25/11
13	WG357194-01	REF	17	4 mL	40 mL		
14	L11020491-01	SAMP	17	4 mL	40 mL		03/03/11
15	L11020492-01	SAMP	17	4 mL	40 mL		02/25/11
16	L11020492-02	SAMP	1	40 mL	40 mL		02/25/11
17	L11020517-01	SAMP	1	40 mL	40 mL		02/24/11
18	L11020521-01	SAMP	17	4 mL	40 mL		03/04/11
19	L11020522-01	SAMP	2	40 mL	40 mL		02/25/11
20	WG357194-02	REF	2	40 mL	40 mL		
21	L11020522-03	SAMP	2	40 mL	40 mL		02/25/11
22	L11020535-01	SAMP	17	4 mL	40 mL		02/23/11
23	WG357194-05	MS	1	4 mL	40 mL	4 mL	
24	WG357194-06	MSD	1	4 mL	40 mL	4 mL	
25	WG357194-07	DUP	1	40 mL	40 mL		
26	WG357194-08	MS	1	36 mL	40 mL	4 mL	

L11020489-02	SAMPLE MAY BE HOT!!!
L11020489-04	SAMPLE MAY BE HOT!!!
L11020489-06	SAMPLE MAY BE HOT!!!

Analyst: 

Reviewer: Brenda Gregory

HB_DIG - Modified 09/30/2009
PDF ID: 1925554
Report generated: 02/22/2011 12:01

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 022311B.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 12
Maintenance Log ID: 36537

Calibration Std: STD44093 ICV Std: STD44087 Post Spike: STD44093
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

Workgroups: WG357245

Comments: Sequences 9-10, 37, 49, and 53-55 were not reported.

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.022311.083510	WG357389-01	Calibration Point		1		02/23/11 08:35
2	HY.022311.083653	WG357389-02	Calibration Point		1		02/23/11 08:36
3	HY.022311.083838	WG357389-03	Calibration Point		1		02/23/11 08:38
4	HY.022311.084023	WG357389-04	Calibration Point		1		02/23/11 08:40
5	HY.022311.084208	WG357389-05	Calibration Point		1		02/23/11 08:42
6	HY.022311.084416	WG357389-06	Calibration Point		1		02/23/11 08:44
7	HY.022311.084737	WG357389-07	Initial Calibration Verification		1		02/23/11 08:47
8	HY.022311.084924	WG357389-08	Initial Calib Blank		1		02/23/11 08:49
9	HY.022311.085116	WG357389-09	Ck4CCV		1		02/23/11 08:51
10	HY.022311.085258	WG357389-10	Ck5CCB		1		02/23/11 08:52
11	HY.022311.090115	WG357389-11	CCV		1		02/23/11 09:01
12	HY.022311.090310	WG357389-12	CCB		1		02/23/11 09:03
13	HY.022311.090635	WG357194-03	Method/Prep Blank	40/40	1		02/23/11 09:06
14	HY.022311.090836	WG357194-04	Laboratory Control S	40/40	1		02/23/11 09:08
15	HY.022311.091018	WG357119-01	Fluid Blank		1		02/23/11 09:10
16	HY.022311.091159	WG357124-01	TCLP Fluid Blank 1		1		02/23/11 09:11
17	HY.022311.091344	WG357124-02	TCLP Fluid Blank 2		1		02/23/11 09:13
18	HY.022311.091527	L11020408-01	R-S1-020711-07/04/06	4/40	1		02/23/11 09:15
19	HY.022311.091725	WG357245-01	Post Digestion Spike		1	L11020408-01	02/23/11 09:17
20	HY.022311.091910	L11020408-02	R-S1-011011-02/03	4/40	1		02/23/11 09:19
21	HY.022311.092056	L11020408-04	R-S1-020111-05	4/40	1		02/23/11 09:20
22	HY.022311.092242	L11020408-05	R-S1-011001-01	4/40	1		02/23/11 09:22
23	HY.022311.092439	WG357389-13	CCV		1		02/23/11 09:24
24	HY.022311.092707	WG357389-14	CCB		1		02/23/11 09:27
25	HY.022311.092852	L11020489-02	E13-010 REP.	40/40	1		02/23/11 09:28
26	HY.022311.093045	WG357245-02	Post Digestion Spike		1	L11020489-02	02/23/11 09:30
27	HY.022311.093247	WG357245-04	Serial Dilution		5	L11020489-02	02/23/11 09:32
28	HY.022311.093512	L11020489-04	E13-011 REP.	40/40	1		02/23/11 09:35
29	HY.022311.093654	L11020489-06	E13-013 REP.	40/40	1		02/23/11 09:36
30	HY.022311.093838	WG357194-01	Reference Sample	4/40	1	L11020491-01	02/23/11 09:38
31	HY.022311.094025	WG357194-05	Matrix Spike	4/40	1	L11020491-01	02/23/11 09:40
32	HY.022311.094209	WG357194-06	Matrix Spike Duplica	4/40	1	L11020491-01	02/23/11 09:42
33	HY.022311.094404	L11020492-01	SWMU-57-POND-21711-W	4/40	1		02/23/11 09:44
34	HY.022311.094547	L11020492-02	SWMU-57-POND-21711-W	40/40	1		02/23/11 09:45

Page: 1 Approved: February 23, 2011

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 022311B.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 12
Maintenance Log ID: 36537

Calibration Std: STD44093 ICV Std: STD44087 Post Spike: STD44093
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

Workgroups: WG357245

Comments: Sequences 9-10, 37, 49, and 53-55 were not reported.

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	HY.022311.094740	WG357389-15	CCV		1		02/23/11 09:47
36	HY.022311.095005	WG357389-16	CCB		1		02/23/11 09:50
37	HY.022311.095148	L11020517-01	PSO2-GW-021811		1		02/23/11 09:51
38	HY.022311.095341	L11020521-01	DS021811	4/40	1		02/23/11 09:53
39	HY.022311.095525	L11020522-01	1102-227-1	40/40	1		02/23/11 09:55
40	HY.022311.095708	WG357245-03	Post Digestion Spike		1	L11020492-02	02/23/11 09:57
41	HY.022311.095852	WG357194-02	Reference Sample	40/40	1	L11020522-03	02/23/11 09:58
42	HY.022311.100036	WG357194-07	Duplicate	40/40	1	L11020522-03	02/23/11 10:00
43	HY.022311.100239	WG357194-08	Matrix Spike	36/40	1	L11020522-03	02/23/11 10:02
44	HY.022311.100423	L11020535-01	2-1857	4/40	1		02/23/11 10:04
45	HY.022311.101144	WG357389-17	CCV		1		02/23/11 10:11
46	HY.022311.101326	WG357389-18	CCB		1		02/23/11 10:13
47	HY.022311.101701	WG357245-05	Post Digestion Spike		1	L11020522-03	02/23/11 10:17
48	HY.022311.101905	WG357245-06	Post Digestion Spike		1	L11020492-02	02/23/11 10:19
49	HY.022311.102049	WG357245-07	Post Digestion Spike		1	L11020517-01	02/23/11 10:20
50	HY.022311.102233	WG357389-19	CCV		1		02/23/11 10:22
51	HY.022311.102418	WG357389-20	CCB		1		02/23/11 10:24
52	HY.022311.103206	L11020517-01	PSO2-GW-021811	40/40	2		02/23/11 10:32
53	HY.022311.103424	+1	+1		2		02/23/11 10:34
54	HY.022311.103607	+2	+2		2		02/23/11 10:36
55	HY.022311.103814	+3	+3		2		02/23/11 10:38
56	HY.022311.104001	WG357389-21	CCV		1		02/23/11 10:40
57	HY.022311.104143	WG357389-22	CCB		1		02/23/11 10:41

Page: 2 Approved: February 23, 2011

Maren Berry

Microbac Laboratories Inc.

Data Checklist

Date: 23-FEB-2011
Analyst: PDM
Analyst: NA
Method: 7470
Instrument: HYDRA
Curve Workgroup: WG357389
Runlog ID: 39173
Analytical Workgroups: WG357245

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	X
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0408, 0489, 0492, 0517, 0521, 0522
	0535
Client Forms	X
Level X	0522, 0535
Level 3	0517
Level 4	0408, 0489, 0492, 0521
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	PWD
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
23-FEB-2011
Paul W Dent

Secondary Reviewer:
23-FEB-2011
Maren Berry

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-23-2011 15:10:13

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method 7470A AAB#: WG357245

Login Number: L11020492

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-POND-21711-W	02	02/17/11					02/22/11	4.8	28		02/23/11	5.8	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1927194
Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L11020492
Work Group: WG357245
Blank File ID: HY.022311.090635
Blank Sample ID: WG357194-03
Prep Date: 02/22/11 09:28
Instrument ID: HYDRA
Analyzed Date: 02/23/11 09:06
Method: 7470A
Analyst: PDM

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357194-04	HY.022311.090836	02/23/11 09:08	01
SWMU-57-POND-21711-W	L11020492-01	HY.022311.094404	02/23/11 09:44	01
SWMU-57-POND-21711-W	L11020492-02	HY.022311.094547	02/23/11 09:45	01
DUP	WG357194-07	HY.022311.100036	02/23/11 10:00	01

Report Name: BLANK_SUMMARY
PDF File ID: 1927195
Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11020492 Prep Date: 02/22/11 09:28 Sample ID: WG357194-03
Instrument ID: HYDRA Run Date: 02/23/11 09:06 Prep Method: 7470A
File ID: HY.022311.090635 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG357245 Matrix: Water Units: mg/L
Contract #: Cal ID: HYDRA-23-FEB-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Mercury	0.000100	0.000200	0.000100	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1927196
23-FEB-2011 13:31

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357194-04
Instrument ID: HYDRA Run Time: 09:08 Prep Method: 7470A
File ID: HY.022311.090836 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG357245 Matrix: Water Units: mg/L
QC Key: DOD4 Lot#: STD44085 Cal ID: HYDRA-23-FEB-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00437	109	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1927197
Report generated: 02/23/2011 13:31

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11020492 Cal ID:HYDRA- Worknum:WG357245
Instrument ID:HYDRA Contract #: Method:7470A
Parent ID:WG357194-01 File ID:HY.022311.093838 Dil:1 Matrix:WATER
Sample ID:WG357194-05 MS File ID:HY.022311.094025 Dil:1 Units:mg/L
Sample ID:WG357194-06 MSD File ID:HY.022311.094209 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury	ND	0.0400	0.0255	63.8	0.0400	0.0423	106	49.6	80 - 120	20	*#

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008
PDF File ID:1927198
Report generated 02/23/2011 13:31

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11020492 **Worknum:** WG357245
Instrument ID: HYDRA **Method:** 7470A
Post Spike ID: WG357245-06 **File ID:** HY.022311.101905 **Dil:** 1 **Units:** ug/L
Sample ID: L11020492-02 **File ID:** HY.022311.094547 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	0.970		0	U	1	97.0	85 - 115	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1927193
Report generated: 02/23/2011 15:39

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L11020492
Analytical Method: 7470A
ICAL Worknum: WG357389

Workgroup (AAB#): WG357245
Instrument ID: HYDRA
Initial Calibration Date: 02/23/2011 08:44

Analyte	WG357389-01		WG357389-02		WG357389-03		WG357389-04		WG357389-05		WG357389-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	-48	0.200	871	1.00	3487	2.00	6872	5.00	17320	10.0	34713

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 1927199
Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L11020492
Analytical Method: 7470A
ICAL Worknum: WG357389

Workgroup (AAB#): WG357245
Instrument ID: HYDRA
Initial Calibration Date: 02/23/2011 08:44

Analyte	R	Q
Mercury	1.000	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 1927199
Report generated 02/23/2011 13:31

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357389-08
Instrument ID: HYDRA Run Time: 08:49 Method: 7470A
File ID: HY.022311.084924 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG357245 Cal ID: HYDRA - 23-FEB-11
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

U = Result is less than 2 x MDL
F = Result is between MDL and 2 x MDL
* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1927201
Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020492	Run Date:	02/23/2011	Sample ID:	WG357389-12
Instrument ID:	HYDRA	Run Time:	09:03	Method:	7470A
File ID:	HY.022311.090310	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG357245	Cal ID:	HYDRA - 23-FEB-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1927203
Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020492	Run Date:	02/23/2011	Sample ID:	WG357389-14
Instrument ID:	HYDRA	Run Time:	09:27	Method:	7470A
File ID:	HY.022311.092707	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG357245	Cal ID:	HYDRA - 23-FEB-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1927203
Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020492	Run Date:	02/23/2011	Sample ID:	WG357389-16
Instrument ID:	HYDRA	Run Time:	09:50	Method:	7470A
File ID:	HY.022311.095005	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG357245	Cal ID:	HYDRA - 23-FEB-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1927203
Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020492	Run Date:	02/23/2011	Sample ID:	WG357389-18
Instrument ID:	HYDRA	Run Time:	10:13	Method:	7470A
File ID:	HY.022311.101326	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG357245	Cal ID:	HYDRA - 23-FEB-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1927203
Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020492	Run Date:	02/23/2011	Sample ID:	WG357389-20
Instrument ID:	HYDRA	Run Time:	10:24	Method:	7470A
File ID:	HY.022311.102418	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG357245	Cal ID:	HYDRA - 23-FEB-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1927203
Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357389-07

Instrument ID: HYDRA Run Time: 08:47 Method: 7470A

File ID: HY.022311.084737 Analyst: PDM Units: ug/L

Workgroup (AAB#): WG357245 Cal ID: HYDRA - 23-FEB-11

QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.05	103	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008

PDF File ID: 1927200

Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357389-11

Instrument ID: HYDRA Run Time: 09:01 Method: 7470A

File ID: HY.022311.090115 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357245 Cal ID: HYDRA - 23-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00210	mg/L	105	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1927202

Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357389-13

Instrument ID: HYDRA Run Time: 09:24 Method: 7470A

File ID: HY.022311.092439 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357245 Cal ID: HYDRA - 23-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00202	mg/L	101	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1927202

Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357389-15

Instrument ID: HYDRA Run Time: 09:47 Method: 7470A

File ID: HY.022311.094740 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357245 Cal ID: HYDRA - 23-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00202	mg/L	101	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1927202

Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357389-17

Instrument ID: HYDRA Run Time: 10:11 Method: 7470A

File ID: HY.022311.101144 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357245 Cal ID: HYDRA - 23-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00199	mg/L	99.5	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1927202

Report generated 02/23/2011 13:31

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020492 Run Date: 02/23/2011 Sample ID: WG357389-19

Instrument ID: HYDRA Run Time: 10:22 Method: 7470A

File ID: HY.022311.102233 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357245 Cal ID: HYDRA - 23-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00199	mg/L	99.5	80 - 120		

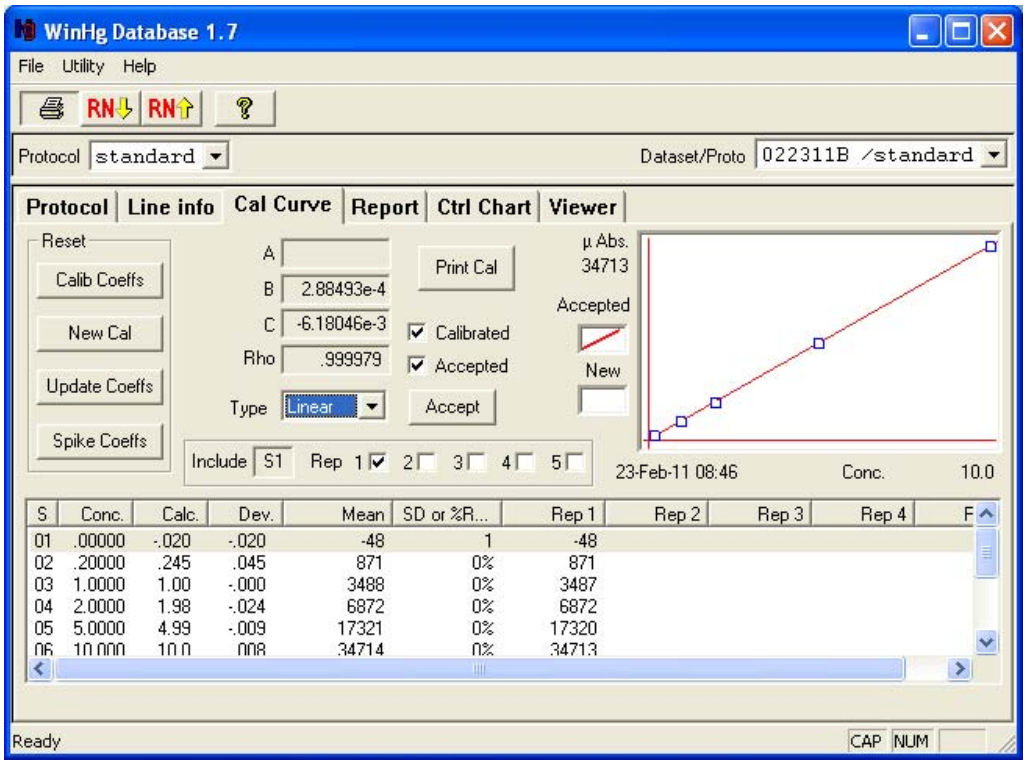
* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1927202

Report generated 02/23/2011 13:31

2.2.3.3 Raw Data



Approved: February 23, 2011

Paul W Dent

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 08:16:59 23 Feb 11 HG

Hg .000 ppb 7

*** Standard: 2 Rep: 1 Seq: 2 08:19:24 23 Feb 11 HG

Hg .200 ppb 749

*** Standard: 3 Rep: 1 Seq: 3 08:21:08 23 Feb 11 HG

Hg 1.00 ppb 3668

*** Standard: 4 Rep: 1 Seq: 4 08:23:50 23 Feb 11 HG

Hg 2.00 ppb 6920

*** Standard: 5 Rep: 1 Seq: 5 08:25:43 23 Feb 11 HG

Hg 5.00 ppb 17340

*** Standard: 6 Rep: 1 Seq: 6 08:27:40 23 Feb 11 HG

Hg 10.0 ppb 34725

*** Check Standard: 2 Ck2ICV Seq: 7 08:29:33 23 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		107.	2.14	2.00	ppb	.000

*** Check Standard: 2 Ck2ICV Seq: 8 08:33:26 23 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		109.	2.17	2.00	ppb	.000

*** Standard: 1 Rep: 1 Seq: 1 08:35:10 23 Feb 11 HG

Hg .000 ppb -48

*** Standard: 2 Rep: 1 Seq: 2 08:36:53 23 Feb 11 HG

Hg .200 ppb 871

*** Standard: 3 Rep: 1 Seq: 3 08:38:38 23 Feb 11 HG

Hg 1.00 ppb 3487

*** Standard: 4 Rep: 1 Seq: 4 08:40:23 23 Feb 11 HG

Hg 2.00 ppb 6872

Approved: February 23, 2011
Paul W Dent

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Standard: 5 Rep: 1              Seq:  5       08:42:08 23 Feb 11   HG

Hg    5.00    ppb      17320

*** Standard: 6 Rep: 1              Seq:  6       08:44:16 23 Feb 11   HG

Hg    10.0    ppb      34713

*** Check Standard: 2  Ck2ICV       Seq:  7       08:47:37 23 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          103.     2.05    2.00  ppb         .000

*** Check Standard: 3  Ck3ICB       Seq:  8       08:49:24 23 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -4.24    -.008    .200  ppb         .000

*** Check Standard: 4  Ck4CCV       Seq:  9       08:51:16 23 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg       L   55.0     1.10    2.00  ppb         .000

*** Check Standard: 5  Ck5CCB       Seq:  10      08:52:58 23 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          5.28     .011    .200  ppb         .000

*** Check Standard: 4  Ck4CCV       Seq:  11      09:01:15 23 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          105.     2.10    2.00  ppb         .000

*** Check Standard: 5  Ck5CCB       Seq:  12      09:03:10 23 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -7.42    -.015    .200  ppb         .000

*** Sample ID: WG35719403 022311B    Seq:  13     09:06:35 23 Feb 11   HG
                          PBW 1T
Hg    .062    ppb        .000      .062

*** Sample ID: WG35719404 022311B    Seq:  14     09:08:36 23 Feb 11   HG
                          LCSW 1T
Hg    4.37    ppb        .000     4.37

*** Sample ID: WG35711901 022311B    Seq:  15     09:10:18 23 Feb 11   HG
                          SPLP BLANK
Hg   -.031    ppb        .000     -.031

*** Sample ID: WG35712401 022311B    Seq:  16     09:11:59 23 Feb 11   HG
                          TCLP BLANK
Hg    .009    ppb        .000      .009
```

Wrong solution analyzed.

Approved: February 23, 2011
Paul W Dent

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID: WG35712402 022311B    Seq:  17     09:13:44 23 Feb 11   HG
                          TCLP BLANK
Hg    .015    ppb       .000      .015

*** Sample ID: 1102040801 022311B    Seq:  18     09:15:27 23 Feb 11   HG

Hg   -.020    ppb       .000     -.020

*** Sample ID: WG35724501 022311B    Seq:  19     09:17:25 23 Feb 11   HG
                          1102040801PS.9
Hg    1.06    ppb       .000      1.06

*** Sample ID: 1102040802 022311B    Seq:  20     09:19:10 23 Feb 11   HG

Hg   -.024    ppb       .000     -.024

*** Sample ID: 1102040804 022311B    Seq:  21     09:20:56 23 Feb 11   HG

Hg    .042    ppb       .000      .042

*** Sample ID: 1102040805 022311B    Seq:  22     09:22:42 23 Feb 11   HG

Hg    .016    ppb       .000      .016

*** Check Standard: 4  Ck4CCV       Seq:  23     09:24:39 23 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          101.     2.02    2.00  ppb         .000

*** Check Standard: 5  Ck5CCB       Seq:  24     09:27:07 23 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          13.6     .027    .200  ppb         .000

*** Sample ID: 1102048902 022311B    Seq:  25     09:28:52 23 Feb 11   HG

Hg    4.25    ppb       .000      4.25

*** Sample ID: WG35724502 022311B    Seq:  26     09:30:45 23 Feb 11   HG
                          1102048901PS.9
Hg    4.83    ppb       .000      4.83    1102048902PS.9

*** Sample ID: WG35724504 022311B    Seq:  27     09:32:47 23 Feb 11   HG
                          1102048901DL 0.2
Hg    .795    ppb       .000      .795      1102048902DL0.2

*** Sample ID: 1102048904 022311B    Seq:  28     09:35:12 23 Feb 11   HG

Hg    8.90    ppb       .000      8.90
```

Approved: February 23, 2011
Paul W Dent

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID: 1102048906 022311B    Seq:  29     09:36:54 23 Feb 11   HG

Hg    4.82    ppb       .000      4.82

*** Sample ID: 1102049101 022311B    Seq:  30     09:38:38 23 Feb 11   HG
                          WG35719401
Hg   -.031    ppb       .000     -.031

*** Sample ID: WG35719405 022311B    Seq:  31     09:40:25 23 Feb 11   HG
                          1102049101S
Hg    2.55    ppb       .000      2.55

*** Sample ID: WG35719406 022311B    Seq:  32     09:42:09 23 Feb 11   HG
                          1102049101SD
Hg    4.23    ppb       .000      4.23

*** Sample ID: 1102049201 022311B    Seq:  33     09:44:04 23 Feb 11   HG

Hg   -.036    ppb       .000     -.036

*** Sample ID: 1102049202 022311B    Seq:  34     09:45:47 23 Feb 11   HG

Hg    .027    ppb       .000      .027

*** Check Standard: 4  Ck4CCV       Seq:  35     09:47:40 23 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          101.     2.02    2.00   ppb        .000

*** Check Standard: 5  Ck5CCB       Seq:  36     09:50:05 23 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -13.2    -.026    .200   ppb        .000

*** Sample ID: 1102051701 022311B    Seq:  37     09:51:48 23 Feb 11   HG

Hg    3.15    ppb       .000      3.15

*** Sample ID: 1102052101 022311B    Seq:  38     09:53:41 23 Feb 11   HG

Hg    .003    ppb       .000      .003

*** Sample ID: 1102052201 022311B    Seq:  39     09:55:25 23 Feb 11   HG

Hg    .011    ppb       .000      .011

*** Sample ID: WG35724503 022311B    Seq:  40     09:57:08 23 Feb 11   HG
                          1102052201PS.9
Hg    .803    ppb       .000      .803
```

Sample analyzed by MSA due to post-spike failure.

Approved: February 23, 2011

Paul W Dent

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 1102052203 022311B Seq: 41 09:58:52 23 Feb 11 HG
WG35719402

Hg	-.035	ppb	.000	-.035				

*** Sample ID: WG35719407 022311B Seq: 42 10:00:36 23 Feb 11 HG
1102052203D

Hg	.046	ppb	.000	.046				

*** Sample ID: WG35719408 022311B Seq: 43 10:02:39 23 Feb 11 HG
1102052203S

Hg	1.08	ppb	.000	1.08				

*** Sample ID: 1102053501 022311B Seq: 44 10:04:23 23 Feb 11 HG

Hg	-.044	ppb	.000	-.044				

*** Check Standard: 4 Ck4CCV Seq: 45 10:11:44 23 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.3	1.99	2.00	ppb	.000

*** Check Standard: 5 Ck5CCB Seq: 46 10:13:26 23 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		10.0	.020	.200	ppb	.000

*** Sample ID: WG35724505 022311B Seq: 47 10:17:01 23 Feb 11 HG
1102052203PS.9

Hg	.730	ppb	.000	.730				

*** Sample ID: WG35724506 022311B Seq: 48 10:19:05 23 Feb 11 HG
1102049202PS.9

Hg	.970	ppb	.000	.970				

*** Sample ID: WG35724507 022311B Seq: 49 10:20:49 23 Feb 11 HG
1102051701PS.9

Hg	4.02	ppb	.000	4.02				

Failed post-spike, sample analyzed by MSA.

*** Check Standard: 4 Ck4CCV Seq: 50 10:22:33 23 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.5	1.99	2.00	ppb	.000

*** Check Standard: 5 Ck5CCB Seq: 51 10:24:18 23 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		15.4	.031	.200	ppb	.000

*** Sample ID: 1102051701 022311B Seq: 52 10:32:06 23 Feb 11 HG
DL0.5

Hg	1.63	ppb	.000	1.63				

Approved: February 23, 2011
Paul W Dent

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: +1 022311B Seq: 53 10:34:24 23 Feb 11 HG
DL0.5

Hg	2.36	ppb	.000	2.36				

*** Sample ID: +2 022311B Seq: 54 10:36:07 23 Feb 11 HG
DL0.5

Hg	3.13	ppb	.000	3.13				

*** Sample ID: +3 022311B Seq: 55 10:38:14 23 Feb 11 HG
DL0.5

Hg	4.12	ppb	.000	4.12				

*** Check Standard: 4 Ck4CCV Seq: 56 10:40:01 23 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		96.6	1.93	2.00	ppb	.000

*** Check Standard: 5 Ck5CCB Seq: 57 10:41:43 23 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		1.67	.003	.200	ppb	.000

Approved: February 23, 2011
Paul W Dent

2.3 General Chemistry Data

2.3.1 Reactive Sulfide Data

2.3.1.1 Summary Data

Login Number: L11020492

Department: Conventionals

Analyst: Dorothy Payne

METHOD

Analysis SW-846 (Reactive Sulfide)

The US-EPA Office of Solid Waste has withdrawn the methods for reactive cyanide and sulfide that were previously published SW-846 chapter 7. The EPA has also eliminated interim threshold values for reactive cyanide and sulfide. The data reported herein for these methods are considered of screening value only. No quality control data for these methods are reported in this data package.

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 22231
Approved By: Deanna Hesson



LABORATORY REPORT

L11020492

03/03/11 15:59

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-POND-21711-W	L11020492-02	SW7.34	1	18-FEB-11

Microbac Laboratories Inc.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number:	**L11020492-02**	PrePrep Method:	**NONE**	Instrument:	**BURET**
Client ID:	**SWMU-57-POND-21711-W**	Prep Method:	**SW7.34**	Prep Date:	**02/22/2011 09:00**
Matrix:	**Water**	Analytical Method:	**SW7.34**	Cal Date:	
Workgroup Number:	**WG357182**	Analyst:	**DLP**	Run Date:	**02/22/2011 09:00**
Collect Date:	**02/17/2011 14:45**	Dilution:	**1**	File ID:	**ET.1102220900-04**
		Units:	**mg/kg**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Reactivity, Sulfide	**18496-25-8**		**U**	**100**	**100**

U Analyte was not detected. The concentration is below the reported LOD.

2.3.1.2 QC Summary Data

Example Calculations - Reactive Sulfide

$$A = \frac{((B * C) - (D * E) * 16000}{F * G} = sulfide\,(mg / L)$$

$$\frac{A * I}{J} = reactive\ sulfide\ (mg / Kg)$$

Example Calculation:

B (mL of Iodine):	15
C (N of Iodine):	0.02514
D (mL of titrant):	9.4
E (N of titrant):	0.02489
16000 factor (1mL of 0.025N iodine reacts with 0.4mg sulfide):	16000
F (mL of scrubber solution used for titrating for sulfide):	100
G (dilution of sample (include 50/250 scrubber dilution)):	0.20
I (volume of NaOH placed in scrubber):	50
J (grams of sample used):	10
A=	114.5072
mg/Kg reactive sulfide=	572.536

Microbac Laboratories Inc.

Data Checklist

Date: 22-FEB-2011
Analyst: DLP
Analyst: NA
Method: REACTS
Instrument: BURET
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG357182

Calibration/Linearity	02-22-11
Second Source Check	
ICV/CCV (std)	
ICB/CCB	
Blank	X
LCS/LCS Dup	X
MS/MSD	
Duplicate	X
Upload Results	X
Client Forms	
QC Violation Sheet	
Case Narratives	
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	
Primary Reviewer	DLP
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
24-FEB-2011

Secondary Reviewer:
25-FEB-2011

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-25-2011 13:03:03

2.3.1.3 Raw Data

REACTIVE SULFIDE WORKGROUP: WG357182

☐ EPA ch. 7 SOP K7332 Revision #: 9

LCS: 5D 44107 Daily Dilution: 2(544)/200= Instrument: buret
non-reacted LCS Daily Dilution = 14.04

Iodine standardization (0.025 N and 0.1N)
mL 10 N titrant: 0.0250
Volume I: 10 mL
Normality I: 0.0250

mL 8 N titrant: 0.0250
Volume I: 2 mL
Normality I: 0.100

Stock standardization (in duplicate)
mL I 1) 10 2) 10
N I 1) 0.10 2) 0.10
mL 0.025 titrant 1) 26.4 2) 26.4

544 = stock conc (mg/L)

02-09-11

SAMPLE	Grams Reacted	Volume Titrated	mL Iodine	N Iodine	mL 0.0250 N Sodium Thiosulfate T: 02-09-01
BLANK	X	200	15	0.0250	15
Non-reacted LCS (mg/L)	X	200	15	0.025	16.0
Reacted (mg/L)	*	100	15	0.0250	10.5
02-492-02	*	100	5	0.0250	5.0
02521-01	*	100	5	0.0250	4.9
02-554-01	*	100	5	0.0250	4.4
02-556-01	*	100	5	0.0250	4.4
02-557-01	*	100	5	0.0250	4.2
02-555-01	*	100	5	0.0250	4.7
DUP: 02-492-02	*	100	5	0.0250	5.0

Analyst: Dorothy Payne Date / Time: 02-22-11/0900

* See prep log.

DCN#86164

Deanna Hesson
Approved: February 25, 2011

Reactivity Preparation Log

Sample	Weight (g)	Time On	Time Off
02-492-02	10.000	1000	1030
02-521-01	10.0274	900	930
02-554-01	10.0550	900	930
02-555-01	10.0131	900	930
02-556-01	10.0153	1000	1030
02-557-01	10.0385	1000	1030
Dup 02-492-02	10.000	1100	1130
LCS-(5)	10.0000	1100	1130
LCS_CN	10.000	1100	1130

Analyst: Christy Payne Date/Time: 02-22-11 0900

DCN#86163

Approved: February 25, 2011

Microbac Laboratories Inc.
TITRAMETRIC REPORT

Workgroup (AAB#): WG357182 **Analyst:** DLP
Product: SW7.34 **Run Date:** 02/22/2011 09:00
Analyte: Reactivity, Sulfide

SAMPLE NUMBER	Sample	Volume	Vol I	Nor I	Vol T	Nor T	Dil	NaOH	Scrub.	Anal.	Reported	Units
WG357182-01	250	200.0	15	.025	15	.025	1	50	250	0	0	mg/kg
WG357182-02	250	200.0	15	.025	6	.025	1	50	250	18.00	18.00	mg/kg
WG357182-03	10	100.0	15	.025	10.5	.025	1	50	250	450.0	450.0	mg/kg
L11020492-02	10	100.0	5	.025	5	.025	1	50	250	ND	ND	mg/kg
WG357182-04	10	100.0	5	.025	5	.025	1	50	250	0	0	mg/kg
L11020521-01	10.0274	100.0	5	.025	4.9	.025	1	50	250	ND	ND	mg/kg
L11020554-01	10.055	100.0	5	.025	4.4	.025	1	50	250	ND	ND	mg/kg
L11020556-01	10.0153	100.0	5	.025	4.4	.025	1	50	250	ND	ND	mg/kg
L11020557-01	10.0385	100.0	5	.025	4.2	.025	1	50	250	ND	ND	mg/kg
L11020555-01	10.0131	100.0	5	.025	4.7	.025	1	50	250	ND	ND	mg/kg
WG357182-05	10	100.0	5	.025	5	.025	1	50	250	0	0	mg/kg

REACTS_REPORT - Modified 03/06/2008

Report generated 02/23/2011 17:13

[redacted]

Approved: February 25, 2011

2.3.2 BOD Data

2.3.2.1 Summary Data

Login Number: L11020492

Department: Conventionals

Analyst: Tammy Morris

METHOD

Analysis EPA405.1/SM 5210B (Biochemical Oxygen Demand)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 22236
Approved By: Deanna Hesson

LABORATORY REPORT

L11020492

03/03/11 15:59

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-POND-21711-W	L11020492-02	SM5210B	1	18-FEB-11

Microbac Laboratories Inc.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number:	**L11020492-02**	PrePrep Method:	**NONE**	Instrument:	**YSI-5000**
Client ID:	**SWMU-57-POND-21711-W**	Prep Method:	**SM5210B**	Prep Date:	**02/18/2011 09:20**
Matrix:	**Water**	Analytical Method:	**SM5210B**	Cal Date:	
Workgroup Number:	**WG356955**	Analyst:	**TMM**	Run Date:	**02/18/2011 09:20**
Collect Date:	**02/17/2011 14:45**	Dilution:	**1**	File ID:	**00.1102180920-10**
		Units:	**mg/L**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Biochemical Oxygen Demand		**4.58**	**J**	**8.00**	**2.67**

J Estimated value ; the analyte concentration was less than the low standard (LOQ)

2.3.2.2 QC Summary Data

Example BOD Calculations

$$(B1 - B2) * F = B$$

$$[(D1 - D2) - B]/(volume/300) = mg/l\ O$$

where:

B1 = initial DO of the seeded blank.
B2 = final DO of the seeded blank.
F = ratio of seed in sample to seed in the blank in decimal form.
D1 = initial DO of the sample.
D2 = final DO of the sample.
volume = ml of sample used.
300 = total ml in the BOD bottle (sample and dilution water).

Final BOD result is the average of 1,2 or 3 bottles that meet the criteria stated in the SOP.

Microbac Laboratories Inc.

Data Checklist

Date: 18-FEB-2011
Analyst: TMM
Analyst: NA
Method: BOD
Instrument: YSI-5000
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG356955

Calibration/Linearity	2/18/11
Second Source Check	
ICV/CCV (std)	X
ICB/CCB	
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	
Case Narratives	
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	TMM
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
24-FEB-2011

Secondary Reviewer:
24-FEB-2011

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-24-2011 13:53:00

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: SM5210B

AAB#: WG356955

Login Number: L11020492

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-POND-21711-W	02	02/17/11							2		02/18/11	.8	2	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1928618
Report generated 02/24/2011 13:25

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L11020492
Blank File ID: 00.1102180920-01
Prep Date: 02/18/11 09:20
Analyzed Date: 02/18/11 09:20
Analyst: TMM

Work Group: WG356955
Blank Sample ID: WG356955-01
Instrument ID: YSI-5000
Method: SM5210B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG356955-02	00.1102180920-02	02/18/11 09:20	
LCS2	WG356955-03	00.1102180920-03	02/18/11 09:20	
LCSX	WG356955-04	00.1102180920-04	02/18/11 09:20	
SWMU-57-POND-21711-W	L11020492-02	00.1102180920-10	02/18/11 09:20	
DUP	WG356955-06	00.1102180920-14	02/18/11 09:20	

Report Name: BLANK_SUMMARY
PDF File ID: 1928619
Report generated 02/24/2011 13:25

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L11020492 Prep Date:02/18/11 09:20 Sample ID:WG356955-01
Instrument ID:YSI-5000 Run Date:02/18/11 09:20 Prep Method:SM5210B
File ID:00.1102180920-01 Analyst:TMM Method:SM5210B
Workgroup (AAB#):WG356955 Matrix:Water Units:mg/L
Contract #: Cal ID:YSI-50 -

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Biochemical Oxygen Demand	1.00	3.00	1.00	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1928620
24-FEB-2011 13:25

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020492 Analyst: TMM Prep Method: SM5210B
Instrument ID: YSI-5000 Matrix: Water Method: SM5210B
Workgroup (AAB#): WG356955 Units: mg/L
QC Key: DOD4 Lot #: STD43157

Sample ID: WG356955-02 LCS File ID: 00.1102180920-02 Run Date: 02/18/2011 09:20
Sample ID: WG356955-03 LCS2 File ID: 00.1102180920-03 Run Date: 02/18/2011 09:20

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Biochemical Oxygen Demand	198	215	109	198	219	111	1.69	84.6 - 115.4	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1928621
Report generated: 02/24/2011 13:25

2.3.2.3 Raw Data

WORKGROUP: WG356955

BIOCHEMICAL OXYGEN DEMAND

LCS/SPIKE: Std 43157 =200

Daily Dilution: 10 (4000)/500

Daily Dilution: 20 (200)/200 = 20 ADT - ON: Tmm 2/18/11 0920

2nd Source: Std 43505 ADT - OFF: TMM 2/23/11 0810

- ✓ LCS made fresh today
- ✓ LCS pH (6.5-7.5) pH = 7.439
- ✓ Dilution water D.O. = 9.11
- ✓ Dilution water made: 2/18/11
- ✓ Seed 1 cap. Per 850 mL DI water
- ✓ LCS added to bottles
- ✓ Spike added to sample
- ✓ Duplicate analyzed
- ✓ Chlorine checked on all samples
- ___ Nitrification inhibitor (HACH Formula 2533) Lot: _____

BOD X

BOD-C _____

EPA Method 405.1/SM 5210B SOP K4051 Revision #: 16 Instrument: YSI 5000 Incubator: 3

All DO reading in mg/L O

Curve DD

		Volume (mL)	Initial D.O.	Final D.O	
UNSEEDED BOD BLANK	1	200	8.91	8.47	0.44
	2				

		Volume (mL)	Initial D.O.	Final D.O
UNSEEDED BOD-C BLANK	1			
	2			

		Volume (mL)	Initial D.O.	Final D.O	
BOD SEEDED CONTROL BLANK (10mL SEED)	1	200	8.86	6.96	0.345
	2	200	8.88	7.33	

		Volume (mL)	Initial D.O.	Final D.O
BOD-C SEEDED CONTROL BLANK (10mL SEED)	1			
	2			

		Volume (mL)	Initial D.O.	Final D.O
BOD BLANK (2mL SEED)	1	200	8.73	8.10
	2	200	8.73	8.24

		Volume (mL)	Initial D.O.	Final D.O
BOD-C BLANK (2mL SEED)	1			
	2			

		Volume (mL)	Initial D.O.	Final D.O
BOD LCS (198 mg/L)	1	6	8.93	4.43
BOD-C LCS (198 mg/L) Inhibitor added ____	2	7	8.97	3.42

		Volume (mL)	Initial D.O.	Final D.O
BOD LCS (198 mg/L)	1	6	8.93	4.18
BOD-C LCS (198 mg/L) Inhibitor added ____	2	7	8.95	3.52

		Volume (mL)	Initial D.O.	Final D.O
2nd SOURCE	1	3	8.99	4.59
	2	4	8.98	3.19

Reviewed By: _____

Page 1 of ___

DCN#86128

Approved: February 24, 2011

WORKGROUP: WG356955

Client: Little Hock
Source: 001
Sample No: Z-462-01
Initial pH: 7.171 Final pH: ✓
Chlorine: ✓
Nitrification inhibitor added: NO
Comments:

Volume (mL)	Initial D.O.	Final D.O
10	8.96	6.73
20	8.90	5.58
50	8.63	<1
75	8.43	<1
200	~~8.37~~ 7.23	<1

Client: Little Hock
Source: 001
Sample No: Z-462-02
Initial pH: 7.328 Final pH: ✓
Chlorine: ✓
Nitrification inhibitor added: NO
Comments:

Volume (mL)	Initial D.O.	Final D.O
10	9.85	6.99
20	8.90	5.99
50	8.73	1.73
75	8.50	<1
200	7.50	<1

Client: Kemron (Sabic)
Source: Outlet 101/Comp
Sample No: Z-463-02
Initial pH: 7.044 Final pH: ✓
Chlorine: ✓
Nitrification inhibitor added: NO
Comments: MS

Volume (mL)	Initial D.O.	Final D.O
20	8.94	8.15
50	9.01	7.98
75	9.06	7.96
200	9.62	7.83
20	8.94	7.01
50	8.96	~~7.01~~ 4.53

Client: Kemron (Sabic)
Source: Outlet 001/Comp
Sample No: Z-463-4
Initial pH: 7.854 Final pH: ✓
Chlorine: ✓
Nitrification inhibitor added: NO
Comments:

Volume (mL)	Initial D.O.	Final D.O
20	8.94	8.13
75	9.14	
200	9.61	~~8.04~~ 8.24

Client: Kemron (Radford)
Source: SMU-59 Pond 211711-W
Sample No: Z-492-02
Initial pH: 8.024 Final pH: ✓
Chlorine: ✓
Nitrification inhibitor added: NO
Comments:

Volume (mL)	Initial D.O.	Final D.O
1	8.91	
3	8.93	
5	8.93	8.13
20	8.94	8.04
75	8.99	7.50

2

DCN#86128

Approved: February 24, 2011

Microbac Laboratories Inc.

BOD REPORT

Workgroup (AAB#):WG356955
Product:SM5210B
Analyte:BIOCHEMICAL OXYGEN DEMAND

Analyst:TMM
Run Date:02/18/2011 09:20

SAMPLE NUMBER	DIL	SEED	VOL1	IDO1	FDO1	RESULT1	VOL2	IDO2	FDO2	RESULT2	VOL3	IDO3	FDO3	RESULT3	RESULT	Units
WG356955-01	1	0.345	200	8.73	8.10	0.4275	200.0	8.73	8.24	0.2175	200.0				0.3225	mg/L
WG356955-02	1	0.345	6	8.93	4.43	207.8	7.0	8.97	3.42	223.1	200.0				215.4	mg/L
WG356955-03	1	0.345	6	8.93	4.18	220.3	7.0	8.95	3.52	217.9	200.0				219.1	mg/L
WG356955-04	1	0.345	3	8.99	4.59	405.5	4.0	8.98	3.19	408.4	200.0				406.9	mg/L
L11020462-01	1	0.345	20	8.90	5.58	44.63	10.0	8.96	6.73	56.55	200.0				50.59	mg/L
L11020462-02	1	0.345	50	8.73	1.73	39.93	20.0	8.90	5.99	38.48	200.0				39.20	mg/L
L11020463-02	1	0.345	200	9.62	7.83	2.168	200.0				200.0				F 2.168	mg/L
WG356955-07	1	0.345	200	9.62	7.83	2.168	200.0				200.0				2.168	mg/L
WG356955-08	1	0.345	20	8.94	7.01	23.78	50.0	8.96	4.53	24.51	200.0				24.14	mg/L
L11020463-04	1	0.345	200	9.61	8.24	1.538	200.0				200.0				F 1.538	mg/L
L11020492-02	1	0.345	75	8.99	7.50	4.580	200.0				200.0				F 4.580	mg/L
L11020490-02	1	0.345	75	9.02	2.49	24.74	20.0	8.92	6.09	37.28	200.0				31.01	mg/L
L11020496-02	1	0.345	200	9.66	5.16	6.233	100.0	9.17	6.73	6.285	200.0				6.259	mg/L
L11020496-01	1	0.345	1	8.82	5.03	1034	0.5	8.87	6.01	1509	200.0				1271	mg/L
WG356955-05	1	0.345	1	8.82	5.03	1034	0.5	8.87	6.01	1509	200.0				1271	mg/L
WG356955-06	1	0.345	1	8.83	5.00	1046	0.5	8.84	6.00	1497	200.0				1271	mg/L
L11020499-01	1	0.345	200	9.52	7.82	2.033	200.0				200.0				F 2.033	mg/L
L11020495-02	1	0.345	200	9.84	7.29	3.308	200.0				200.0				3.308	mg/L
L11020495-01	1	0.345	200	8.92	7.56	1.523	200.0				200.0				F 1.523	mg/L
L11020494-01	1	0.345	200	9.04	7.85	1.268	200.0				200.0				ND	mg/L
L11020494-02	1	0.345	200	9.05	7.38	1.988	200.0				200.0				ND	mg/L

Report Name: BOD_REPORT
Report Generated: 24-FEB-2011 10:13

[redacted]

Approved: February 24, 2011

2.3.3 COD Data

2.3.3.1 Summary Data

Login Number: L11020492

Department: Conventionals

Analyst: Tammy Morris

METHOD

Analysis EPA 410.4 MOD/SM5220D/HACH 8000 (Chemical Oxygen Demand)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 22233
Approved By: Deanna Hesson

LABORATORY REPORT

L11020492

03/03/11 15:59

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-POND-21711-W	L11020492-02	410.4 MOD	1	18-FEB-11

Microbac Laboratories Inc.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number: **L11020492-02**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Water**
Workgroup Number: **WG357104**
Collect Date: **02/17/2011 14:45**

PrePrep Method: **NONE**
Prep Method: **METHOD**
Analytical Method: **410.4 MOD**
Analyst: **TMM**
Dilution: **1**
Units: **mg/L**

Instrument: **UV-120-1V**
Prep Date: **02/21/2011 11:09**
Cal Date:
Run Date: **02/21/2011 11:09**
File ID: **1V.1102211109-09**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Chemical Oxygen Demand		**74.1**		**20.0**	**10.0**

2.3.3.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
x = instrument response as absorbance or OD
y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:
y = mx + b

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of m from plot:	2.7599	
Value of b from plot:	0.0153	
Absorbance of unknown from quantitation report (x):	0.3765	
Calculated concentration (y):	1.05440235	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	1.05	mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

A, B, C = constants from the ICAL quadratic regression

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

y = Ax^2 + Bx + C

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of A from plot:	101.2796	
Value of B from plot:	318.9056	
Value of C from plot:	-2.2712	
Absorbance of unknown from quantitation report (x):	0.1583	
Calculated concentration (y):	50.7495108	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	50.75	mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 21-FEB-2011
Analyst: TMM
Analyst: NA
Method: COD-LOW
Instrument: UV-120-1V
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG357104

Calibration/Linearity	1/12/11
Second Source Check	
ICV/CCV (std)	X
ICB/CCB	
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	
Case Narratives	
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	TMM
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
22-FEB-2011

Secondary Reviewer:
23-FEB-2011

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-23-2011 15:37:13

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 410.4 MOD AAB#: WG357104

Login Number: L11020492

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-POND-21711-W	02	02/17/11							28		02/21/11	3.9	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1926955
Report generated 02/23/2011 12:52

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L11020492
Blank File ID: 1V.1102211109-02
Prep Date: 02/21/11 11:09
Analyzed Date: 02/21/11 11:09
Analyst: TMM

Work Group: WG357104
Blank Sample ID: WG357104-01
Instrument ID: UV-120-1V
Method: 410.4 MOD

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357104-02	1V.1102211109-03	02/21/11 11:09	
LCS2	WG357104-03	1V.1102211109-04	02/21/11 11:09	
SWMU-57-POND-21711-W	L11020492-02	1V.1102211109-09	02/21/11 11:09	
DUP	WG357104-05	1V.1102211109-13	02/21/11 11:09	

Report Name: BLANK_SUMMARY
PDF File ID: 1926956
Report generated 02/23/2011 12:52

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L11020492 Prep Date:02/21/11 11:09 Sample ID:WG357104-01
Instrument ID:UV-120-1V Run Date:02/21/11 11:09 Prep Method:METHOD
File ID:1V.1102211109-02 Analyst:TMM Method:410.4 MOD
Workgroup (AAB#):WG357104 Matrix:Water Units:mg/L
Contract #: Cal ID:UV-120-

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Chemical Oxygen Demand	10.0	20.0	10.0	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1926957
23-FEB-2011 12:52

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020492 Analyst: TMM Prep Method: METHOD
Instrument ID: UV-120-1V Matrix: Water Method: 410.4 MOD
Workgroup (AAB#): WG357104 Units: mg/L
QC Key: DOD4 Lot #: STD43558

Sample ID: WG357104-02 LCS File ID: 1V.1102211109-03 Run Date: 02/21/2011 11:09
Sample ID: WG357104-03 LCS2 File ID: 1V.1102211109-04 Run Date: 02/21/2011 11:09

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Chemical Oxygen Demand	100	106	106	100	105	105	0.776	90 - 110	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1926958
Report generated: 02/23/2011 12:52

2.3.3.3 Raw Data

Curves Wq353807

Parameter: COD-Low

Spectrophotometer: UV-120-1V

Calibration (Curve) standard stock: Std 41436

Concentration: 10,000 mg/L

Recipe for preparation of curve standards found in:
SOP: K4105 Revision: 13 Page: 7

Second Source Stock: Std 40147 (concentration: 1000)

Daily Preparation: 5(1,000)/50 =

concentration = 100

Calibration Standards (mg/L)	Volume (mL)	Cell Size (cm)	Wavelength (nm)	Absorbance	
Std 5 (150)	2	1cm	420	0.141	0.158
Std 6 (100)	↓	↓	↓	0.246	0.256
Std 7 (50)				0.398	0.404
Std 8 (30)				0.434	0.430
Std 9 (20)				0.483	0.480
Std 10	↓	↓	↓	0.544	0.501
2nd Source (100)	2	1cm	420	0.284	0.292

Analyst: Tammy Mann

Date/Time: 1/12/11 @ 1000

DCN#85726

Deanna Hesson

Approved: January 17, 2011

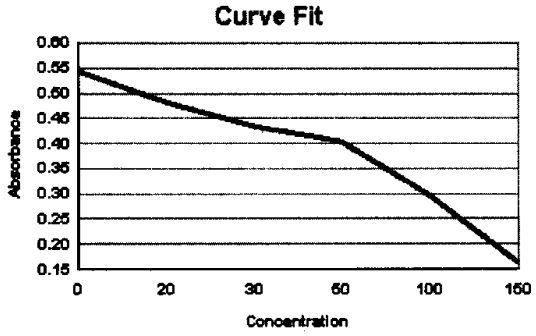
Microbac Laboratories Inc.
INITIAL CALIBRATION

Workgroup:WG353807
Analytical Method:400
Instrument ID:UV-120-1V

Analyst:TMM
Initial Calibration Date:01/12/2011

Analyte: CHEMICAL OXYGEN DEMAND
Number of Points: 6
Slope: -0.00243683
Y-Intercept: 0.528648
Coef. Of Correlation (R^2): 0.991236
Coef. Of Correlation (R): 0.995608

Concentration X	Absorbance Y	X^2	X * Y	Y-Fitted (mX^2+B)
0.00	0.544	0.00	0.00	0.528648
20.0	0.480	400	9.60	0.479912
30.0	0.434	900	13.0	0.455544
50.0	0.404	2500	20.2	0.406807
100	0.296	10000	29.6	0.284965
150	0.161	22500	24.2	0.163124



WG_ICAL_CAL_WET - Modified 03/06/2008
Report generated 01/13/2011 13:28

[redacted]

Approved: January 17, 2011

Microbac Laboratories Inc.
ALTERNATE SOURCE REPORT

Workgroup #: WG353807
File ID: 1V.1101121000-07
CCV ID: WG353807-07
Units: mg/L
Analyte: CHEMICAL OXYGEN DEMAND

Instrument ID: UV-120-1V
Run Date: 01/12/2011
Run Time: 10:00
Analyst: TMM
Cal ID: UV-120 -

Analyte	Expected	Found	RF	%D	Q
Chemical Oxygen Demand	100	100	0.00284	0.0	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

WET_WG_SSCV - Modified 03/06/2008
Report generated 01/13/2011 13:26

[redacted]

Approved: January 17, 2011

WORKGROUP: WG357104

COD - SW

EPA 410.4/SM5220D/HACH 8000
SOP K4105 Revision #: 13
Curve ID: 1/12/2011
Wavelength (nm): 420

CCV: Std41436 Daily dilution: 4(10,000)/50 = 800 Daily dilution: 3(400)/150 = 80
LCS: Std43558 Daily dilution: 5(4,000)/50 = 100
Spike: Std43558 Daily dilution: 0.1(4,000)/2 = 50
Hot Block Temp: 148C
Spectrophotometer: UV-120-1 ✓

SAMPLE	DILUTION	ABSORBANCE 1	ABSORBANCE 2
CCV: 80 mg/L		0.342	
BLANK:		0.518	
LCS: 100 mg/L		0.270	
LCS DUP: 100 mg/L		0.272	
02-430-04		0.472	
07		0.499	
02-450-01		0.499	
02		0.357	
02-492-02		0.348	
02-499-01		0.516	
02-494-01		0.526	
02		0.518	
DUP: 02-499-01		0.509	
MS: (50)		0.384	
MDS: (50)		0.359	
CCV: 80 mg/L		0.340	

ANALYST: Tammy Sparks

DATE/TIME: (on) 2/21/11 @ 1109
DATE/TIME: (off) @ 1309

DCN#86146

Approved: February 23, 2011

Microbac Laboratories Inc.
SAMPLE REPORT

Workgroup: WG357104 **Analyst:** TMM
Analyte: CHEMICAL OXYGEN DEMAND **Date:** 02/21/2011

Sample ID	I Vol	F Vol	Response	Slope	Y Intercept	Anal. Conc.	Rep. Conc.	Dil	Units
WG357104-01	2	2	0.518	-0.002437	0.5286	4.3698	4.3698	1	mg/L
WG357104-02	2	2	0.270	-0.002437	0.5286	106.14	106.14	1	mg/L
WG357104-03	2	2	0.272	-0.002437	0.5286	105.32	105.32	1	mg/L
L11020430-04	2	2	0.472	-0.002437	0.5286	23.247	23.247	1	mg/L
L11020430-07	2	2	0.499	-0.002437	0.5286	12.167	12.167 F	1	mg/L
L11020450-01	2	2	0.499	-0.002437	0.5286	12.167	12.167 F	1	mg/L
L11020450-02	2	2	0.357	-0.002437	0.5286	70.439	70.439	1	mg/L
L11020492-02	2	2	0.348	-0.002437	0.5286	74.133	74.133	1	mg/L
L11020499-01	2	2	0.516	-0.002437	0.5286	5.1905	ND	1	mg/L
WG357104-04	2	2	0.516	-0.002437	0.5286	5.1905	5.1905	1	mg/L
L11020494-01	2	2	0.526	-0.002437	0.5286	1.0869	ND	1	mg/L
L11020494-02	2	2	0.518	-0.002437	0.5286	4.3698	ND	1	mg/L
WG357104-05	2	2	0.509	-0.002437	0.5286	8.0631	8.0631	1	mg/L
WG357104-06	2	2	0.384	-0.002437	0.5286	59.359	59.359	1	mg/L
WG357104-07	2	2	0.359	-0.002437	0.5286	69.618	69.618	1	mg/L

UV_SAMPLE_REPORT - Modified 03/06/2008

Report generated **02/22/2011 15:13**

[redacted]

Approved: February 23, 2011

Microbac Laboratories Inc.
CONTINUING CALIBRATION REPORT

Workgroup #: WG357271
File ID: 1V.1102211109-01
CCV ID: WG357271-01
Units: mg/L
Analyte: CHEMICAL OXYGEN DEMAND

Instrument ID: UV-120-1V
Run Date: 02/21/2011
Run Time: 11:09
Analyst: TMM
Cal ID: UV-120 - 16-FEB-11

Analyte	Expected	Found	RF	%D	Q
Chemical Oxygen Demand	80	76.6	0.00428	4.3	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

WET_WG_CCV - Modified 03/06/2008

Report generated 02/22/2011 15:13

[redacted]

Approved: February 23, 2011

Microbac Laboratories Inc.
CONTINUING CALIBRATION REPORT

Workgroup #: WG357271
File ID: 1V.1102211109-16
CCV ID: WG357271-02
Units: mg/L
Analyte: CHEMICAL OXYGEN DEMAND

Instrument ID: UV-120-1V
Run Date: 02/21/2011
Run Time: 11:09
Analyst: TMM
Cal ID: UV-120 - 16-FEB-11

Analyte	Expected	Found	RF	%D	Q
Chemical Oxygen Demand	80	77.4	0.00425	3.3	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

WET_WG_CCV - Modified 03/06/2008

Report generated 02/22/2011 15:13

[redacted]

Approved: February 23, 2011

2.3.4 Method Flashpoint

2.3.4.1 Summary Data

Login Number: L11020492

Department: Conventionals

Analyst: Jeremy Kinney

METHOD

Analysis SW-846 1010 (Flashpoint)

Analysis Method 1010 is applicable only to liquid samples as specified in 40 CFR Part 261.21(a) (1). Section 261.21 does not define ignitability criteria, or test methods, for solid matrices. Any flashpoint data reported in this report for samples other than liquids should be considered of screening value only.

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 22234
Approved By: Deanna Hesson

LABORATORY REPORT

L11020492

03/03/11 15:59

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-POND-21711-W	L11020492-02	1010	1	18-FEB-11

Microbac Laboratories Inc.

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number:	**L11020492-02**	PrePrep Method:	**NONE**	Instrument:	**PRECISION**
Client ID:	**SWMU-57-POND-21711-W**	Prep Method:	**1010**	Prep Date:	**02/23/2011 13:50**
Matrix:	**Water**	Analytical Method:	**1010**	Cal Date:	
Workgroup Number:	**WG357376**	Analyst:	**JBK**	Run Date:	**02/23/2011 13:50**
Collect Date:	**02/17/2011 14:45**	Dilution:	**1**	File ID:	**PR11022414500501**
		Units:	**Degrees C**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Ignitability		**77.0**	**>**		

> Result is greater than the associated numerical value.

2.3.4.2 QC Summary Data

1.0 Calculating the flashpoint of a sample.

$$Flashpoint = C + 0.033(760 - P)$$

Where:
C = Observed flashpoint (Celcius)
P = Ambient barometric pressure(mmHg) corrected for temperature and gravity.

Flashpoint = Flashpoint of the sample.

Microbac Laboratories Inc.

Data Checklist

Date: 23-FEB-2011
Analyst: JBK
Analyst: NA
Method: FLASH
Instrument: PRECISION
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG357376

Calibration/Linearity	01/2011
Second Source Check	
ICV/CCV (std)	
ICB/CCB	
Blank	X
LCS/LCS Dup	X
MS/MSD	
Duplicate	X
Upload Results	
Client Forms	X
QC Violation Sheet	
Case Narratives	
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JBK
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
23-FEB-2011

Secondary Reviewer:
24-FEB-2011

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-24-2011 13:52:55

2.3.4.3 Raw Data

FLASHPOINT

LCS: STD 43805
TEMPERATURE: 20C
PRESSURE: 749.5

SOP K1010 Revision #: 18.14 (4/2/13)
Method SW846 1010 A=115 (2/2/11) RPM B=250RPM C=NO STIR
Instrument: Pensky Martin Closed Cup Tester

SAMPLE	DESCRIPTION	INITIAL TEMP(C)	COMMENTS or FLASHPOINT	FINAL RESULT (C)
LCS	p-Xylene (A)	14	flash@28	28
LCS DUP	p-Xylene (A)	16	flash @27	27
Blank	DI H_2O (A)	18	no flash @68	>68
02-408-01	water (A)	9	flame ext@74	>74
-02	water (A)	11	flame ext@71	>71
-04	soil (C)	17	flame ext @77	>77
-05	soil (C)	15	flame ext@81	>81
02-492-02	dirty water (A)	13	flame ext @77	>77
02-587-01	thick oil/used oil (B)	16	no flash @95	flash "missed"
02-521-01	soil (C)	17	flame ext@79	>79
RR587-01*	oil (B)	5	flash immed.	55
*5x cooled via refrigeration to initial temperature. Suspected at first analysis flashpoint was "missed"				
DUP: 02-587-01*	oil (B)	6	flash immed.	56

ANALYST: _____ DATE: 2/23/11/1350

DCN#86184

Approved: February 24, 2011

Microbac Laboratories Inc.
FLASH CALCULATIONS

Workgroup: WG357376
Date: 23-FEB-11
Analyst: JBK

Observed Barometric Pressure 749.5

Lowest Pressure in Bracket: 740
Temperature Correction #1: 2.47
Temperature Correction #2: 2.41

Lowest Pressure in Bracket: 700
Grav Correction #1: .48
Grav Correction #2: .42

Temperature Correction: 2.4385
Grav Correction: .4497
Corrected Barometric Pressure: 763.0518

Correction for Flash: -.1007094

Approved: February 24, 2011

2.3.5 Reactive Cyanide Data

2.3.5.1 Summary Data

Login Number: L11020492

Department: Conventionals

Analyst: Dorothy Payne

METHOD

Analysis SW-846 (Reactive Cyanide)

The US-EPA Office of Solid Waste has withdrawn the methods for reactive cyanide and sulfide that were previously published SW-846 chapter 7. The EPA has also eliminated interim threshold values for reactive cyanide and sulfide. The data reported herein for these methods are considered of screening value only. No quality control data for these methods are reported in this data package.

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 22232
Approved By: Deanna Hesson



LABORATORY REPORT

L11020492

03/03/11 15:59

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-POND-21711-W	L11020492-02	SW7.33	1	18-FEB-11

Report Number: **L11020492**
Report Date : **March 3, 2011**

Sample Number: **L11020492-02**
Client ID: **SWMU-57-POND-21711-W**
Matrix: **Water**
Workgroup Number: **WG357180**
Collect Date: **02/17/2011 14:45**

PrePrep Method: **NONE**
Prep Method: **SW7.33**
Analytical Method: **SW7.33**
Analyst: **DLP**
Dilution: **1**
Units: **mg/kg**

Instrument: **UV-120-1V**
Prep Date: **02/22/2011 09:05**
Cal Date: **02/03/2011 09:20**
Run Date: **02/22/2011 09:05**
File ID: **1V.1102220905-02**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Reactivity, Cyanide	57-12-5		U	10.0	10.0

U Analyte was not detected. The concentration is below the reported LOD.

2.3.5.2 QC Summary Data

Example Reactive Cyanide Calculations

1.0 Calculating the reactive cyanide of a sample.

$$A = \frac{Absorbance - Intercept}{slope \times dilution}$$

$$B = \frac{VolumeNaOH}{gramsofsample}$$

$$ReactiveCyanide = A \times B$$

Where:	
Absorbance = Reading from the spectrophotometer.	0.801
Intercept = Calculated from calibration standard absorbencies.	-0.0006
Slope = Calculated from calibration standard absorbencies.	2.10942
Dilution = Dilution of the distillate.	0.2
Volume NaOH = mL of NaOH in the scrubber.	50
Grams of sample = Grams of sample used for analysis.	10.000
Reactive Cyanide = mg/kg reactive cyanide present in sample.	47.50

Microbac Laboratories Inc.

Data Checklist

Date: 22-FEB-2011
Analyst: DLP
Analyst: NA
Method: REACTCN
Instrument: UV-120-1V
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG357180

Calibration/Linearity	02-03-11
Second Source Check	
ICV/CCV (std)	X
ICB/CCB	
Blank	
LCS/LCS Dup	X
MS/MSD	
Duplicate	X
Upload Results	X
Client Forms	
QC Violation Sheet	
Case Narratives	
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	
Primary Reviewer	DLP
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
24-FEB-2011

Secondary Reviewer:
25-FEB-2011

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-25-2011 13:03:04

2.3.5.3 Raw Data

Reactive Cyanide

LCS: STD 43850 (1000 mg/L)
CCV: STD 43849 (1000 mg/L) SOP: K7332 Revision # 9

Daily Dilution: 5(1000)/250 = 20
10(20)/100 = 2
5(2)/50 = 0.2

Curve ID: 2/3/11
Spec: UV-120-1V

Sample	Volume (mL)	Dilution	Absorbance @ 578nm (1cm cell)
CCV: 0.2	NA		0.454
LCS: 1000mg/L	x	15	0.406
02-492-02	x		0.000
02-521-01	x		0.000
02-554-01	x		0.001
02-555-01	x		0.001
02-556-01	x		0.001
02-557-01	x		0.000
DUP: 02-492-02	x		0.000

Analyst: Quentin Payne Date/Time: 02-22-11/0900
2/22/11/1420 cbb

x See prep log.

DCN#86163

Approved: February 25, 2011

Reactivity Preparation Log

Sample	Weight (g)	Time On	Time Off
02-492-02	10.000	1000	1030
02-521-01	10.0274	900	930
02-554-01	10.0550	900	930
02-555-01	10.0131	900	930
02-556-01	10.0153	1000	1030
02-557-01	10.0385	1000	1030
Dup 02-492-02	10.000	1100	1130
LCS-(5)	10.0000	1100	1130
LCS_CN	10.000	1100	1130

Analyst: Chantty Payne

Date/Time: 02-22-11/0900

DCN#86163

Approved: February 25, 2011

Microbac Laboratories Inc.
SAMPLE REPORT

Workgroup: WG357180
Analyte: CYANIDE

Analyst: DLP
Date: 02/22/2011

Sample ID	I Vol	F Vol	Response	Scrubber		Slope	Y Intercept	Dil	Anal. Conc.	Rep. Conc.	Units
WG357180-01	10	50	0.406	50	250	2.229	0.005784	5	0.89756	22.439	mg/kg
L11020492-02	10	50	0	50	250	2.229	0.005784	1	-0.064853	ND	mg/kg
WG357180-02	10	50	0	50	250	2.229	0.005784	1	-0.064853	-0.32426	mg/kg
L11020521-01	10.0274	50	0	50	250	2.229	0.005784	1	-0.064676	ND	mg/kg
L11020554-01	10.055	50	0.00100	50	250	2.229	0.005784	1	-0.053346	ND	mg/kg
L11020555-01	10.0131	50	0.00100	50	250	2.229	0.005784	1	-0.053569	ND	mg/kg
L11020556-01	10.0153	50	0.00100	50	250	2.229	0.005784	1	-0.053557	ND	mg/kg
L11020557-01	10.0385	50	0	50	250	2.229	0.005784	1	-0.064604	ND	mg/kg
WG357180-03	10	50	0	50	250	2.229	0.005784	1	-0.064853	-0.32426	mg/kg

UV_REACTC - Modified 03/06/2008
Report generated 02/23/2011 17:17

[redacted]

Approved: February 25, 2011

Microbac Laboratories Inc.
CONTINUING CALIBRATION REPORT

Workgroup #: WG357429
File ID: 1V.1102220901-01
CCV ID: WG357429-01
Units: mg/kg
Analyte: CYANIDE

Instrument ID: UV-120-1V
Run Date: 02/22/2011
Run Time: 09:01
Analyst: DLP
Cal ID: UV-120 - 16-FEB-11

Analyte	Expected	Found	RF	%D	Q
Reactivity, Cyanide	.2	0.201	2.27	0.5	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

WET_WG_CCV - Modified 03/06/2008

Report generated 02/23/2011 17:14

[redacted]

Approved: February 25, 2011

2.3.6 Total Halides

2.3.6.1 Summary Data

Login Number: L11020492

Department: Conventionals

Analyst: Dorothy Payne

METHOD

Analysis SW-846 5050

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

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Narrative ID: 22235
Approved By: Deanna Hesson

LABORATORY REPORT

L11020492

02/25/11 13:24

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-POND-21711-W	L11020492-02	SW5050	1	18-FEB-11

Report Number: **L11020492**
Report Date : **February 25, 2011**

Sample Number:	L11020492-02	PrePrep Method:	NONE	Instrument:	PAAR
Client ID:	SWMU-57-POND-21711-W	Prep Method:	SW5050	Prep Date:	02/22/2011 09:15
Matrix:	Water	Analytical Method:	SW5050	Cal Date:	
Workgroup Number:	WG357189	Analyst:	DLP	Run Date:	02/22/2011 09:15
Collect Date:	02/17/2011 14:45	Dilution:	1	File ID:	AR.1102220915-04
		Units:	mg/kg		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Total Halides			U	500	250

U Analyte was not detected. The concentration is below the reported LOD.

2.3.6.2 QC Summary Data

Microbac Laboratories Inc.

Data Checklist

Date: 22-FEB-2011
Analyst: DLP
Analyst: NA
Method: TX
Instrument: PAAR
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG357189

Calibration/Linearity	
Second Source Check	
ICV/CCV (std)	
ICB/CCB	
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	
QC Violation Sheet	
Case Narratives	
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	
Primary Reviewer	DLP
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
24-FEB-2011

Secondary Reviewer:
25-FEB-2011

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-25-2011 13:03:02

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: SW5050 AAB#: WG357189

Login Number: L11020492

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-POND-21711-W	02	02/17/11									02/22/11	4.8		

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1929731
Report generated 02/25/2011 11:34

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L11020492	Work Group:	WG357189
Blank File ID:	AR.1102220915-01	Blank Sample ID:	WG357189-01
Prep Date:	02/22/11 09:15	Instrument ID:	PAAR
Analyzed Date:	02/22/11 09:15	Method:	SW5050
Analyst:	DLP		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357189-02	AR.1102220915-02	02/22/11 09:15	
LCS2	WG357189-03	AR.1102220915-03	02/22/11 09:15	
SWMU-57-POND-21711-W	L11020492-02	AR.1102220915-04	02/22/11 09:15	
DUP	WG357189-05	AR.1102220915-05	02/22/11 09:15	

Report Name: BLANK_SUMMARY
PDF File ID: 1929732
Report generated 02/25/2011 11:34

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L11020492 Prep Date:02/22/11 09:15 Sample ID:WG357189-01
Instrument ID:PAAR Run Date:02/22/11 09:15 Prep Method:SW5050
File ID:AR.1102220915-01 Analyst:DLP Method:SW5050
Workgroup (AAB#):WG357189 Matrix:Water Units:mg/kg
Contract #: Cal ID: PAAR-

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Total Halides	2.50	5.00	2.50	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1929733
25-FEB-2011 11:34

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020492 Analyst: DLP Prep Method: SW5050
Instrument ID: PAAR Matrix: Water Method: SW5050
Workgroup (AAB#): WG357189 Units: mg/kg
QC Key: DOD4 Lot #: STD41143

Sample ID: WG357189-02 LCS File ID: AR.1102220915-02 Run Date: 02/22/2011 09:15
Sample ID: WG357189-03 LCS2 File ID: AR.1102220915-03 Run Date: 02/22/2011 09:15

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Total Halides	1420	1470	104	1420	1520	107	3.45	90 - 110	10	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1929734
Report generated: 02/25/2011 11:34

2.3.6.3 Raw Data

WORKGROUP: WG357189

Total Halides

SOP K5050 Revision # 11
SW846 5050

LCS: STD 41143
Daily Dil: 1.0 (1445) ÷ 1441
MS: STD 41143
Daily Dil 0.5 (1445) = 722.5

Titrant: 352-11-01
Standardization Date: 02-22-11
Normality: 0.0141

Sample	Grams Bombed	Volume Diluted to (mL)	Volume Titrated (mL)	Dilution	ML Titrant
Blank	NA		100		0.10
LCS: (__)	1.0182		100		3.10
LCS Dup	1.0165		100		3.20
02-492-02	1.0090		100		0.5
DUP 02-492-02	1.0003		100		0.50
MS(___mg/L) 492-02	1.0121		100		2.00

Analyst: Rusty Paige Date/Time: 02-22-11/0915

DCN#86166

Approved: February 25, 2011

Microbac Laboratories Inc.
TITRAMETRIC REPORT

Workgroup (AAB#):WG357189 Analyst:DLP
Product:SW5050 Run Date:02/22/2011 09:15
Analyte:Total Halides

SAMPLE NUMBER	Sample	Vol	Bomb	Tit. ml	Dil	N	Mill WT	Blank	Ana. Result	Rep. Conc.	Units
WG357189-01	100	100.0	100	.1	1	0.0141	35450	0.4998	.499845	0.4998	mg/kg
WG357189-02	1.0182	100.0	100	3.1	1	0.0141	35450	0.4998	1472.731291	1473	mg/kg
WG357189-03	1.0165	100.0	100	3.2	1	0.0141	35450	0.4998	1524.367437	1524	mg/kg
L11020492-02	1.009	100.0	100	.5	1	0.0141	35450	0.4998	198.154609	ND	mg/kg
WG357189-04	1.009	100.0	100	.5	1	0.0141	35450	0.4998	198.154609	198.2	mg/kg
WG357189-05	1.0003	100.0	100	.5	1	0.0141	35450	0.4998	199.878037	199.9	mg/kg
WG357189-06	1.0121	100.0	100	2	1	0.0141	35450	0.4998	938.351447	938.4	mg/kg

TX_REPORT - Modified 03/06/2008

Report generated 02/24/2011 14:27

[redacted]

Approved: February 25, 2011

3.0 Attachments

Microbac Laboratories Inc.
Analyst Listing
March 3, 2011

ADC – ANTHONY D. CANTER	AJF – AMANDA J. FICKIESEN	ALB – ANNIE L. BROWN
ALV – AMY L. VALENTINE	AML – TONY M. LONG	AZH – AFTER HOURS
BLG – BRENDA L. GREENWALT	BRG – BRENDA R. GREGORY	CAA – CASSIE A. AUGENSTEIN
CAF – CHERYL A. FLOWERS	CEB – CHAD E. BARNES	CLC – CHRYS L. CRAWFORD
CLS – CARA L. STRICKLER	CLW – CHARISSA L. WINTERS	CPD – CHAD P. DAVIS
CSH – CHRIS S. HILL	DDE – DEBRA D. ELLIOTT	DEL – DON E. LIGHTFRITZ
DEV – DAVID E. VANDENBERG	DGB – DOUGLAS G. BUTCHER	DIH – DEANNA I. HESSON
DLB – DAVID L. BUMGARNER	DLP – DOROTHY L. PAYNE	DLR – DIANNA L. RAUCH
ECL – ERIC C. LAWSON	EDL – ERIN D. LONG	ERP – ERIN R. PORTER
FJB – FRANCES J. BOLDEN	HAV – HEMA VILASAGAR	HJR – HOLLY J. REED
JAL – JOHN A. LENT	JBK – JEREMY B. KINNEY	JDH – JUSTIN D. HESSON
JKT – JANE K. THOMPSON	JLL – JOHN L. LENT	JWR – JOHN W. RICHARDS
JWS – JACK W. SHEAVES	JYH – JI Y. HU	KEB – KATIE E. BARNES
KHR – KIM H. RHODES	KRA – KATHY R. ALBERTSON	LKN – LINDA K. NEDEFF
LSB – LESLIE S. BUCINA	MDA – MIKE D. ALBERTSON	MDC – MIKE D. COCHRAN
MES – MARY E. SCHILLING	MMB – MAREN M. BEERY	MRT – MICHELLE R. TAYLOR
MSW – MATT S. WILSON	PDM – PIERCE D. MORRIS	PWD – PAUL W. DENT
RAH – ROY A. HALSTEAD	RB – BOB BUCHANAN	REK – BOB E. KYER
RLK – ROBIN L. KLINGER	RWC – RODNEY W. CAMPBELL	SLM – STEPHANIE L. MOSSBURG
SLP – SHERI L. PFALZGRAF	TIP – TAE I. PARRISH	TMB – TIFFANY M. BAILEY
TMM – TAMMY M. MORRIS	VC – VICKI COLLIER	WJB – WILL J. BEASLEY
WTD – WADE T. DELONG		

Microbac Laboratories Inc.
List of Valid Qualifiers
March 03, 2011

Qualkey: DOD

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	The reported result is associated with a contaminated method blank.
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
I	Semiquantitative result (out of instrument calibration range)
J	Estimated concentration; sample matrix interference.
J	Estimated value ; the analyte concentration was greater than the highest standard
J	Estimated value ; the analyte concentration was less than the low standard (LOQ)
J	The reported result is an estimated value.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Nontarget analyte; the analyte is a tentativlely identified compound (TIC) by GC/MS
NA	Not applicable
ND	Not detected at or above the reporting limit (RL).
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Analyte was not detected. The concentration is below the reported LOD.
UJ	Undetected; the analyte was analyzed for, but not detected.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)
Z	Cannot be resolved from isomer - see below

*****Special Notes for Organic Analytes**

Qualkey: DOD

1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methylphenol and 4-Methylphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound an are matrix dependent.

COC No. A 2496

156 Starlite Drive
Marietta, OH 45750

KEMRON
ENVIRONMENTAL SERVICES
CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4308
Fax: 740-376-2536

Company Name: UXB - KEMRON

Project Contact: MARY LOU ROCHETTE | Contact Phone #: 740-373-4308

Turn Around Requirements: 5-DAY | Location: SWMU-57 POND SAMPLE

Project ID: MR0669-400-002

Sampler (print): JONAH ANDERSON | Signature:

Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	TCLP-METALS (SEE LIST)	TAL-METALS	REACTIVITY (CYANIDE & SULFIDE)	FLASH	TOTAL HALOGENS	COD	PCB	BOD	TOTAL # (LAB USE)
SWMU-57-POND-21711-W		X	2-17-11	1445	W	10		2	1	1	1	1	1	2	1	

Program: ☐ CWA ☐ RCRA ☐ DOD ☐ AFCEE ☐ Other

ADDITIONAL REQUIREMENTS

★TCLP★ METALS LIST: Sb, As, Ba, Be, Cd, Cr, Pb, Hg, Ni, Se, Ag, Tl, V

SEE RFFAP QAPP

-TEMP BLANK-

Relinquished by: (Signature) | Date: 2-17-11 | Time: 1615

Relinquished by: (Signature) | Date | Time

Microbac OVD 221000012489
Received: 02/18/2011 10:21
By: BRENDA GREENWALT
Brenda Greenwalt

Received by: (Signature) | Date | Time

Remarks:

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

1000012489

COOLER INSPECTION

Received: 02/18/2011 10:21
Delivery Method: FedEx
Opened By: Brenda Greenwalt
Comments:

Login(s): L11020492|

Cooler(s)

Cooler #	Temp Gun	Temp	Tracking #	COC #	Comments
0014384	G	1.0	345750495100256187504379331920000	2496	

1	Yes	Were shipping coolers sealed?
2	Yes	Were custody seals intact?
3	Yes	Were cooler temperatures in range of 0-6?
4	Yes	Was ice present?
5	Yes	Were COC's received/information complete/signed and dated?
6	Yes	Were sample containers and labels intact and match COC?
7	Yes	Were the correct containers and volumes received?
8	Yes	Were samples received within EPA hold times?
9	Yes	Were correct perservatives used? (water only)
10	Yes	Were pH ranges acceptable? (voa's excluded)
11	NA	Were VOA samples free of headspace (less than 6mm)?

Discrepancies:

Microbac - Ohio Valley Division
158 Starlite Drive
Marietta, OH 45750
Tel: (740)373-4071 Fax: (740)373-4835

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L11020492
Account: 2820
Project: 2820.216
Samples: 2
Due Date: 25-FEB-2011

Samplenum	Container ID	Products
L11020492-01	798835	TC-EX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	18-FEB-2011 12:07	RLK	
2	PREP	W1	TCL	21-FEB-2011 06:31	RWC	AZH
3	STORE	TCL	A2	21-FEB-2011 09:25	RLK	RWC

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	18-FEB-2011 12:07	RLK	
2	STORE	W1	A1	22-FEB-2011 14:25	BLG	BLG

Samplenum	Container ID	Products
L11020492-02	798836	8082

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	18-FEB-2011 12:07	RLK	
2	PREP	W1	EXT	21-FEB-2011 09:38	CEB	RLK
3	DISP	EXT	DISP	21-FEB-2011 17:26	RB	RB
4	ANALYZ*	EXT	SEMI	22-FEB-2011 09:34	ECL	CEB

Sample extract/digestate/leachate

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	18-FEB-2011 12:07	RLK	
2	STORE	W1	A1	22-FEB-2011 14:25	BLG	BLG

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L11020492-02	798837	BOD

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	L1	18-FEB-2011 12:07	RLK	
2	ANALYZ	L1	WET	18-FEB-2011 12:25	TMM	RLK
3	STORE	WET	A2	21-FEB-2011 08:08	AZH	TMM

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L11020492
Account: 2820
Project: 2820.216
Samples: 2
Due Date: 25-FEB-2011

Samplenum	Container ID	Products
L11020492-02	798838	FLASH REACTC REACTS

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	18-FEB-2011 12:07	RLK	
2	ANALYZ	W1	WET	22-FEB-2011 08:21	DLP	RLK
3	STORE	WET	A2	23-FEB-2011 08:02	RLK	DLP
4	ANALYZ	W1	WET	23-FEB-2011 08:19	JBK	RLK
5	STORE	WET	A2	24-FEB-2011 11:12	RLK	JBK

Bottle: 2

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	18-FEB-2011 12:07	RLK	

Samplenum	Container ID	Products
L11020492-02	798839	COD-HIGH COD-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	18-FEB-2011 12:07	RLK	
2	ANALYZ	W1	WET	21-FEB-2011 08:02	TMM	AZH
3	STORE	W1	A2	22-FEB-2011 10:15	RLK	TMM

Samplenum	Container ID	Products
L11020492-02	798840	AG AL AS-AX BA BE CA CD CO CR CU FE HG K MG MN

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	18-FEB-2011 12:07	RLK	
2	PREP	W1	DIG	21-FEB-2011 05:23	REK	AZH
3	ANALYZ*	DIG	METALS	21-FEB-2011 13:58	PDM	REK
4	STORE	DIG	A2	22-FEB-2011 14:12	RLK	BRG

Sample extract/digestate/leachate

Samplenum	Container ID	Products
L11020492-02	798841	BOMB-F TX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	18-FEB-2011 12:07	RLK	
2	ANALYZ	W1	WET	22-FEB-2011 08:21	DLP	RLK
3	STORE	WET	A2	23-FEB-2011 08:02	RLK	DLP

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

L11020572 – Soil Characterization

158 Starlite Drive, Marietta, OH 45750 • T:740-373-4071 • F:740-373-4835 • http://www.microbac.com

Laboratory Report Number: L11020572

Client: Mary Lou Rochette, 156 Starlite Drive, Marietta, OH, 45750

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories.

Review and compilation of your report was completed by Microbac's Sales and Service Team. If you have questions, comments or require further assistance regarding this report, please contact your team member noted in the reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

Kathy Albertson	*Team Chemist/Data Specialist*	Kathy.Albertson@microbac.com
Stephanie Mossburg	*Team Chemist/Data Specialist*	Stephanie.Mossburg@microbac.com
Tony Long	*Team Chemist/Data Specialist*	Tony.Long@microbac.com
Amanda Fickiesen	*Client Services Specialist*	Amanda.Fickiesen@microbac.com
Annie Brown	*Client Services Specialist*	Annie.Brown@microbac.com

This report was reviewed on March 04, 2011.

Stephanie Mossburg - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the DoD QSM and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in this report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, DoD ELAP certification number 2936.01. The reported results are related only to the samples analyzed as received.

This report was certified on March 04, 2011.

David Vandenberg - Managing Director

State of origin: Virginia
Accrediting authority: N/A ID:N/A
QAPP: DOD Ver 4.1
This report contains a total of 221 pages.

Look closer. Go further. Do more.

Microbac REPORT L11020572
PREPARED FOR Kemron Environmental Services
WORK ID:

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1.0 Introduction

LABORATORY REPORT

L11020572

03/04/11 16:17

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Summary

Client ID	Lab ID	Date Collected	Date Received
SWMU-57-B4-0-6-WC	L11020572-01	02/18/2011 10:35	02/19/2011
SWMU-57-SB7-0-2-WC	L11020572-02	02/18/2011 11:20	02/19/2011
SWMU-57-PS-0-6-WC	L11020572-03	02/18/2011 12:20	02/19/2011
SWMU-57-SB2-0-2-WC	L11020572-04	02/18/2011 13:00	02/19/2011
SWMU-57-SB3-0-2-WC	L11020572-05	02/18/2011 13:20	02/19/2011
SWMU-57-SB18-0-2-WC	L11020572-06	02/18/2011 13:45	02/19/2011
SWMU-57-PS2-0-6-WC	L11020572-07	02/18/2011 14:30	02/19/2011

L1_A_PROD_COVER - Modified 02/06/2008
PDF File ID: 1935297
Report generated: 03/04/2011 16:17

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number: **L11020572-01**
Client ID: **SWMU-57-B4-0-6-WC**
Matrix: **Leachate**
Workgroup Number: **WG357502**
Collect Date: **02/18/2011 10:35**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **7470A**
Analytical Method: **7470A**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **02/24/2011 09:08**
Cal Date: **02/24/2011 13:18**
Run Date: **02/24/2011 13:46**
File ID: **HY.022411.134629**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6	0.00123	J	.002	.001	D009	.2

J Estimated value ; the analyte concentration was less than the low standard (LOQ)

Sample Number: **L11020572-01**
Client ID: **SWMU-57-B4-0-6-WC**
Matrix: **Leachate**
Workgroup Number: **WG357495**
Collect Date: **02/18/2011 10:35**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/24/2011 08:34**
Cal Date: **02/24/2011 14:04**
Run Date: **02/24/2011 23:20**
File ID: **P2.022411.232048**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.189		.1	.05	D005	100
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020572-01**
Client ID: **SWMU-57-B4-0-6-WC**
Matrix: **Soil**
Workgroup Number: **WG358112**
Collect Date: **02/18/2011 10:35**

PrePrep Method: **NONE**
Prep Method: **9045D**
Analytical Method: **9045D**
Analyst: **JBK**
Dilution: **1**
Units: **UNITS**

Instrument: **ORION-4STAR**
Prep Date: **03/03/2011 10:55**
Cal Date:
Run Date: **03/03/2011 10:55**
File ID: **OS11030312540601**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.03			

Sample Number: **L11020572-02**
Client ID: **SWMU-57-SB7-0-2-WC**
Matrix: **Leachate**
Workgroup Number: **WG357502**
Collect Date: **02/18/2011 11:20**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **7470A**
Analytical Method: **7470A**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **02/24/2011 09:08**
Cal Date: **02/24/2011 13:20**
Run Date: **02/24/2011 13:54**
File ID: **HY.022411.135406**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6		U	.002	.001	D009	.2

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number: **L11020572-02**
Client ID: **SWMU-57-SB7-0-2-WC**
Matrix: **Leachate**
Workgroup Number: **WG357495**
Collect Date: **02/18/2011 11:20**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/24/2011 08:34**
Cal Date: **02/24/2011 14:04**
Run Date: **02/24/2011 23:41**
File ID: **P2.022411.234102**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.423		.1	.05	D005	100
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020572-02**
Client ID: **SWMU-57-SB7-0-2-WC**
Matrix: **Soil**
Workgroup Number: **WG358112**
Collect Date: **02/18/2011 11:20**

PrePrep Method: **NONE**
Prep Method: **9045D**
Analytical Method: **9045D**
Analyst: **JBK**
Dilution: **1**
Units: **UNITS**

Instrument: **ORION-4STAR**
Prep Date: **03/03/2011 10:55**
Cal Date:
Run Date: **03/03/2011 10:55**
File ID: **OS11030312541701**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.11			

Sample Number: **L11020572-03**
Client ID: **SWMU-57-PS-0-6-WC**
Matrix: **Leachate**
Workgroup Number: **WG357502**
Collect Date: **02/18/2011 12:20**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **7470A**
Analytical Method: **7470A**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **02/24/2011 09:08**
Cal Date: **02/24/2011 13:20**
Run Date: **02/24/2011 13:55**
File ID: **HY.022411.135558**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6		U	.002	.001	D009	.2

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020572-03**
Client ID: **SWMU-57-PS-0-6-WC**
Matrix: **Leachate**
Workgroup Number: **WG357495**
Collect Date: **02/18/2011 12:20**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/24/2011 08:34**
Cal Date: **02/24/2011 14:04**
Run Date: **02/25/2011 00:01**
File ID: **P2.022511.000109**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.0866	J	.1	.05	D005	100
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

J Estimated value ; the analyte concentration was less than the low standard (LOQ)
U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number: **L11020572-03**
Client ID: **SWMU-57-PS-0-6-WC**
Matrix: **Soil**
Workgroup Number: **WG358112**
Collect Date: **02/18/2011 12:20**

PrePrep Method: **NONE**
Prep Method: **9045D**
Analytical Method: **9045D**
Analyst: **JBK**
Dilution: **1**
Units: **UNITS**

Instrument: **ORION-4STAR**
Prep Date: **03/03/2011 10:55**
Cal Date:
Run Date: **03/03/2011 10:55**
File ID: **OS11030312542401**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	6.64			

Sample Number: **L11020572-04**
Client ID: **SWMU-57-SB2-0-2-WC**
Matrix: **Leachate**
Workgroup Number: **WG357502**
Collect Date: **02/18/2011 13:00**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **7470A**
Analytical Method: **7470A**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **02/24/2011 09:08**
Cal Date: **02/24/2011 13:20**
Run Date: **02/24/2011 13:57**
File ID: **HY.022411.135740**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6		U	.002	.001	D009	.2

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020572-04**
Client ID: **SWMU-57-SB2-0-2-WC**
Matrix: **Leachate**
Workgroup Number: **WG357495**
Collect Date: **02/18/2011 13:00**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/24/2011 08:34**
Cal Date: **02/24/2011 14:04**
Run Date: **02/25/2011 00:07**
File ID: **P2.022511.000755**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.260		.1	.05	D005	100
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020572-04**
Client ID: **SWMU-57-SB2-0-2-WC**
Matrix: **Soil**
Workgroup Number: **WG358112**
Collect Date: **02/18/2011 13:00**

PrePrep Method: **NONE**
Prep Method: **9045D**
Analytical Method: **9045D**
Analyst: **JBK**
Dilution: **1**
Units: **UNITS**

Instrument: **ORION-4STAR**
Prep Date: **03/03/2011 10:55**
Cal Date:
Run Date: **03/03/2011 10:55**
File ID: **OS11030312543301**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.52			

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number: **L11020572-05**
Client ID: **SWMU-57-SB3-0-2-WC**
Matrix: **Leachate**
Workgroup Number: **WG357502**
Collect Date: **02/18/2011 13:20**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **7470A**
Analytical Method: **7470A**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **02/24/2011 09:08**
Cal Date: **02/24/2011 13:20**
Run Date: **02/24/2011 13:59**
File ID: **HY.022411.135933**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6		U	.002	.001	D009	.2

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020572-05**
Client ID: **SWMU-57-SB3-0-2-WC**
Matrix: **Leachate**
Workgroup Number: **WG357495**
Collect Date: **02/18/2011 13:20**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/24/2011 08:34**
Cal Date: **02/24/2011 14:04**
Run Date: **02/25/2011 00:14**
File ID: **P2.022511.001440**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.183		.1	.05	D005	100
Cadmium, TCLP	7440-43-9	0.281		.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020572-05**
Client ID: **SWMU-57-SB3-0-2-WC**
Matrix: **Soil**
Workgroup Number: **WG358112**
Collect Date: **02/18/2011 13:20**

PrePrep Method: **NONE**
Prep Method: **9045D**
Analytical Method: **9045D**
Analyst: **JBK**
Dilution: **1**
Units: **UNITS**

Instrument: **ORION-4STAR**
Prep Date: **03/03/2011 10:55**
Cal Date:
Run Date: **03/03/2011 10:55**
File ID: **OS11030312544301**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.43			

Sample Number: **L11020572-06**
Client ID: **SWMU-57-SB18-0-2-WC**
Matrix: **Leachate**
Workgroup Number: **WG357502**
Collect Date: **02/18/2011 13:45**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **7470A**
Analytical Method: **7470A**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **02/24/2011 09:08**
Cal Date: **02/24/2011 13:20**
Run Date: **02/24/2011 14:01**
File ID: **HY.022411.140118**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6		U	.002	.001	D009	.2

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number: **L11020572-06**
Client ID: **SWMU-57-SB18-0-2-WC**
Matrix: **Leachate**
Workgroup Number: **WG357495**
Collect Date: **02/18/2011 13:45**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/24/2011 08:34**
Cal Date: **02/24/2011 14:04**
Run Date: **02/25/2011 00:21**
File ID: **P2.022511.002123**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.196		.1	.05	D005	100
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020572-06**
Client ID: **SWMU-57-SB18-0-2-WC**
Matrix: **Soil**
Workgroup Number: **WG358112**
Collect Date: **02/18/2011 13:45**

PrePrep Method: **NONE**
Prep Method: **9045D**
Analytical Method: **9045D**
Analyst: **JBK**
Dilution: **1**
Units: **UNITS**

Instrument: **ORION-4STAR**
Prep Date: **03/03/2011 10:55**
Cal Date:
Run Date: **03/03/2011 10:55**
File ID: **OS11030312545101**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.24			

Sample Number: **L11020572-07**
Client ID: **SWMU-57-PS2-0-6-WC**
Matrix: **Leachate**
Workgroup Number: **WG357502**
Collect Date: **02/18/2011 14:30**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **7470A**
Analytical Method: **7470A**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **02/24/2011 09:08**
Cal Date: **02/24/2011 13:20**
Run Date: **02/24/2011 14:03**
File ID: **HY.022411.140303**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6		U	.002	.001	D009	.2

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020572-07**
Client ID: **SWMU-57-PS2-0-6-WC**
Matrix: **Leachate**
Workgroup Number: **WG357495**
Collect Date: **02/18/2011 14:30**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/24/2011 08:34**
Cal Date: **02/24/2011 14:04**
Run Date: **02/25/2011 00:28**
File ID: **P2.022511.002810**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.118		.1	.05	D005	100
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	**L11020572-07**	PrePrep Method:	**NONE**	Instrument:	**ORION-4STAR**
Client ID:	**SWMU-57-PS2-0-6-WC**	Prep Method:	**9045D**	Prep Date:	**03/03/2011 10:55**
Matrix:	**Soil**	Analytical Method:	**9045D**	Cal Date:	
Workgroup Number:	**WG358112**	Analyst:	**JBK**	Run Date:	**03/03/2011 10:55**
Collect Date:	**02/18/2011 14:30**	Dilution:	**1**	File ID:	**OS11030312545901**
		Units:	**UNITS**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	**10-29-7**	**7.25**			

Login Number: L11020572

Department: Login

Chain of Custody:

Shipment Conditions

COC #	Cooler #	Temperature
2481	5474	1.0

Sample Management: All samples were received intact.

Sample Identification

Lab ID	Client ID
L11020572-01	SWMU-57-B4-0-6-WC
L11020572-02	SWMU-57-SB7-0-2-WC
L11020572-03	SWMU-57-PS-0-6-WC
L11020572-04	SWMU-57-SB2-0-2-WC
L11020572-05	SWMU-57-SB3-0-2-WC
L11020572-06	SWMU-57-SB18-0-2-WC
L11020572-07	SWMU-57-PS2-0-6-WC

Narrative ID: 21926
Approved By: Stephanie Mossburg
Stephanie Mossburg

2.0 Full Sample Data Package

2.1 Metals Data

2.1.1 Metals I C P Data

2.1.1.1 Summary Data

Login Number: L11020572

Department: Metals

Analyst: Pierce Morris

METHOD

Preparation: SW-846 3015

Analysis: SW-846 6010

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG357495 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 22180
Approved By: Sheri Pfalzgraf

LABORATORY REPORT

L11020572

03/04/11 16:17

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-B4-0-6-WC	L11020572-01	6010B	1	19-FEB-11
SWMU-57-SB7-0-2-WC	L11020572-02	6010B	1	19-FEB-11
SWMU-57-PS-0-6-WC	L11020572-03	6010B	1	19-FEB-11
SWMU-57-SB2-0-2-WC	L11020572-04	6010B	1	19-FEB-11
SWMU-57-SB3-0-2-WC	L11020572-05	6010B	1	19-FEB-11
SWMU-57-SB18-0-2-WC	L11020572-06	6010B	1	19-FEB-11
SWMU-57-PS2-0-6-WC	L11020572-07	6010B	1	19-FEB-11

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	L11020572-01	PrePrep Method:	1311	Instrument:	PE-ICP2
Client ID:	SWMU-57-B4-0-6-WC	Prep Method:	3015	Prep Date:	02/24/2011 08:34
Matrix:	Leachate	Analytical Method:	6010B	Cal Date:	02/24/2011 14:04
Workgroup Number:	WG357495	Analyst:	PDM	Run Date:	02/24/2011 23:20
Collect Date:	02/18/2011 10:35	Dilution:	1	File ID:	P2.022411.232048
Sample Tag:	01	Units:	mg/L		

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.189		.1	.05	D005	100
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number: **L11020572-02**
Client ID: **SWMU-57-SB7-0-2-WC**
Matrix: **Leachate**
Workgroup Number: **WG357495**
Collect Date: **02/18/2011 11:20**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/24/2011 08:34**
Cal Date: **02/24/2011 14:04**
Run Date: **02/24/2011 23:41**
File ID: **P2.022411.234102**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.423		.1	.05	D005	100
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number: **L11020572-03**
Client ID: **SWMU-57-PS-0-6-WC**
Matrix: **Leachate**
Workgroup Number: **WG357495**
Collect Date: **02/18/2011 12:20**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/24/2011 08:34**
Cal Date: **02/24/2011 14:04**
Run Date: **02/25/2011 00:01**
File ID: **P2.022511.000109**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.0866	J	.1	.05	D005	100
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

J Estimated value ; the analyte concentration was less than the low standard (LOQ)
U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number: **L11020572-04**
Client ID: **SWMU-57-SB2-0-2-WC**
Matrix: **Leachate**
Workgroup Number: **WG357495**
Collect Date: **02/18/2011 13:00**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/24/2011 08:34**
Cal Date: **02/24/2011 14:04**
Run Date: **02/25/2011 00:07**
File ID: **P2.022511.000755**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.260		.1	.05	D005	100
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number: **L11020572-05**
Client ID: **SWMU-57-SB3-0-2-WC**
Matrix: **Leachate**
Workgroup Number: **WG357495**
Collect Date: **02/18/2011 13:20**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/24/2011 08:34**
Cal Date: **02/24/2011 14:04**
Run Date: **02/25/2011 00:14**
File ID: **P2.022511.001440**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.183		.1	.05	D005	100
Cadmium, TCLP	7440-43-9	0.281		.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number: **L11020572-06**
Client ID: **SWMU-57-SB18-0-2-WC**
Matrix: **Leachate**
Workgroup Number: **WG357495**
Collect Date: **02/18/2011 13:45**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/24/2011 08:34**
Cal Date: **02/24/2011 14:04**
Run Date: **02/25/2011 00:21**
File ID: **P2.022511.002123**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.196		.1	.05	D005	100
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number: **L11020572-07**
Client ID: **SWMU-57-PS2-0-6-WC**
Matrix: **Leachate**
Workgroup Number: **WG357495**
Collect Date: **02/18/2011 14:30**
Sample Tag: **01**

PrePrep Method: **1311**
Prep Method: **3015**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/24/2011 08:34**
Cal Date: **02/24/2011 14:04**
Run Date: **02/25/2011 00:28**
File ID: **P2.022511.002810**

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Arsenic, TCLP	7440-38-2		U	1	.5	D004	5
Barium, TCLP	7440-39-3	0.118		.1	.05	D005	100
Cadmium, TCLP	7440-43-9		U	.1	.05	D006	1
Chromium, TCLP	7440-47-3		U	.2	.1	D007	5
Lead, TCLP	7439-92-1		U	1	.5	D008	5
Selenium, TCLP	7782-49-2		U	.8	.4	D010	1
Silver, TCLP	7440-22-4		U	.1	.05	D011	5

U Analyte was not detected. The concentration is below the reported LOD.

2.1.1.2 QC Summary Data

Example 6010 Calculations
Perkin Elmer Optima 4300 DV

1.0 Initial Calibration (ICAL) Parameters
The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system in ug/mL (ppm)	0.1
Vf = Final volume (mL)	50
Vi = Initial volume (mL)	50
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in ug/mL (mg/L)	0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (mg/L) (ppm)	0.1
Vf = Final volume (mL)	50
Vi = Initial weight (g)	1
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in ug/g (mg/kg)	5

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:	**Example:**
Cx = Concentration calculated as received (wet basis)	5
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (mg/kg)	6.25

TCLP Non-Volatile

Analyst(s): Ruc
Date: 02-23-11
Filter Lot #: H11368979

Agitator Speed 30 ± 2 rpm ☑

Analyst/Date		Analyst/Date	
RuC 2-23-11		RuC 2-24-11	
Time On	Temp On °C	Time Off	Temp Off °C
1330	23	0630	23

Jug #	Sample #	Tests	Method	Fluid #	Matrix*	%Solid	Size Reduction Yes	Size Reduction No	Int. Wt. (g)	Fluid Vol. (mL)
D	02-572-01	ME	1311	FI-814	S/S	100		✓	100.04	2000
	02								100.00	
	03								100.06	
	04								100.01	
	05								100.00	
	06								100.03	
	07								100.04	
	02-587-01				O *				100.08	
	02-588-01				S				100.00	
N/A	FBLK				N/A	N/A			2000	

Ruc 2-23-11

*Matrix Code = (S-solid) (SS-sand, soil or sludge) (P-paint) (O-organic) (W-water or waste)
Agitator speed is 30 ± 2 rpm unless otherwise noted.

Comments: *Extremely thick ORGANIC MATERIAL - TREATED AS A SOLID AS PER 1311 - Ruc

Peer Review By: _____ Supervisor Review: _____

Microbac Laboratories Inc.
Microwave Digestion Log

Workgroup: WG357448
Analyst: VC
Spike Analyst: VC
Run Date: 02/24/2011 08:34
Method: 3015
Balance: BAL016
Instrument: MW-2

SOP: ME407 Revison 11
Spike Solution: STD39932
Spike Witness: ERP
HNO3 Lot #: COA15168
Digestion Tubes Lot #: COA15251

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG357448-02	BLANK	17	5 mL	50 mL	207.663 g	207.653 g		
2	WG357088-01	FBLK	18	5 mL	50 mL	211.215 g	211.2 g		
3	WG357390-01	FBLK	17	5 mL	50 mL	210.63 g	210.622 g		
4	WG357448-03	LCS	17	5 mL	50 mL	211.986 g	211.983 g	5 mL	
5	L11020502-17	SAMP	18	5 mL	50 mL	209.297 g	209.285 g		02/28/11
6	L11020506-10	SAMP	18	5 mL	50 mL	208.867 g	208.861 g		02/28/11
7	L11020506-11	SAMP	18	5 mL	50 mL	211.318 g	211.31 g		02/28/11
8	L11020521-01	SAMP	17	5 mL	50 mL	209.847 g	209.837 g		03/04/11
9	L11020572-01	SAMP	17	5 mL	50 mL	209.187 g	209.184 g		02/28/11
10	L11020572-02	SAMP	17	5 mL	50 mL	211.951 g	211.941 g		02/28/11
11	L11020572-03	SAMP	17	5 mL	50 mL	209.951 g	209.953 g		02/28/11
12	L11020572-04	SAMP	17	5 mL	50 mL	210.978 g	210.985 g		02/28/11
13	L11020572-05	SAMP	17	5 mL	50 mL	212.009 g	212.015 g		02/28/11
14	L11020572-06	SAMP	17	5 mL	50 mL	210.284 g	210.297 g		02/28/11
15	L11020572-07	SAMP	17	5 mL	50 mL	208.96 g	208.965 g		02/28/11
16	L11020587-01	SAMP	17	5 mL	50 mL	209.22 g	209.211 g		02/28/11
17	WG357448-01	REF	17	5 mL	50 mL	207.959 g	207.938 g		
18	L11020588-01	SAMP	17	5 mL	50 mL	207.959 g	207.938 g		03/01/11
19	WG357448-04	MS	17	5 mL	50 mL	207.236 g	207.231 g	5 mL	
20	WG357448-05	MSD	17	5 mL	50 mL	207.231 g	207.179 g	5 mL	

WG357088-01	high sodium
L11020502-17	high sodium
L11020506-10	high sodium
L11020506-11	high sodium

Analyst: Vicki Collins

Reviewer: Erin Potter

MW_DIG - Modified 09/30/2009
PDF ID: 1928356
Report generated: 02/24/2011 09:40

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022411H6.CSV
Analyst1: PDM Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 36555

Calibration Std: STD44101 ICV Std: STD43946 Post Spike: STD39932
ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44103
CCV: STD44102 LLCCV:

Workgroups: 357494,357224,357225,357496,357495

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.022411.133742	WG357578-01	Calibration Point		1		02/24/11 13:37
2	P2.022411.134420	WG357578-02	Calibration Point		1		02/24/11 13:44
3	P2.022411.135057	WG357578-03	Calibration Point		1		02/24/11 13:50
4	P2.022411.135739	WG357578-04	Calibration Point		1		02/24/11 13:57
5	P2.022411.140419	WG357578-05	Calibration Point		1		02/24/11 14:04
6	P2.022411.141104	WG357578-06	Initial Calibration Verification		1		02/24/11 14:11
7	P2.022411.141745	WG357578-07	Initial Calib Blank		1		02/24/11 14:17
8	P2.022411.142423	WG357578-08	Interference Check		1		02/24/11 14:24
9	P2.022411.143002	WG357578-09	Interference Check		1		02/24/11 14:30
10	P2.022411.143546	WG357578-10	CCV		1		02/24/11 14:35
11	P2.022411.144226	WG357578-11	CCB		1		02/24/11 14:42
12	P2.022411.144910	WG357435-02	Method/Prep Blank	50/50	1		02/24/11 14:49
13	P2.022411.145550	WG357435-03	Laboratory Control S	50/50	1		02/24/11 14:55
14	P2.022411.150228	WG357435-01	Reference Sample		1	L11020597-01	02/24/11 15:02
15	P2.022411.150919	WG357435-04	Duplicate	50/50	1	L11020597-01	02/24/11 15:09
16	P2.022411.151605	WG357435-05	Matrix Spike	50/50	1	L11020597-01	02/24/11 15:16
17	P2.022411.152247	L11020597-02	018	50/50	1		02/24/11 15:22
18	P2.022411.152928	L11020617-01	UF\#1 PERMEATE/COMP	50/50	1		02/24/11 15:29
19	P2.022411.153636	WG357494-01	Post Digestion Spike		1	L11020617-01	02/24/11 15:36
20	P2.022411.154412	WG357494-02	Serial Dilution		5	L11020617-01	02/24/11 15:44
21	P2.022411.155053	L11020617-03	CARBON EFF/COMP	50/50	1		02/24/11 15:50
22	P2.022411.155734	WG357578-12	CCV		1		02/24/11 15:57
23	P2.022411.160420	WG357578-13	CCB		1		02/24/11 16:04
24	P2.022411.161102	L11020619-04	OUTFALL 003/COMP	50/50	1		02/24/11 16:11
25	P2.022411.161750	L11020619-06	OUTFALL 800/COMP	50/50	1		02/24/11 16:17
26	P2.022411.162429	L11020621-01	OUTFALL 002/COMP	50/50	1		02/24/11 16:24
27	P2.022411.163114	WG357578-14	CCV		1		02/24/11 16:31
28	P2.022411.163757	WG357578-15	CCB		1		02/24/11 16:37
29	P2.022411.164435	WG357152-02	Method/Prep Blank	50/50	1		02/24/11 16:44
30	P2.022411.165116	WG357152-03	Laboratory Control S	50/50	1		02/24/11 16:51
31	P2.022411.165802	WG357152-01	Reference Sample		1	L11020513-06	02/24/11 16:58
32	P2.022411.170444	WG357152-04	Matrix Spike	50/50	1	L11020513-06	02/24/11 17:04
33	P2.022411.171132	WG357152-05	Matrix Spike Duplica	50/50	1	L11020513-06	02/24/11 17:11
34	P2.022411.171817	L11020533-01	LH18/24-SP650-6443-GRAB	50/50	1		02/24/11 17:18

 Approved: February 25, 2011

Maren Berry

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022411H6.CSV
Analyst1: PDM Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 36555

Calibration Std: STD44101 ICV Std: STD43946 Post Spike: STD39932
ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44103
CCV: STD44102 LLCCV:

Workgroups: 357494,357224,357225,357496,357495

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.022411.172504	WG357224-03	Post Digestion Spike		1	L11020533-01	02/24/11 17:25
36	P2.022411.173153	WG357224-04	Serial Dilution		5	L11020533-01	02/24/11 17:31
37	P2.022411.173837	L11020533-02	LH18/24-SP650-6443-COMP	50/50	1		02/24/11 17:38
38	P2.022411.174524	L11020537-01	10112-W0001	50/50	1		02/24/11 17:45
39	P2.022411.175207	WG357578-16	CCV		1		02/24/11 17:52
40	P2.022411.175847	WG357578-17	CCB		1		02/24/11 17:58
41	P2.022411.180524	L11020537-02	10116-W0001	50/50	1		02/24/11 18:05
42	P2.022411.181205	L11020537-03	10116-W0002	50/50	1		02/24/11 18:12
43	P2.022411.181847	L11020537-04	10116-W0003	50/50	1		02/24/11 18:18
44	P2.022411.182524	L11020537-05	10116-W0004	50/50	1		02/24/11 18:25
45	P2.022411.183205	L11020537-06	10116-W0005	50/50	1		02/24/11 18:32
46	P2.022411.183846	L11020537-07	10116-W0006	50/50	1		02/24/11 18:38
47	P2.022411.184523	L11020537-08	13073-W0001	50/50	1		02/24/11 18:45
48	P2.022411.185207	WG357578-18	CCV		1		02/24/11 18:52
49	P2.022411.185846	WG357578-19	CCB		1		02/24/11 18:58
50	P2.022411.190523	WG356894-01	Reference Sample		1	L11020445-01	02/24/11 19:05
51	P2.022411.191208	WG356894-04	Duplicate	50/50	1	L11020445-01	02/24/11 19:12
52	P2.022411.191852	WG356894-05	Matrix Spike	50/50	1	L11020445-01	02/24/11 19:18
53	P2.022411.192554	L11020445-02	012	50/50	1		02/24/11 19:25
54	P2.022411.193243	L11020445-03	016	50/50	1		02/24/11 19:32
55	P2.022411.193931	L11020445-04	016	50/50	1		02/24/11 19:39
56	P2.022411.194614	L11020445-05	017	50/50	1		02/24/11 19:46
57	P2.022411.195301	L11020445-06	017	50/50	1		02/24/11 19:53
58	P2.022411.195948	WG357578-20	CCV		1		02/24/11 19:59
59	P2.022411.200628	WG357578-21	CCB		1		02/24/11 20:06
60	P2.022411.201310	WG357436-02	Method/Prep Blank	50/50	1		02/24/11 20:13
61	P2.022411.201951	WG357436-03	Laboratory Control S	50/50	1		02/24/11 20:19
62	P2.022411.202630	WG357436-01	Reference Sample		10	L11020590-01	02/24/11 20:26
63	P2.022411.203313	WG357436-04	Matrix Spike	50/50	10	L11020590-01	02/24/11 20:33
64	P2.022411.203958	WG357436-05	Matrix Spike Duplica	50/50	10	L11020590-01	02/24/11 20:39
65	P2.022411.204637	L11020598-01	12517-W0001	50/50	1		02/24/11 20:46
66	P2.022411.205317	WG357496-01	Post Digestion Spike		1	L11020598-01	02/24/11 20:53
67	P2.022411.210005	WG357496-02	Serial Dilution		5	L11020598-01	02/24/11 21:00
68	P2.022411.210644	WG357578-22	CCV		1		02/24/11 21:06

Page: 2 Approved: February 25, 2011

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022411H6.CSV
Analyst1: PDM Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 36555

Calibration Std: STD44101 ICV Std: STD43946 Post Spike: STD39932
ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44103
CCV: STD44102 LLCCV:

Workgroups: 357494,357224,357225,357496,357495

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	P2.022411.211322	WG357578-23	CCB		1		02/24/11 21:13
70	P2.022411.212011	L11020598-02	13097-W0001	50/50	1		02/24/11 21:20
71	P2.022411.212649	L11020600-01	BAKER HUGHES	50/50	10		02/24/11 21:26
72	P2.022411.213332	L11020601-01	CARR SERVICES	50/50	100		02/24/11 21:33
73	P2.022411.214017	L11020605-01	12194-W0001	50/50	1		02/24/11 21:40
74	P2.022411.214656	L11020605-02	12194-W0002	50/50	1		02/24/11 21:46
75	P2.022411.215340	L11020605-03	12194-W0003	50/50	1		02/24/11 21:53
76	P2.022411.220021	L11020605-04	12207-W0001	50/50	1		02/24/11 22:00
77	P2.022411.220700	L11020605-05	12212-W0001	50/50	1		02/24/11 22:07
78	P2.022411.221341	L11020605-06	12214-W0001	50/50	1		02/24/11 22:13
79	P2.022411.222022	L11020605-07	12219-W0001	50/50	1		02/24/11 22:20
80	P2.022411.222701	WG357578-24	CCV		1		02/24/11 22:27
81	P2.022411.223341	WG357578-25	CCB		1		02/24/11 22:33
82	P2.022411.224022	L11020612-02	AV-OU7-VBII-C1-022111	50/50	1		02/24/11 22:40
83	P2.022411.224705	L11020612-03	AV-OU7-VBII-C2-022111	50/50	1		02/24/11 22:47
84	P2.022411.225349	WG357448-02	Method/Prep Blank	5/50	1		02/24/11 22:53
85	P2.022411.230035	WG357448-03	Laboratory Control S	5/50	1		02/24/11 23:00
86	P2.022411.230718	WG357390-01	Fluid Blank		1		02/24/11 23:07
87	P2.022411.231401	L11020521-01	DS021811	5/50	1		02/24/11 23:14
88	P2.022411.232048	L11020572-01	SWMU-57-B4-0-6-WC	5/50	1		02/24/11 23:20
89	P2.022411.232734	WG357495-01	Post Digestion Spike		1	L11020572-01	02/24/11 23:27
90	P2.022411.233417	WG357495-02	Serial Dilution		5	L11020572-01	02/24/11 23:34
91	P2.022411.234102	L11020572-02	SWMU-57-SB7-0-2-WC	5/50	1		02/24/11 23:41
92	P2.022411.234748	WG357578-26	CCV		1		02/24/11 23:47
93	P2.022411.235428	WG357578-27	CCB		1		02/24/11 23:54
94	P2.022511.000109	L11020572-03	SWMU-57-PS-0-6-WC	5/50	1		02/25/11 00:01
95	P2.022511.000755	L11020572-04	SWMU-57-SB2-0-2-WC	5/50	1		02/25/11 00:07
96	P2.022511.001440	L11020572-05	SWMU-57-SB3-0-2-WC	5/50	1		02/25/11 00:14
97	P2.022511.002123	L11020572-06	SWMU-57-SB18-0-2-WC	5/50	1		02/25/11 00:21
98	P2.022511.002810	L11020572-07	SWMU-57-PS2-0-6-WC	5/50	1		02/25/11 00:28
99	P2.022511.003453	L11020587-01	OH VALLEY COAL	5/50	1		02/25/11 00:34
100	P2.022511.004139	WG357448-01	Reference Sample		1	L11020588-01	02/25/11 00:41
101	P2.022511.004823	WG357448-04	Matrix Spike	5/50	1	L11020588-01	02/25/11 00:48
102	P2.022511.005507	WG357448-05	Matrix Spike Duplica	5/50	1	L11020588-01	02/25/11 00:55

Page: 3 Approved: February 25, 2011

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022411H6.CSV

Analyst1: PDM Analyst2: N/A

Method: 6010 SOP: ME600E Rev: 10

Maintenance Log ID: 36555

Calibration Std: STD44101 ICV Std: STD43946 Post Spike: STD39932

ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44103

CCV: STD44102 LLCCV:

Workgroups: 357494,357224,357225,357496,357495

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	P2.022511.010154	WG357578-28	CCV		1		02/25/11 01:01
104	P2.022511.010837	WG357578-29	CCB		1		02/25/11 01:08
105	P2.022511.011522	L11020596-01	W9034	50/50	1		02/25/11 01:15
106	P2.022511.012201	L11020596-02	W9035	50/50	1		02/25/11 01:22
107	P2.022511.012842	WG357088-01	Fluid Blank		100		02/25/11 01:28
108	P2.022511.013525	L11020502-17	GB-81-5	5/50	100		02/25/11 01:35
109	P2.022511.014204	L11020506-10	GB-66-1	5/50	100		02/25/11 01:42
110	P2.022511.014848	L11020506-11	GB-66-1-DUP	5/50	100		02/25/11 01:48
111	P2.022511.015534	WG357578-30	CCV		1		02/25/11 01:55
112	P2.022511.020217	WG357578-31	CCB		1		02/25/11 02:02

Page: 4 Approved: February 25, 2011

Maren Berry

Microbac Laboratories Inc.

Data Checklist

Date: 24-FEB-2011
Analyst: PDM
Analyst: NA
Method: 6010
Instrument: PE-ICP2
Curve Workgroup: 357578
Runlog ID: 39206
Analytical Workgroups: 357494,357224,357225,357496,357495

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0533,0537,0590,0596,0598,0600,601
	0605,0612,0445,0502,0506,0521,0572
Client Forms	
Level X	
Level 3	0533,0502,0506
Level 4	0537,0596,0598,0605,0612,0521,0572
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	PDM
Secondary Reviewer	MMB
Comments	

Primary Reviewer: Pierce Morris 25-FEB-2011

Secondary Reviewer: Maren Berry 25-FEB-2011

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-25-2011 14:07:18

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method 6010B AAB#: WG357495

Login Number: L11020572

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-B4-0-6-WC	01	02/18/11	02/23/11	5.1			02/24/11	5.9	180		02/24/11	1.4	180	
SWMU-57-SB7-0-2-WC	02	02/18/11	02/23/11	5.1			02/24/11	5.9	180		02/24/11	1.4	180	
SWMU-57-PS-0-6-WC	03	02/18/11	02/23/11	5			02/24/11	5.8	180		02/25/11	1.4	180	
SWMU-57-SB2-0-2-WC	04	02/18/11	02/23/11	5			02/24/11	5.8	180		02/25/11	1.4	180	
SWMU-57-SB3-0-2-WC	05	02/18/11	02/23/11	5			02/24/11	5.8	180		02/25/11	1.4	180	
SWMU-57-SB18-0-2-WC	06	02/18/11	02/23/11	5			02/24/11	5.8	180		02/25/11	1.5	180	
SWMU-57-PS2-0-6-WC	07	02/18/11	02/23/11	5			02/24/11	5.8	180		02/25/11	1.5	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1929618
Report generated 02/25/2011 11:13

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L11020572
Blank File ID: P2.022411.225349
Prep Date: 02/24/11 08:34
Analyzed Date: 02/24/11 22:53
Analyst: PDM

Work Group: WG357495
Blank Sample ID: WG357448-02
Instrument ID: PE-ICP2
Method: 6010B

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357448-03	P2.022411.230035	02/24/11 23:00	01
SWMU-57-B4-0-6-WC	L11020572-01	P2.022411.232048	02/24/11 23:20	01
SWMU-57-SB7-0-2-WC	L11020572-02	P2.022411.234102	02/24/11 23:41	01
SWMU-57-PS-0-6-WC	L11020572-03	P2.022511.000109	02/25/11 00:01	01
SWMU-57-SB2-0-2-WC	L11020572-04	P2.022511.000755	02/25/11 00:07	01
SWMU-57-SB3-0-2-WC	L11020572-05	P2.022511.001440	02/25/11 00:14	01
SWMU-57-SB18-0-2-WC	L11020572-06	P2.022511.002123	02/25/11 00:21	01
SWMU-57-PS2-0-6-WC	L11020572-07	P2.022511.002810	02/25/11 00:28	01

Report Name: BLANK_SUMMARY
PDF File ID: 1929619
Report generated 02/25/2011 11:13

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11020572 Prep Date: 02/24/11 08:34 Sample ID: WG357448-02
Instrument ID: PE-ICP2 Run Date: 02/24/11 22:53 Prep Method: 3015
File ID: P2.022411.225349 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG357495 Matrix: Leachate Units: mg/L
Contract #: Cal ID: PE-ICP-24-FEB-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Arsenic, TCLP	0.500	1.00	0.500	1	U
Barium, TCLP	0.0500	0.100	0.0500	1	U
Cadmium, TCLP	0.0500	0.100	0.0500	1	U
Chromium, TCLP	0.100	0.200	0.100	1	U
Lead, TCLP	0.500	1.00	0.500	1	U
Selenium, TCLP	0.400	0.800	0.400	1	U
Silver, TCLP	0.0500	0.100	0.0500	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1929620
25-FEB-2011 11:13

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357448-03
Instrument ID: PE-ICP2 Run Time: 23:00 Prep Method: 3015
File ID: P2.022411.230035 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG357495 Matrix: Leachate Units: mg/L
QC Key: DOD4 Lot#: STD39932 Cal ID: PE-ICP-24-FEB-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Arsenic, TCLP	2.00	1.75	87.3	80 - 120	
Barium, TCLP	5.00	4.71	94.1	80 - 120	
Cadmium, TCLP	0.250	0.229	91.4	80 - 120	
Chromium, TCLP	2.50	2.36	94.4	80 - 120	
Lead, TCLP	2.50	2.31	92.2	80 - 120	
Selenium, TCLP	2.00	1.84	92.0	80 - 120	
Silver, TCLP	2.00	1.83	91.6	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1929621
Report generated: 02/25/2011 11:13

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11020572 Cal ID:PE-ICP2- Worknum:WG357495
Instrument ID:PE-ICP2 Contract #: Method:6010B
Parent ID:WG357448-01 File ID:P2.022511.004139 Dil:1 Matrix:WATER
Sample ID:WG357448-04 MS File ID:P2.022511.004823 Dil:1 Units:mg/L
Sample ID:WG357448-05 MSD File ID:P2.022511.005507 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Arsenic, TCLP	ND	2.00	1.76	88.0	2.00	1.78	89.2	1.35	80 - 120	20	
Barium, TCLP	0.315	5.00	4.79	89.5	5.00	4.83	90.2	0.743	80 - 120	20	
Cadmium, TCLP	ND	0.250	0.235	94.1	0.250	0.234	93.4	0.722	80 - 120	20	
Chromium, TCLP	ND	2.50	2.35	94.0	2.50	2.37	94.7	0.806	80 - 120	20	
Lead, TCLP	ND	2.50	2.29	91.8	2.50	2.32	92.8	1.12	80 - 120	20	
Selenium, TCLP	ND	2.00	1.88	93.9	2.00	1.90	94.9	1.10	80 - 120	20	
Silver, TCLP	ND	2.00	1.83	91.7	2.00	1.83	91.3	0.467	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008
PDF File ID:1929622
Report generated 02/25/2011 11:13

Microbac Laboratories Inc.
Serial Dilution Report

Login: L11020572 **Worknum:** WG357495
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG357495-02 **File ID:** P2.022411.233417 **Dil:** 5 **Units:** mg/L
Sample: L11020572-01 **File ID:** P2.022411.232048 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Arsenic	ND	U	ND	U		
Barium	.0189	X	ND	U		
Cadmium	ND	U	ND	U		
Chromium	ND	U	ND	U		
Lead	ND	U	ND	U		
Selenium	ND	U	ND	U		
Silver	ND	U	ND	U		

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 50 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 50 times the MDL.

SERIAL_DIL - Modified 09/22/2008
PDF File ID: 1929616
02/25/2011 11:13

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11020572 **Worknum:** WG357495
Instrument ID: PE-ICP2 **Method:** 6010B
Post Spike ID: WG357495-01 **File ID:** P2.022411.232734 **Dil:** 1 **Units:** mg/L
Sample ID: L11020572-01 **File ID:** P2.022411.232048 **Dil:** 1 **Matrix:** Leachate

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ARSENIC	0.186		0	U	.2	93.2	75 - 125	
BARIUM	0.492		0.0189		.5	94.9	75 - 125	
CADMIUM	0.0276		0	U	.025	110.4	75 - 125	
CHROMIUM	0.238		0	U	.25	95.2	75 - 125	
LEAD	0.235		0	U	.25	94.0	75 - 125	
SELENIUM	0.194		0	U	.2	97.0	75 - 125	
SILVER	0.189		0	U	.2	94.3	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1929617
Report generated: 02/25/2011 11:13

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L11020572**	Workgroup (AAB#):	**WG357495**
Analytical Method:	**6010B**	Instrument ID:	**PE-ICP2**
ICAL Worknum:	**WG357578**	Initial Calibration Date:	**24-FEB-2011 14:04**

	WG357578-01		WG357578-02		WG357578-03		WG357578-04		WG357578-05			
	Conc	**INT**	**Conc**	**INT**	**Conc**	**INT**	**Conc**	**INT**	**Conc**	**INT**	**R**	**Q**
ARSENIC	0	1.71	NA	NA	.008	9.78	.4	436	.8	871	1	
BARIUM	0	-42.7	.01	599	.02	1200	1	59100	2	119000	.999984	
CADMIUM	0	21.3	.0005	10.2	.001	17.8	.05	895	.1	1770	.999131	
CHROMIUM	0	-21.9	.005	602	.01	1200	.5	57800	1	116000	.999965	
LEAD	0	38.3	.005	29.8	.01	68.0	.5	2950	1	5870	.996437	
SELENIUM	0	4.18	NA	NA	.008	12.2	.4	570	.8	1140	1	
SILVER	0	-1310	.004	723	.008	1560	.4	82300	.8	164000	.999985	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

INT_CAL_ICP - Modified 03/06/2008
PDF File ID 1929625
Report generated: 25-FEB-2011 11:13

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357578-07
Instrument ID: PE-ICP2 Run Time: 14:17 Method: 6010B
File ID: P2.022411.141745 Analyst: PDM Units: mg/L
Workgroup (AAB#): WG357495 Cal ID: PE-ICP2 - 24-FEB-11
Matrix: LEACHATE

Analytes	MDL	RDL	Concentration	Qualifier
ARSENIC	.05	.1	.05	U
BARIUM	.005	.01	.005	U
CADMIUM	.005	.01	.005	U
CHROMIUM	.01	.02	.01	U
LEAD	.05	.1	.05	U
SELENIUM	.04	.08	.04	U
SILVER	.005	.01	.005	U

U = Result is less than 2 x MDL
F = Result is between MDL and 2 x MDL
* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1929627
Report generated 02/25/2011 11:13

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357578-11

Instrument ID: PE-ICP2 Run Time: 14:42 Method: 6010B

File ID: P2.022411.144226 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357495 Cal ID: PE-ICP - 24-FEB-11

Matrix: LEACHATE QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Arsenic	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Chromium	0.0100	0.0200	0.0100	U
Lead	0.0500	0.100	0.0500	U
Selenium	0.0400	0.0800	0.0400	U
Silver	0.00500	0.0100	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1929630
Report generated 02/25/2011 11:13

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357578-25

Instrument ID: PE-ICP2 Run Time: 22:33 Method: 6010B

File ID: P2.022411.223341 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357495 Cal ID: PE-ICP - 24-FEB-11

Matrix: LEACHATE QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Arsenic	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Chromium	0.0100	0.0200	0.0100	U
Lead	0.0500	0.100	0.0500	U
Selenium	0.0400	0.0800	0.0400	U
Silver	0.00500	0.0100	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1929630
Report generated 02/25/2011 11:13

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357578-27

Instrument ID: PE-ICP2 Run Time: 23:54 Method: 6010B

File ID: P2.022411.235428 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357495 Cal ID: PE-ICP - 24-FEB-11

Matrix: LEACHATE QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Arsenic	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Chromium	0.0100	0.0200	0.0100	U
Lead	0.0500	0.100	0.0500	U
Selenium	0.0400	0.0800	0.0400	U
Silver	0.00500	0.0100	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1929630
Report generated 02/25/2011 11:13

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020572 Run Date: 02/25/2011 Sample ID: WG357578-29

Instrument ID: PE-ICP2 Run Time: 01:08 Method: 6010B

File ID: P2.022511.010837 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357495 Cal ID: PE-ICP - 24-FEB-11

Matrix: LEACHATE QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Arsenic	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Chromium	0.0100	0.0200	0.0100	U
Lead	0.0500	0.100	0.0500	U
Selenium	0.0400	0.0800	0.0400	U
Silver	0.00500	0.0100	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1929630
Report generated 02/25/2011 11:13

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020572 Run Date: 02/25/2011 Sample ID: WG357578-31

Instrument ID: PE-ICP2 Run Time: 02:02 Method: 6010B

File ID: P2.022511.020217 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357495 Cal ID: PE-ICP - 24-FEB-11

Matrix: LEACHATE QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Arsenic	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Chromium	0.0100	0.0200	0.0100	U
Lead	0.0500	0.100	0.0500	U
Selenium	0.0400	0.0800	0.0400	U
Silver	0.00500	0.0100	0.00500	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1929630
Report generated 02/25/2011 11:13

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357578-06

Instrument ID: PE-ICP2 Run Time: 14:11 Method: 6010B

File ID: P2.022411.141104 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357495 Cal ID: PE-ICP - 24-FEB-11

QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Arsenic		.4	0.390	97.6	90 - 110	
Barium		1	1.00	100	90 - 110	
Cadmium		.05	0.0494	98.9	90 - 110	
Chromium		.5	0.497	99.4	90 - 110	
Lead		.5	0.492	98.4	90 - 110	
Selenium		.4	0.396	99.0	90 - 110	
Silver		.4	0.396	99.0	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008

PDF File ID: 1929626

Report generated 02/25/2011 11:13

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357578-10

Instrument ID: PE-ICP2 Run Time: 14:35 Method: 6010B

File ID: P2.022411.143546 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357495 Cal ID: PE-ICP - 24-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Arsenic		0.400	0.395	mg/L	98.7	90 - 110		
Barium		1.00	0.989	mg/L	98.9	90 - 110		
Cadmium		0.0500	0.0500	mg/L	100	90 - 110		
Chromium		0.500	0.491	mg/L	98.3	90 - 110		
Lead		0.500	0.491	mg/L	98.1	90 - 110		
Selenium		0.400	0.403	mg/L	101	90 - 110		
Silver		0.400	0.396	mg/L	99.0	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1929629

Report generated 02/25/2011 11:13

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357578-24

Instrument ID: PE-ICP2 Run Time: 22:27 Method: 6010B

File ID: P2.022411.222701 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357495 Cal ID: PE-ICP - 24-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Arsenic		0.400	0.402	mg/L	100	90 - 110		
Barium		1.00	1.02	mg/L	102	90 - 110		
Cadmium		0.0500	0.0514	mg/L	103	90 - 110		
Chromium		0.500	0.507	mg/L	101	90 - 110		
Lead		0.500	0.505	mg/L	101	90 - 110		
Selenium		0.400	0.415	mg/L	104	90 - 110		
Silver		0.400	0.404	mg/L	101	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1929629

Report generated 02/25/2011 11:13

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357578-26

Instrument ID: PE-ICP2 Run Time: 23:47 Method: 6010B

File ID: P2.022411.234748 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357495 Cal ID: PE-ICP - 24-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Arsenic		0.400	0.405	mg/L	101	90 - 110		
Barium		1.00	1.05	mg/L	105	90 - 110		
Cadmium		0.0500	0.0527	mg/L	105	90 - 110		
Chromium		0.500	0.524	mg/L	105	90 - 110		
Lead		0.500	0.518	mg/L	104	90 - 110		
Selenium		0.400	0.428	mg/L	107	90 - 110		
Silver		0.400	0.415	mg/L	104	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1929629

Report generated 02/25/2011 11:13

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020572 Run Date: 02/25/2011 Sample ID: WG357578-28

Instrument ID: PE-ICP2 Run Time: 01:01 Method: 6010B

File ID: P2.022511.010154 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357495 Cal ID: PE-ICP - 24-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Arsenic		0.400	0.402	mg/L	101	90 - 110		
Barium		1.00	1.04	mg/L	104	90 - 110		
Cadmium		0.0500	0.0532	mg/L	106	90 - 110		
Chromium		0.500	0.521	mg/L	104	90 - 110		
Lead		0.500	0.514	mg/L	103	90 - 110		
Selenium		0.400	0.429	mg/L	107	90 - 110		
Silver		0.400	0.412	mg/L	103	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1929629

Report generated 02/25/2011 11:13

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020572 Run Date: 02/25/2011 Sample ID: WG357578-30

Instrument ID: PE-ICP2 Run Time: 01:55 Method: 6010B

File ID: P2.022511.015534 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357495 Cal ID: PE-ICP - 24-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Arsenic		0.400	0.365	mg/L	91.2	90 - 110		
Barium		1.00	0.979	mg/L	97.9	90 - 110		
Cadmium		0.0500	0.0488	mg/L	97.5	90 - 110		
Chromium		0.500	0.489	mg/L	97.8	90 - 110		
Lead		0.500	0.480	mg/L	96.0	90 - 110		
Selenium		0.400	0.395	mg/L	98.8	90 - 110		
Silver		0.400	0.381	mg/L	95.3	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1929629

Report generated 02/25/2011 11:13

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11020572 **Workgroup (AAB#):** WG357495
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG357578-08 **File ID:** P2.022411.142423 **Units:** mg/L
Sol. AB : WG357578-09 **File ID:** P2.022411.143002 **Matrix:** Leachate

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Arsenic	NS	-0.000730	NS	0.250	0.256	102	
Barium	NS	-0.000250	NS	0.250	0.248	99.2	
Cadmium	NS	0.000140	NS	0.500	0.469	93.8	
Chromium	NS	-0.000730	NS	0.250	0.246	98.4	
Lead	NS	0.00148	NS	0.500	0.482	96.4	
Selenium	NS	-0.0000300	NS	0.250	0.260	104	
Silver	NS	-0.000820	NS	0.500	0.514	103	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 1929628
Report generated 02/25/2011 11:13

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020572 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	AG	AL	AS	B	BA
ALUMINUM	396.15	0	0	0.206	0	0
ANTIMONY	206.84	0	0	-0.740	0	0
ARSENIC	188.98	0	0.0893	0	0	0
BARIUM	233.53	0	0.00932	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	1.12	0	0	0
CADMIUM	228.80	0	0	6.68	0	0
CALCIUM	227.55	0	0.195	10.0	0	0
CHROMIUM	267.72	0	0.0250	0	0	0
COBALT	228.62	0	0	0	0	0.337
COPPER	327.39	0	0	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	0	-0.0210	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-0.185	0	-0.231	-0.0949	-0.230
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0.111	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0.200	0	0.0400
ZINC	206.20	0	0	0	0	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1929624
Report generated: 02/25/2011 11:13

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020572 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	BE	CA	CD	CO	CR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	0	6.33
ARSENIC	188.98	0	0.0200	-0.0875	0	-5.90
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	-0.0733
BORON	249.68	0	0	24.1	5.90	1.50
CADMIUM	228.80	0	0	0	-10.7	0
CALCIUM	227.55	0	0	0	300	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	-0.244
COPPER	327.39	0	0	0	0.380	-0.0400
IRON	239.56	0	0	0	1.91	0
LEAD	220.35	0	-0.0480	0	0.116	-0.0700
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-1.04	0	-0.755	-0.0418	-0.110
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	-0.566	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.250	0	-1.52	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0.0900	0	3.48	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	-0.0100	0	0	0.297
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	0	0	0	0	-3.64

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1929624
Report generated: 02/25/2011 11:13

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020572 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	CU	FE	K	LI	MG
ALUMINUM	396.15	0	-0.0800	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	-0.139	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0.195	0	0	0
BORON	249.68	0	-4.66	0	0	0
CADMIUM	228.80	0	0.00130	0	0	0
CALCIUM	227.55	-2.00	-5.00	0	0	0.104
CHROMIUM	267.72	0	-0.000800	0	0	0
COBALT	228.62	0	0.0262	0	0	0
COPPER	327.39	0	-0.115	0	0.154	0
IRON	239.56	0	0	0	0	0.0276
LEAD	220.35	0.740	0.0440	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0.540	0	0	0
MANGANESE	257.61	-0.0457	-0.0453	-0.0181	-0.794	0.0147
MOLYBDENUM	202.03	0	-0.0494	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.369	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0.0717	0.0498	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0.120	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.134	0	0	0
ZINC	206.20	-0.200	0.0230	0	0	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1929624
Report generated: 02/25/2011 11:13

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020572 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	MN	MO	NA	NI	PB
ALUMINUM	396.15	0	13.5	0	0	0
ANTIMONY	206.84	0	-7.69	0	0	0
ARSENIC	188.98	0	6.00	0	0	0
BARIUM	233.53	0	-0.548	0	0	0
BERYLLIUM	234.86	-0.131	-1.50	0	-0.00974	0
BORON	249.68	0	-2.20	0	0	0
CADMIUM	228.80	0	-0.00900	0	-0.398	0
CALCIUM	227.55	0	-8.00	0	-900	0
CHROMIUM	267.72	0.434	-0.00100	0	0	0
COBALT	228.62	0	-0.125	0	0.129	0
COPPER	327.39	0	-0.0774	0	0.150	0.257
IRON	239.56	0.480	0	0	0	0.407
LEAD	220.35	0.100	-5.00	0	0.100	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-5.00	0	0	0.0252
MANGANESE	257.61	0	-0.0482	-0.00916	-0.0340	-0.0413
MOLYBDENUM	202.03	-0.209	0	0	0.120	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	1.00	0	0
SELENIUM	196.03	0.451	0.300	0	0.0940	0
SILICON	251.61	0	15.0	0	0	0
SILVER	328.07	0.130	0.100	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	-1.50	1.20	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.578	0	0	0
ZINC	206.20	0	0.180	0	-0.200	-0.100

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1929624
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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020572 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	SB	SE	SI	SN	SR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	0	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	0	0	0	0
CADMIUM	228.80	0	0	0	0	0
CALCIUM	227.55	0	0	2.79	0	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	0
COPPER	327.39	0	0.148	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	-0.0100	0	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-0.0924	0	0	0
MANGANESE	257.61	-0.0505	-0.0281	-0.185	-0.0445	-0.625
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	-0.0500	-0.0100	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0.200
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	-0.300	0	0	0	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1929624
Report generated: 02/25/2011 11:13

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020572 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	TI	TL	V	ZN
ALUMINUM	396.15	0	0	0	0
ANTIMONY	206.84	0	0	0.000100	0
ARSENIC	188.98	0	0	0.0930	0
BARIUM	233.53	0	0	-2.29	0
BERYLLIUM	234.86	0	0	0	0
BORON	249.68	0	0	0	0
CADMIUM	228.80	0	0	0.0800	0
CALCIUM	227.55	0	0	60.0	0
CHROMIUM	267.72	0	0	-0.567	-0.0400
COBALT	228.62	2.21	0	0	0
COPPER	327.39	-1.05	0	-0.700	-0.0613
IRON	239.56	0	0	0	0
LEAD	220.35	0	0	0.0560	0
LITHIUM	670.78	0	0	0	0
MAGNESIUM	279.08	0	0	0	0
MANGANESE	257.61	-0.00931	-0.0414	-0.0601	-0.0552
MOLYBDENUM	202.03	0	0	-0.288	0
NICKEL	231.60	0	0.617	0	0
POTASSIUM	766.49	0	0	0	0
SELENIUM	196.03	-0.220	0	-0.126	0
SILICON	251.61	0	0	0	0
SILVER	328.07	0	0	-1.67	0
SODIUM	589.59	0	0	0	0
STRONTIUM	407.77	0	0	0	0
THALLIUM	190.80	-12.0	0.617	-1.41	0
TIN	189.93	0	0	0	0
TITANIUM	334.94	0	0	0	0
VANADIUM	290.88	0	0	0	0
ZINC	206.20	0	0	-0.100	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1929624
Report generated: 02/25/2011 11:13

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L11020572 **Date:** 01/12/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Integration Time (Sec.)	Concentration (mg/L)
Aluminum	10.00	450.0
Antimony	10.00	45.0
Arsenic	10.00	9.0
Barium	10.00	9.0
Beryllium	10.00	4.5
Boron	10.00	45.0
Cadmium	10.00	9.0
Calcium	10.00	450.0
Chromium	10.00	45.0
Cobalt	10.00	45.0
Copper	10.00	45.0
Iron	10.00	450.0
Lead	10.00	90.0
Lithium	10.00	0.9
Magnesium	10.00	450.0
Manganese	10.00	27.0
Molybdenum	10.00	45.0
Nickel	10.00	45.0
Potassium	10.00	72.0
Selenium	10.00	45.0
Silicon	10.00	36.0
Silver	10.00	9.0
Sodium	10.00	180.0
Strontium	10.00	4.5
Thallium	10.00	45.0
Tin	10.00	45.0
Titanium	10.00	45.0
Vanadium	10.00	45.0
Zinc	10.00	45.0

Comments:
All analytes passed acceptance criteria at the specified concentration.

LINEAR_RANGE - Modified 03/06/2008
PDF File ID: 1929623
Report generated: 02/25/2011 11:13

2.1.1.3 Raw Data

==========

Analysis Begun

Start Time: 2/24/2011 1:37:40 PM **Plasma On Time: 2/24/2011 7:06:53 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\00PDM.sif
Batch ID:
Results Data Set: 022411H6
Results Library: C:\pe\peicp2\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: S0 **Date Collected: 2/24/2011 1:37:42 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S0

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	5077778.1	68772.04	1.35%		
YRADIAL	307388.4	10377.50	3.38%		
Ga 417.206	1293717.9	8806.03	0.68%		
GaRADIAL	62293.4	798.73	1.28%		
Ag 328.068†	-1307.1	128.56	9.84%	[0.00]	mg/L
Al 396.153†	-253.0	49.01	19.38%	[0.00]	mg/L
As 188.979†	1.7	1.19	69.38%	[0.00]	mg/L
Ba 233.527†	-42.7	6.72	15.75%	[0.00]	mg/L
Be 234.861†	-567.1	5.67	1.00%	[0.00]	mg/L
B 249.677†	1015.9	16.34	1.61%	[0.00]	mg/L
Ca 227.546†	-46.3	2.35	5.07%	[0.00]	mg/L
Cd 228.802†	21.3	1.42	6.69%	[0.00]	mg/L
Co 228.616†	-24.2	2.81	11.63%	[0.00]	mg/L
Cr 267.716†	-21.9	10.15	46.39%	[0.00]	mg/L
Cu 327.393†	-1187.7	84.38	7.10%	[0.00]	mg/L
Fe 239.562†	2.9	2.28	79.06%	[0.00]	mg/L
Mg 279.077†	4.2	6.97	164.32%	[0.00]	mg/L
Mn 257.610†	156.3	6.72	4.30%	[0.00]	mg/L
Mo 202.031†	-28.7	2.05	7.14%	[0.00]	mg/L
Ni 231.604†	2.4	3.25	137.84%	[0.00]	mg/L
Pb 220.353†	38.3	9.16	23.91%	[0.00]	mg/L
Sb 206.836†	18.1	3.57	19.72%	[0.00]	mg/L
Se 196.026†	4.2	4.84	115.94%	[0.00]	mg/L
Si 251.611†	310.6	13.15	4.23%	[0.00]	mg/L
Sn 189.927†	39.5	3.41	8.62%	[0.00]	mg/L
Ti 334.940†	-646.1	72.61	11.24%	[0.00]	mg/L
Tl 190.801†	-17.6	3.80	21.58%	[0.00]	mg/L
V 290.880†	4365.4	70.98	1.63%	[0.00]	mg/L
Zn 206.200†	219.5	10.24	4.67%	[0.00]	mg/L
K 766.490†	301.2	58.88	19.55%	[0.00]	mg/L
Na 589.592†	800.1	223.64	27.95%	[0.00]	mg/L
Sr 407.771†	-329.2	247.90	75.31%	[0.00]	mg/L
Li 670.784†	187.6	74.74	39.83%	[0.00]	mg/L

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Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S1 **Date Collected: 2/24/2011 1:44:20 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S1

Analyte	Back Pressure	Flow

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All	170.0 kPa	0.50 L/min

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	5066590.7	69224.65	1.37%		
YRADIAL	305395.1	3404.32	1.11%		
Ga 417.206	1259129.0	31881.19	2.53%		
GaRADIAL	62291.1	927.50	1.49%		
Ag 328.068†	722.6	100.54	13.91%	[0.0040]	mg/L
Al 396.153†	607.9	55.69	9.16%	[0.10]	mg/L
Ba 233.527†	598.6	14.45	2.41%	[0.010]	mg/L
Be 234.861†	275.9	5.61	2.03%	[0.0005]	mg/L
Cd 228.802†	10.2	3.56	34.98%	[0.00050]	mg/L
Co 228.616†	40.2	10.02	24.94%	[0.0020]	mg/L
Cr 267.716†	601.9	5.28	0.88%	[0.0050]	mg/L
Cu 327.393†	688.2	49.42	7.18%	[0.0050]	mg/L
Fe 239.562†	16.8	1.39	8.27%	[0.040]	mg/L
Mg 279.077†	84.0	1.17	1.39%	[0.10]	mg/L
Mn 257.610†	2491.6	25.65	1.03%	[0.0050]	mg/L
Mo 202.031†	137.3	7.79	5.67%	[0.010]	mg/L
Ni 231.604†	177.4	6.22	3.51%	[0.0050]	mg/L
Pb 220.353†	29.8	4.82	16.19%	[0.0050]	mg/L
Sb 206.836†	18.7	2.70	14.46%	[0.012]	mg/L
Si 251.611†	2611.4	91.35	3.50%	[0.050]	mg/L
Sn 189.927†	58.0	4.10	7.07%	[0.010]	mg/L
Ti 334.940†	7387.5	250.03	3.38%	[0.010]	mg/L
V 290.880†	1362.7	188.56	13.84%	[0.010]	mg/L
Zn 206.200†	338.9	5.37	1.58%	[0.010]	mg/L
K 766.490†	1309.0	50.67	3.87%	[0.50]	mg/L
Na 589.592†	6818.7	136.45	2.00%	[0.50]	mg/L
Sr 407.771†	10378.4	886.60	8.54%	[0.010]	mg/L
Li 670.784†	847.5	150.29	17.73%	[0.010]	mg/L

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S2 **Date Collected: 2/24/2011 1:50:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S2

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	5024436.6	38006.51	0.76%		
YRADIAL	307288.2	9260.30	3.01%		
Ga 417.206	1266324.8	13797.67	1.09%		
GaRADIAL	62548.4	1919.51	3.07%		
Ag 328.068†	1560.5	63.89	4.09%	[0.0080]	mg/L
Al 396.153†	1089.3	16.72	1.53%	[0.20]	mg/L
As 188.979†	9.8	0.76	7.80%	[0.0080]	mg/L
Ba 233.527†	1201.8	14.58	1.21%	[0.020]	mg/L
Be 234.861†	568.5	6.23	1.10%	[0.0010]	mg/L
B 249.677†	346.6	85.96	24.80%	[0.010]	mg/L
Ca 227.546†	24.5	1.50	6.13%	[0.20]	mg/L
Cd 228.802†	17.8	0.60	3.37%	[0.0010]	mg/L
Co 228.616†	77.1	6.73	8.72%	[0.0040]	mg/L
Cr 267.716†	1197.5	18.94	1.58%	[0.010]	mg/L
Cu 327.393†	1386.5	44.11	3.18%	[0.010]	mg/L
Fe 239.562†	36.8	2.03	5.51%	[0.080]	mg/L
Mg 279.077†	162.7	7.54	4.64%	[0.20]	mg/L
Mn 257.610†	4784.0	154.48	3.23%	[0.010]	mg/L
Mo 202.031†	272.8	0.24	0.09%	[0.020]	mg/L
Ni 231.604†	346.3	3.38	0.97%	[0.010]	mg/L
Pb 220.353†	68.0	5.00	7.35%	[0.010]	mg/L
Sb 206.836†	38.1	3.93	10.32%	[0.024]	mg/L

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Se 196.026†	12.2	2.14	17.57%	[0.0080]	mg/L
Si 251.611†	4214.5	116.67	2.77%	[0.10]	mg/L
Sn 189.927†	113.8	1.57	1.38%	[0.020]	mg/L
Ti 334.940†	14686.7	228.38	1.56%	[0.020]	mg/L
Tl 190.801†	15.3	0.94	6.19%	[0.010]	mg/L
V 290.880†	2955.6	167.55	5.67%	[0.020]	mg/L
Zn 206.200†	696.4	9.32	1.34%	[0.020]	mg/L
K 766.490†	2613.8	72.95	2.79%	[1.00]	mg/L
Na 589.592†	13656.4	127.75	0.94%	[1.00]	mg/L
Sr 407.771†	20437.7	1601.20	7.83%	[0.020]	mg/L
Li 670.784†	1664.5	13.98	0.84%	[0.020]	mg/L

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S3 **Date Collected: 2/24/2011 1:57:39 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S3

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	4802819.4	34594.17	0.72%		
YRADIAL	296990.4	4344.75	1.46%		
Ga 417.206	1211707.8	17272.41	1.43%		
GaRADIAL	60997.4	751.37	1.23%		
Ag 328.068†	82331.3	1090.18	1.32%	[0.40]	mg/L
Al 396.153†	50593.6	93.59	0.18%	[10.00]	mg/L
As 188.979†	436.2	8.16	1.87%	[0.40]	mg/L
Ba 233.527†	59128.6	512.48	0.87%	[1.00]	mg/L
Be 234.861†	29334.3	384.07	1.31%	[0.05]	mg/L
B 249.677†	26630.1	399.01	1.50%	[0.50]	mg/L
Ca 227.546†	1073.8	8.85	0.82%	[10.00]	mg/L
Cd 228.802†	894.6	16.67	1.86%	[0.05]	mg/L
Co 228.616†	3854.7	30.84	0.80%	[0.20]	mg/L
Cr 267.716†	57839.3	526.80	0.91%	[0.50]	mg/L
Cu 327.393†	74775.6	1018.85	1.36%	[0.50]	mg/L
Fe 239.562†	1727.0	11.27	0.65%	[4.00]	mg/L
Mg 279.077†	7973.0	34.17	0.43%	[10.00]	mg/L
Mn 257.610†	227377.0	2185.69	0.96%	[0.50]	mg/L
Mo 202.031†	13462.5	160.03	1.19%	[1.00]	mg/L
Ni 231.604†	17175.5	225.84	1.31%	[0.50]	mg/L
Pb 220.353†	2947.2	27.05	0.92%	[0.50]	mg/L
Sb 206.836†	1934.5	22.06	1.14%	[1.20]	mg/L
Se 196.026†	570.1	7.56	1.33%	[0.40]	mg/L
Si 251.611†	177283.8	1842.12	1.04%	[5.00]	mg/L
Sn 189.927†	5821.9	48.90	0.84%	[1.00]	mg/L
Ti 334.940†	733532.4	2763.56	0.38%	[1.00]	mg/L
Tl 190.801†	860.4	14.34	1.67%	[0.50]	mg/L
V 290.880†	150911.6	1807.39	1.20%	[1.00]	mg/L
Zn 206.200†	33065.6	258.82	0.78%	[1.00]	mg/L
K 766.490†	128817.5	670.28	0.52%	[50.00]	mg/L
Na 589.592†	662949.7	7344.99	1.11%	[50.00]	mg/L
Sr 407.771†	1025749.4	63948.40	6.23%	[1.00]	mg/L
Li 670.784†	80966.5	917.84	1.13%	[1.00]	mg/L

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S4 **Date Collected: 2/24/2011 2:04:19 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S4

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

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Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	4737305.1	47452.76	1.00%		
YRADIAL	293944.2	10885.56	3.70%		
Ga 417.206	1215851.3	27317.63	2.25%		
GaRADIAL	61831.0	1231.53	1.99%		
Ag 328.068†	164224.0	5368.83	3.27%	[0.80]	mg/L
Al 396.153†	98141.2	742.11	0.76%	[20.00]	mg/L
As 188.979†	870.7	14.49	1.66%	[0.80]	mg/L
Ba 233.527†	118644.9	2884.87	2.43%	[2.00]	mg/L
Be 234.861†	58631.6	2128.38	3.63%	[0.10]	mg/L
B 249.677†	54120.8	1730.32	3.20%	[1.00]	mg/L
Ca 227.546†	2156.5	37.69	1.75%	[20.00]	mg/L
Cd 228.802†	1774.1	32.98	1.86%	[0.10]	mg/L
Co 228.616†	7684.4	44.50	0.58%	[0.40]	mg/L
Cr 267.716†	116088.9	2425.06	2.09%	[1.00]	mg/L
Cu 327.393†	149303.5	5039.60	3.38%	[1.00]	mg/L
Fe 239.562†	3474.6	86.27	2.48%	[8.00]	mg/L
Mg 279.077†	16012.3	469.73	2.93%	[20.00]	mg/L
Mn 257.610†	454733.5	3118.55	0.69%	[1.00]	mg/L
Mo 202.031†	27261.5	566.02	2.08%	[2.00]	mg/L
Ni 231.604†	34405.0	710.97	2.07%	[1.00]	mg/L
Pb 220.353†	5871.2	32.03	0.55%	[1.00]	mg/L
Sb 206.836†	3836.4	72.80	1.90%	[2.40]	mg/L
Se 196.026†	1140.9	20.68	1.81%	[0.80]	mg/L
Si 251.611†	353433.2	12953.90	3.67%	[10.00]	mg/L
Sn 189.927†	11655.8	59.50	0.51%	[2.00]	mg/L
Ti 334.940†	1494791.8	9629.20	0.64%	[2.00]	mg/L
Tl 190.801†	1688.9	12.86	0.76%	[1.00]	mg/L
V 290.880†	307548.3	7118.33	2.31%	[2.00]	mg/L
Zn 206.200†	65983.4	1508.42	2.29%	[2.00]	mg/L
K 766.490†	255220.5	1555.97	0.61%	[100.00]	mg/L
Na 589.592†	1302828.7	12197.51	0.94%	[100.00]	mg/L
Sr 407.771†	2072154.4	194049.73	9.36%	[2.00]	mg/L
Li 670.784†	158377.4	1476.77	0.93%	[2.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Wt. Lin	-99.1	206100	0.00000	0.999985	
Al 396.153	4	Wt. Lin	109.1	4960	0.00000	0.999854	
As 188.979	3	Wt. Lin	1.1	1087	0.00000	1.000000	
Ba 233.527	4	Wt. Lin	7.4	59320	0.00000	0.999984	
Be 234.861	4	Wt. Lin	-17.6	586600	0.00000	1.000000	
B 249.677	3	Wt. Lin	-193.3	53980	0.00000	0.999980	
Ca 227.546	3	Wt. Lin	3.1	107.4	0.00000	0.999996	
Cd 228.802	4	Wt. Lin	1.2	17570	0.00000	0.999131	
Co 228.616	4	Wt. Lin	1.6	19170	0.00000	0.999931	
Cr 267.716	4	Wt. Lin	24.1	116100	0.00000	0.999965	
Cu 327.393	4	Wt. Lin	-63.8	148600	0.00000	0.999815	
Fe 239.562	4	Wt. Lin	-0.3	439.1	0.00000	0.999073	
Mg 279.077	4	Wt. Lin	4.0	797.6	0.00000	0.999989	
Mn 257.610	4	Wt. Lin	221.3	454800	0.00000	0.999997	
Mo 202.031	4	Wt. Lin	1.8	13550	0.00000	0.999982	
Ni 231.604	4	Wt. Lin	5.2	34320	0.00000	0.999988	
Pb 220.353	4	Wt. Lin	1.2	6043	0.00000	0.996437	
Sb 206.836	4	Wt. Lin	-0.6	1607	0.00000	0.999988	
Se 196.026	3	Wt. Lin	0.8	1424	0.00000	1.000000	
Si 251.611	4	Wt. Lin	833.3	34980	0.00000	0.999646	
Sn 189.927	4	Wt. Lin	-0.5	5803	0.00000	0.999926	
Ti 334.940	4	Wt. Lin	-27.2	739500	0.00000	0.999951	
Tl 190.801	3	Wt. Lin	-1.8	1708	0.00000	0.999950	
V 290.880	4	Wt. Lin	-155.9	153100	0.00000	0.999878	
Zn 206.200	4	Wt. Lin	11.1	33270	0.00000	0.999717	
K 766.490	4	Non Lin, Calc Int	7.6	2600	-0.48151	1.000000	
Na 589.592	4	Non Lin, Calc Int	82.4	13490	-4.59925	1.000000	
Sr 407.771	4	Wt. Lin	47.1	1029000	0.00000	0.999964	
Li 670.784	4	Wt. Lin	48.7	80190	0.00000	0.999927	

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Sequence No.: 6 **Autosampler Location: 9**
Sample ID: ICV 2nd Vendor **Date Collected: 2/24/2011 2:11:04 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICV 2nd Vendor

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: ICV 2nd Vendor

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4859922.1						13845.18	0.28%
YRADIAL	300542.9						2753.50	0.92%
Ga 417.206	1242567.5						5484.03	0.44%
GaRADIAL	61820.3						870.19	1.41%
Ag 328.068†	81273.9	0.396	mg/L	0.0040	0.396	mg/L	0.0040	1.01%
QC value within limits for Ag 328.068 Recovery = 98.97%								
Al 396.153†	50825.4	10.2	mg/L	0.07	10.2	mg/L	0.07	0.67%
QC value within limits for Al 396.153 Recovery = 102.12%								
As 188.979†	429.2	0.390	mg/L	0.0038	0.390	mg/L	0.0038	0.98%
QC value within limits for As 188.979 Recovery = 97.60%								
Ba 233.527†	59166.4	1.000	mg/L	0.0091	1.000	mg/L	0.0091	0.91%
QC value within limits for Ba 233.527 Recovery = 99.99%								
Be 234.861†	28440.2	0.0493	mg/L	0.00021	0.0493	mg/L	0.00021	0.43%
QC value within limits for Be 234.861 Recovery = 98.57%								
B 249.677†	26559.5	0.502	mg/L	0.0031	0.502	mg/L	0.0031	0.62%
QC value within limits for B 249.677 Recovery = 100.33%								
Ca 227.546†	1065.1	10.2	mg/L	0.12	10.2	mg/L	0.12	1.20%
QC value within limits for Ca 227.546 Recovery = 102.30%								
Cd 228.802†	876.2	0.0494	mg/L	0.00039	0.0494	mg/L	0.00039	0.78%
QC value within limits for Cd 228.802 Recovery = 98.89%								
Co 228.616†	3823.9	0.197	mg/L	0.0010	0.197	mg/L	0.0010	0.52%
QC value within limits for Co 228.616 Recovery = 98.47%								
Cr 267.716†	57764.6	0.497	mg/L	0.0062	0.497	mg/L	0.0062	1.25%
QC value within limits for Cr 267.716 Recovery = 99.45%								
Cu 327.393†	74549.6	0.504	mg/L	0.0047	0.504	mg/L	0.0047	0.93%
QC value within limits for Cu 327.393 Recovery = 100.78%								
Fe 239.562†	1742.4	3.97	mg/L	0.059	3.97	mg/L	0.059	1.48%
QC value within limits for Fe 239.562 Recovery = 99.20%								
Mg 279.077†	8030.8	10.1	mg/L	0.08	10.1	mg/L	0.08	0.76%
QC value within limits for Mg 279.077 Recovery = 100.66%								
Mn 257.610†	230666.3	0.511	mg/L	0.0051	0.511	mg/L	0.0051	1.00%
QC value within limits for Mn 257.610 Recovery = 102.28%								
Mo 202.031†	13190.7	0.974	mg/L	0.0095	0.974	mg/L	0.0095	0.97%
QC value within limits for Mo 202.031 Recovery = 97.41%								
Ni 231.604†	17259.8	0.503	mg/L	0.0041	0.503	mg/L	0.0041	0.81%
QC value within limits for Ni 231.604 Recovery = 100.53%								
Pb 220.353†	2942.8	0.492	mg/L	0.0025	0.492	mg/L	0.0025	0.50%
QC value within limits for Pb 220.353 Recovery = 98.36%								
Sb 206.836†	1946.5	1.22	mg/L	0.012	1.22	mg/L	0.012	0.98%
QC value within limits for Sb 206.836 Recovery = 101.36%								
Se 196.026†	560.8	0.396	mg/L	0.0025	0.396	mg/L	0.0025	0.64%
QC value within limits for Se 196.026 Recovery = 99.02%								
Si 251.611†	178356.9	5.06	mg/L	0.029	5.06	mg/L	0.029	0.57%
QC value within limits for Si 251.611 Recovery = 101.21%								
Sn 189.927†	5882.7	1.01	mg/L	0.005	1.01	mg/L	0.005	0.53%
QC value within limits for Sn 189.927 Recovery = 101.38%								
Ti 334.940†	745776.6	1.01	mg/L	0.004	1.01	mg/L	0.004	0.35%
QC value within limits for Ti 334.940 Recovery = 100.84%								
Tl 190.801†	847.6	0.509	mg/L	0.0022	0.509	mg/L	0.0022	0.44%
QC value within limits for Tl 190.801 Recovery = 101.78%								
V 290.880†	148119.8	0.968	mg/L	0.0104	0.968	mg/L	0.0104	1.08%
QC value within limits for V 290.880 Recovery = 96.82%								
Zn 206.200†	32473.1	0.978	mg/L	0.0079	0.978	mg/L	0.0079	0.81%
QC value within limits for Zn 206.200 Recovery = 97.79%								
K 766.490†	128461.6	49.8	mg/L	0.63	49.8	mg/L	0.63	1.27%
QC value within limits for K 766.490 Recovery = 99.62%								
Na 589.592†	645910.9	48.7	mg/L	0.32	48.7	mg/L	0.32	0.67%

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QC value within limits for Na 589.592 Recovery = 97.38%
Sr 407.771† 1042516.6 1.01 mg/L 0.085 1.01 mg/L 0.085 8.35%
QC value within limits for Sr 407.771 Recovery = 101.30%
Li 670.784† 80540.0 1.00 mg/L 0.005 1.00 mg/L 0.005 0.52%
QC value within limits for Li 670.784 Recovery = 100.38%
All analyte(s) passed QC.

Sequence No.: 7 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 2/24/2011 2:17:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	5088691.9						29358.61	0.58%
YRADIAL	310040.7						4107.24	1.32%
Ga 417.206	1279423.9						15585.07	1.22%
GaRADIAL	63012.7						1155.15	1.83%
Ag 328.068†	64.8	0.00080	mg/L	0.000226	0.00080	mg/L	0.000226	28.38%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	118.4	0.00190	mg/L	0.010664	0.00190	mg/L	0.010664	562.04%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.1	-0.00106	mg/L	0.001539	-0.00106	mg/L	0.001539	145.49%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	7.0	-0.00001	mg/L	0.000040	-0.00001	mg/L	0.000040	607.18%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-9.7	0.00001	mg/L	0.000009	0.00001	mg/L	0.000009	70.01%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	227.7	0.00779	mg/L	0.000936	0.00779	mg/L	0.000936	12.01%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	2.3	-0.00679	mg/L	0.025835	-0.00679	mg/L	0.025835	380.49%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	2.0	0.00006	mg/L	0.000130	0.00006	mg/L	0.000130	217.85%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	6.5	0.00026	mg/L	0.000370	0.00026	mg/L	0.000370	144.41%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-2.4	-0.00023	mg/L	0.000101	-0.00023	mg/L	0.000101	44.38%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-77.7	-0.00009	mg/L	0.000340	-0.00009	mg/L	0.000340	363.37%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-0.6	-0.00089	mg/L	0.004688	-0.00089	mg/L	0.004688	528.79%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-0.9	-0.00613	mg/L	0.007498	-0.00613	mg/L	0.007498	122.25%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	0.0	-0.00049	mg/L	0.000020	-0.00049	mg/L	0.000020	4.16%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-5.1	-0.00051	mg/L	0.000084	-0.00051	mg/L	0.000084	16.37%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	5.1	-0.00001	mg/L	0.000319	-0.00001	mg/L	0.000319	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	2.2	0.00016	mg/L	0.001087	0.00016	mg/L	0.001087	670.35%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.9	0.00090	mg/L	0.000421	0.00090	mg/L	0.000421	46.78%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.5	-0.00092	mg/L	0.003861	-0.00092	mg/L	0.003861	420.01%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	35.6	-0.0228	mg/L	0.00067	-0.0228	mg/L	0.00067	2.95%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	6.1	0.00113	mg/L	0.000517	0.00113	mg/L	0.000517	45.81%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-42.4	-0.00002	mg/L	0.000166	-0.00002	mg/L	0.000166	810.16%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.5	0.00133	mg/L	0.002104	0.00133	mg/L	0.002104	157.73%
QC value within limits for Tl 190.801 Recovery = Not calculated								

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V 290.880† -137.7 0.00012 mg/L 0.000257 0.00012 mg/L 0.000257 214.98%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† -6.8 -0.00054 mg/L 0.000093 -0.00054 mg/L 0.000093 17.23%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 163.6 0.0600 mg/L 0.04361 0.0600 mg/L 0.04361 72.69%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 67.1 -0.00114 mg/L 0.008133 -0.00114 mg/L 0.008133 715.62%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -147.3 -0.00019 mg/L 0.000032 -0.00019 mg/L 0.000032 17.07%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 14.7 -0.00042 mg/L 0.001403 -0.00042 mg/L 0.001403 331.15%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 2/24/2011 2:24:23 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4487899.4						46279.45	1.03%
YRADIAL	282857.1						3454.69	1.22%
Ga 417.206	1153718.2						24237.78	2.10%
GaRADIAL	59389.9						735.45	1.24%
Ag 328.068†	753.6	-0.00082	mg/L	0.001131	-0.00082	mg/L	0.001131	137.43%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1244407.5	251	mg/L	8.2	251	mg/L	8.2	3.28%
QC value within limits for Al 396.153 Recovery = 100.35%								
As 188.979†	10.6	-0.00073	mg/L	0.001849	-0.00073	mg/L	0.001849	252.70%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	132.2	-0.00025	mg/L	0.000094	-0.00025	mg/L	0.000094	37.51%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	11823.1	0.00031	mg/L	0.000365	0.00031	mg/L	0.000365	117.18%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	-10134.5	-0.00241	mg/L	0.008258	-0.00241	mg/L	0.008258	343.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	30944.1	289	mg/L	3.7	289	mg/L	3.7	1.29%
QC value within limits for Ca 227.546 Recovery = 115.43%								
Cd 228.802†	6.7	0.00014	mg/L	0.000180	0.00014	mg/L	0.000180	127.67%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	25.3	-0.00136	mg/L	0.000262	-0.00136	mg/L	0.000262	19.28%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	658.9	-0.00073	mg/L	0.000188	-0.00073	mg/L	0.000188	25.71%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1709.2	0.00034	mg/L	0.000192	0.00034	mg/L	0.000192	55.96%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	43599.6	99.3	mg/L	0.55	99.3	mg/L	0.55	0.55%
QC value within limits for Fe 239.562 Recovery = 99.29%								
Mg 279.077†	206111.9	258	mg/L	2.0	258	mg/L	2.0	0.78%
QC value within limits for Mg 279.077 Recovery = 103.34%								
Mn 257.610†	-136.9	-0.00006	mg/L	0.000027	-0.00006	mg/L	0.000027	43.76%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-15.3	0.00364	mg/L	0.000181	0.00364	mg/L	0.000181	4.97%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-60.1	-0.00196	mg/L	0.000744	-0.00196	mg/L	0.000744	37.95%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-97.3	0.00148	mg/L	0.000746	0.00148	mg/L	0.000746	50.51%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	19.0	0.0122	mg/L	0.00130	0.0122	mg/L	0.00130	10.64%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-114.4	-0.00003	mg/L	0.014579	-0.00003	mg/L	0.014579	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	1826.8	0.0284	mg/L	0.00222	0.0284	mg/L	0.00222	7.82%

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QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	-37.7	-0.00641 mg/L	0.000816	-0.00641 mg/L	0.000816	12.73%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-1812.7	0.00047 mg/L	0.000981	0.00047 mg/L	0.000981	210.64%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	159.7	0.0686 mg/L	0.00097	0.0686 mg/L	0.00097	1.41%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	-1234.2	0.00058 mg/L	0.001503	0.00058 mg/L	0.001503	258.10%
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	192.1	0.00317 mg/L	0.000534	0.00317 mg/L	0.000534	16.84%
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	229.7	0.0854 mg/L	0.01081	0.0854 mg/L	0.01081	12.65%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	369.3	0.0213 mg/L	0.00903	0.0213 mg/L	0.00903	42.45%
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	13838.8	0.00149 mg/L	0.000171	0.00149 mg/L	0.000171	11.46%
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	190.0	0.00176 mg/L	0.002870	0.00176 mg/L	0.002870	162.87%
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 2/24/2011 2:30:02 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4541739.3						45773.97	1.01%
YRADIAL	291638.3						4622.83	1.59%
Ga 417.206	1176712.0						13391.76	1.14%
GaRADIAL	61250.7						932.96	1.52%
Ag 328.068†	106697.3	0.514	mg/L	0.0008	0.514	mg/L	0.0008	0.16%
QC value within limits for Ag 328.068 Recovery = 102.75%								
Al 396.153†	1206670.0	243	mg/L	6.7	243	mg/L	6.7	2.74%
QC value within limits for Al 396.153 Recovery = 97.31%								
As 188.979†	287.7	0.256	mg/L	0.0050	0.256	mg/L	0.0050	1.94%
QC value within limits for As 188.979 Recovery = 102.39%								
Ba 233.527†	14839.5	0.248	mg/L	0.0020	0.248	mg/L	0.0020	0.80%
QC value within limits for Ba 233.527 Recovery = 99.33%								
Be 234.861†	162607.2	0.258	mg/L	0.0026	0.258	mg/L	0.0026	1.00%
QC value within limits for Be 234.861 Recovery = 103.16%								
B 249.677†	-10176.6	-0.0191	mg/L	0.01393	-0.0191	mg/L	0.01393	72.77%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	29688.7	277	mg/L	3.9	277	mg/L	3.9	1.41%
QC value within limits for Ca 227.546 Recovery = 110.88%								
Cd 228.802†	8228.3	0.469	mg/L	0.0147	0.469	mg/L	0.0147	3.14%
QC value within limits for Cd 228.802 Recovery = 93.83%								
Co 228.616†	4570.1	0.236	mg/L	0.0019	0.236	mg/L	0.0019	0.79%
QC value within limits for Co 228.616 Recovery = 94.30%								
Cr 267.716†	29236.8	0.246	mg/L	0.0022	0.246	mg/L	0.0022	0.91%
QC value within limits for Cr 267.716 Recovery = 98.22%								
Cu 327.393†	36584.4	0.258	mg/L	0.0026	0.258	mg/L	0.0026	1.03%
QC value within limits for Cu 327.393 Recovery = 103.04%								
Fe 239.562†	42522.2	96.8	mg/L	0.40	96.8	mg/L	0.40	0.41%
QC value within limits for Fe 239.562 Recovery = 96.84%								
Mg 279.077†	200146.2	251	mg/L	0.9	251	mg/L	0.9	0.34%
QC value within limits for Mg 279.077 Recovery = 100.35%								
Mn 257.610†	112678.9	0.249	mg/L	0.0008	0.249	mg/L	0.0008	0.32%
QC value within limits for Mn 257.610 Recovery = 99.66%								
Mo 202.031†	-5.3	0.00432	mg/L	0.000543	0.00432	mg/L	0.000543	12.57%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	16147.8	0.470	mg/L	0.0032	0.470	mg/L	0.0032	0.67%
QC value within limits for Ni 231.604 Recovery = 94.04%								

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Pb 220.353†	2810.2	0.482 mg/L	0.0039	0.482 mg/L	0.0039	0.81%
QC value within limits for Pb 220.353 Recovery = 96.33%						
Sb 206.836†	839.4	0.521 mg/L	0.0065	0.521 mg/L	0.0065	1.24%
QC value within limits for Sb 206.836 Recovery = 104.27%						
Se 196.026†	260.1	0.260 mg/L	0.0021	0.260 mg/L	0.0021	0.80%
QC value within limits for Se 196.026 Recovery = 104.07%						
Si 251.611†	279.4	-0.0158 mg/L	0.00066	-0.0158 mg/L	0.00066	4.15%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-30.9	-0.00524 mg/L	0.000846	-0.00524 mg/L	0.000846	16.16%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-2047.0	-0.00004 mg/L	0.000032	-0.00004 mg/L	0.000032	77.01%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	996.8	0.560 mg/L	0.0093	0.560 mg/L	0.0093	1.66%
QC value within limits for Tl 190.801 Recovery = 111.96%						
V 290.880†	37054.0	0.250 mg/L	0.0010	0.250 mg/L	0.0010	0.39%
QC value within limits for V 290.880 Recovery = 100.17%						
Zn 206.200†	15291.0	0.458 mg/L	0.0034	0.458 mg/L	0.0034	0.74%
QC value within limits for Zn 206.200 Recovery = 91.66%						
K 766.490†	13584.4	5.22 mg/L	0.083	5.22 mg/L	0.083	1.59%
QC value within limits for K 766.490 Recovery = 104.43%						
Na 589.592†	68216.9	5.06 mg/L	0.012	5.06 mg/L	0.012	0.23%
QC value within limits for Na 589.592 Recovery = 101.21%						
Sr 407.771†	13371.8	0.00133 mg/L	0.000188	0.00133 mg/L	0.000188	14.13%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	-23.1	-0.00089 mg/L	0.000362	-0.00089 mg/L	0.000362	40.50%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 10 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/24/2011 2:35:46 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4844466.1						43216.55	0.89%
YRADIAL	298258.7						6074.53	2.04%
Ga 417.206	1228146.3						6898.61	0.56%
GaRADIAL	61082.4						837.51	1.37%
Ag 328.068†	81327.0	0.396	mg/L	0.0009	0.396	mg/L	0.0009	0.23%
QC value within limits for Ag 328.068 Recovery = 99.04%								
Al 396.153†	51149.2	10.3	mg/L	0.10	10.3	mg/L	0.10	1.01%
QC value within limits for Al 396.153 Recovery = 102.77%								
As 188.979†	434.2	0.395	mg/L	0.0022	0.395	mg/L	0.0022	0.55%
QC value within limits for As 188.979 Recovery = 98.72%								
Ba 233.527†	58534.6	0.989	mg/L	0.0085	0.989	mg/L	0.0085	0.86%
QC value within limits for Ba 233.527 Recovery = 98.93%								
Be 234.861†	29014.0	0.0503	mg/L	0.00017	0.0503	mg/L	0.00017	0.35%
QC value within limits for Be 234.861 Recovery = 100.54%								
B 249.677†	26354.0	0.498	mg/L	0.0008	0.498	mg/L	0.0008	0.16%
QC value within limits for B 249.677 Recovery = 99.55%								
Ca 227.546†	1068.7	10.3	mg/L	0.14	10.3	mg/L	0.14	1.35%
QC value within limits for Ca 227.546 Recovery = 102.58%								
Cd 228.802†	886.8	0.0500	mg/L	0.00035	0.0500	mg/L	0.00035	0.71%
QC value within limits for Cd 228.802 Recovery = 100.04%								
Co 228.616†	3831.8	0.197	mg/L	0.0015	0.197	mg/L	0.0015	0.77%
QC value within limits for Co 228.616 Recovery = 98.70%								
Cr 267.716†	57085.0	0.491	mg/L	0.0042	0.491	mg/L	0.0042	0.85%
QC value within limits for Cr 267.716 Recovery = 98.28%								
Cu 327.393†	73753.1	0.499	mg/L	0.0022	0.499	mg/L	0.0022	0.44%
QC value within limits for Cu 327.393 Recovery = 99.70%								
Fe 239.562†	1738.2	3.96	mg/L	0.025	3.96	mg/L	0.025	0.63%
QC value within limits for Fe 239.562 Recovery = 98.96%								
Mg 279.077†	8015.0	10.0	mg/L	0.07	10.0	mg/L	0.07	0.70%

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QC value within limits for Mg 279.077 Recovery = 100.47%

Mn 257.610†	224384.3	0.498 mg/L	0.0030	0.498 mg/L	0.0030	0.60%
QC value within limits for Mn 257.610 Recovery = 99.52%						
Mo 202.031†	13280.8	0.981 mg/L	0.0069	0.981 mg/L	0.0069	0.70%
QC value within limits for Mo 202.031 Recovery = 98.08%						
Ni 231.604†	17052.0	0.497 mg/L	0.0033	0.497 mg/L	0.0033	0.67%
QC value within limits for Ni 231.604 Recovery = 99.32%						
Pb 220.353†	2935.3	0.491 mg/L	0.0043	0.491 mg/L	0.0043	0.89%
QC value within limits for Pb 220.353 Recovery = 98.12%						
Sb 206.836†	1912.2	1.20 mg/L	0.009	1.20 mg/L	0.009	0.74%
QC value within limits for Sb 206.836 Recovery = 99.59%						
Se 196.026†	570.8	0.403 mg/L	0.0017	0.403 mg/L	0.0017	0.41%
QC value within limits for Se 196.026 Recovery = 100.77%						
Si 251.611†	173056.3	4.91 mg/L	0.023	4.91 mg/L	0.023	0.46%
QC value within limits for Si 251.611 Recovery = 98.17%						
Sn 189.927†	5774.9	0.995 mg/L	0.0092	0.995 mg/L	0.0092	0.93%
QC value within limits for Sn 189.927 Recovery = 99.52%						
Ti 334.940†	731493.7	0.989 mg/L	0.0051	0.989 mg/L	0.0051	0.51%
QC value within limits for Ti 334.940 Recovery = 98.91%						
Tl 190.801†	837.6	0.503 mg/L	0.0057	0.503 mg/L	0.0057	1.14%
QC value within limits for Tl 190.801 Recovery = 100.56%						
V 290.880†	148890.1	0.973 mg/L	0.0071	0.973 mg/L	0.0071	0.73%
QC value within limits for V 290.880 Recovery = 97.32%						
Zn 206.200†	32532.5	0.980 mg/L	0.0095	0.980 mg/L	0.0095	0.97%
QC value within limits for Zn 206.200 Recovery = 97.97%						
K 766.490†	130508.4	50.6 mg/L	0.71	50.6 mg/L	0.71	1.41%
QC value within limits for K 766.490 Recovery = 101.22%						
Na 589.592†	671015.4	50.6 mg/L	1.06	50.6 mg/L	1.06	2.08%
QC value within limits for Na 589.592 Recovery = 101.24%						
Sr 407.771†	1040462.4	1.01 mg/L	0.065	1.01 mg/L	0.065	6.48%
QC value within limits for Sr 407.771 Recovery = 101.10%						
Li 670.784†	82211.0	1.02 mg/L	0.021	1.02 mg/L	0.021	2.06%
QC value within limits for Li 670.784 Recovery = 102.46%						

All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/24/2011 2:42:26 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5090683.5						42626.81	0.84%
YRADIAL	303825.8						7734.17	2.55%
Ga 417.206	1290865.7						5364.65	0.42%
GaRADIAL	61913.9						863.54	1.39%
Ag 328.068†	-22.4	0.00037	mg/L	0.000841	0.00037	mg/L	0.000841	225.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	36.4	-0.0146	mg/L	0.00593	-0.0146	mg/L	0.00593	40.48%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.8	-0.00031	mg/L	0.001126	-0.00031	mg/L	0.001126	367.78%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.2	-0.00013	mg/L	0.000080	-0.00013	mg/L	0.000080	63.41%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	4.4	0.00004	mg/L	0.000010	0.00004	mg/L	0.000010	27.98%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	18.9	0.00396	mg/L	0.000090	0.00396	mg/L	0.000090	2.28%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	5.4	0.0216	mg/L	0.02463	0.0216	mg/L	0.02463	113.75%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	1.6	0.00003	mg/L	0.000066	0.00003	mg/L	0.000066	214.65%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	5.5	0.00020	mg/L	0.000238	0.00020	mg/L	0.000238	118.25%
QC value within limits for Co 228.616 Recovery = Not calculated								

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Cr 267.716†	-19.5	-0.00037 mg/L	0.000015	-0.00037 mg/L	0.000015	4.00%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	-77.4	-0.00009 mg/L	0.000214	-0.00009 mg/L	0.000214	236.93%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	0.9	0.00272 mg/L	0.003932	0.00272 mg/L	0.003932	144.64%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	-1.1	-0.00645 mg/L	0.004885	-0.00645 mg/L	0.004885	75.69%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-3.8	-0.00050 mg/L	0.000005	-0.00050 mg/L	0.000005	0.91%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	1.6	-0.00002 mg/L	0.000255	-0.00002 mg/L	0.000255	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	5.9	0.00002 mg/L	0.000110	0.00002 mg/L	0.000110	553.96%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-0.9	-0.00035 mg/L	0.001228	-0.00035 mg/L	0.001228	350.73%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	3.2	0.00237 mg/L	0.004228	0.00237 mg/L	0.004228	178.30%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	2.5	0.00117 mg/L	0.003208	0.00117 mg/L	0.003208	273.73%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-11.2	-0.0241 mg/L	0.00087	-0.0241 mg/L	0.00087	3.60%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.9	0.00040 mg/L	0.000600	0.00040 mg/L	0.000600	148.69%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	21.2	0.00007 mg/L	0.000225	0.00007 mg/L	0.000225	342.03%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-1.5	0.00018 mg/L	0.003114	0.00018 mg/L	0.003114	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	1.2	0.00103 mg/L	0.000941	0.00103 mg/L	0.000941	91.63%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	9.4	-0.00005 mg/L	0.000113	-0.00005 mg/L	0.000113	212.41%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	82.6	0.0289 mg/L	0.02937	0.0289 mg/L	0.02937	101.69%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	-131.5	-0.0159 mg/L	0.00584	-0.0159 mg/L	0.00584	36.83%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	-250.0	-0.00029 mg/L	0.000092	-0.00029 mg/L	0.000092	31.81%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	8.4	-0.00050 mg/L	0.000204	-0.00050 mg/L	0.000204	40.74%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 38**
Sample ID: PBW X5 WG357435-02 **Date Collected: 2/24/2011 2:49:10 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW X5 WG357435-02

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: PBW X5 WG357435-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5155968.2						58837.82	1.14%
YRADIAL	313119.7						9877.59	3.15%
Ga 417.206	1324294.6						18097.55	1.37%
GaRADIAL	63680.2						675.17	1.06%
Ag 328.068†	-5.6	0.00046	mg/L	0.000271	0.00046	mg/L	0.000271	59.37%
Al 396.153†	87.6	-0.00433	mg/L	0.010356	-0.00433	mg/L	0.010356	239.22%
As 188.979†	0.3	-0.00072	mg/L	0.001710	-0.00072	mg/L	0.001710	236.46%
Ba 233.527†	17.4	0.00017	mg/L	0.000196	0.00017	mg/L	0.000196	114.17%
Be 234.861†	12.1	0.00005	mg/L	0.000011	0.00005	mg/L	0.000011	22.25%
B 249.677†	-149.7	0.00081	mg/L	0.000130	0.00081	mg/L	0.000130	16.00%
Ca 227.546†	8.6	0.0513	mg/L	0.00305	0.0513	mg/L	0.00305	5.95%
Cd 228.802†	-0.4	-0.00008	mg/L	0.000052	-0.00008	mg/L	0.000052	64.43%
Co 228.616†	3.8	0.00011	mg/L	0.000308	0.00011	mg/L	0.000308	268.39%
Cr 267.716†	-6.8	-0.00026	mg/L	0.000155	-0.00026	mg/L	0.000155	58.69%
Cu 327.393†	-29.2	0.00023	mg/L	0.000743	0.00023	mg/L	0.000743	317.54%

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Fe 239.562†	-0.2	0.00018	mg/L	0.003153	0.00018	mg/L	0.003153 >999.9%
Mg 279.077†	-1.1	-0.00649	mg/L	0.006746	-0.00649	mg/L	0.006746 103.99%
Mn 257.610†	10.8	-0.00047	mg/L	0.000015	-0.00047	mg/L	0.000015 3.11%
Mo 202.031†	-1.8	-0.00027	mg/L	0.000165	-0.00027	mg/L	0.000165 61.61%
Ni 231.604†	-4.2	-0.00028	mg/L	0.000228	-0.00028	mg/L	0.000228 82.45%
Pb 220.353†	3.2	0.00034	mg/L	0.000793	0.00034	mg/L	0.000793 231.97%
Sb 206.836†	-3.6	-0.00189	mg/L	0.001127	-0.00189	mg/L	0.001127 59.51%
Se 196.026†	4.3	0.00250	mg/L	0.004773	0.00250	mg/L	0.004773 191.14%
Si 251.611†	2.7	-0.0237	mg/L	0.00013	-0.0237	mg/L	0.00013 0.53%
Sn 189.927†	-6.9	-0.00111	mg/L	0.001027	-0.00111	mg/L	0.001027 92.22%
Ti 334.940†	5.0	0.00004	mg/L	0.000127	0.00004	mg/L	0.000127 286.79%
Tl 190.801†	-0.7	0.00065	mg/L	0.003858	0.00065	mg/L	0.003858 591.80%
V 290.880†	44.2	0.00131	mg/L	0.000487	0.00131	mg/L	0.000487 37.21%
Zn 206.200†	36.7	0.00077	mg/L	0.000261	0.00077	mg/L	0.000261 34.04%
K 766.490†	-80.4	-0.0338	mg/L	0.03118	-0.0338	mg/L	0.03118 92.23%
Na 589.592†	-197.0	-0.0207	mg/L	0.00290	-0.0207	mg/L	0.00290 13.99%
Sr 407.771†	-288.8	-0.00033	mg/L	0.000053	-0.00033	mg/L	0.000053 16.38%
Li 670.784†	19.5	-0.00036	mg/L	0.000577	-0.00036	mg/L	0.000577 158.60%

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Sequence No.: 13 **Autosampler Location: 39**
Sample ID: LCSW X5 WG357435-03 **Date Collected: 2/24/2011 2:55:50 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW X5 WG357435-03

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: LCSW X5 WG357435-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5038529.7						63982.31	1.27%
YRADIAL	310458.4						5211.04	1.68%
Ga 417.206	1299422.7						12935.84	1.00%
GaRADIAL	63221.4						1394.08	2.21%
Ag 328.068†	38967.8	0.190	mg/L	0.0005	0.190	mg/L	0.0005	0.25%
Al 396.153†	24861.5	4.98	mg/L	0.019	4.98	mg/L	0.019	0.38%
As 188.979†	206.0	0.187	mg/L	0.0015	0.187	mg/L	0.0015	0.81%
Ba 233.527†	28436.6	0.481	mg/L	0.0083	0.481	mg/L	0.0083	1.73%
Be 234.861†	13906.6	0.0241	mg/L	0.00023	0.0241	mg/L	0.00023	0.93%
B 249.677†	50716.4	0.946	mg/L	0.0103	0.946	mg/L	0.0103	1.09%
Ca 227.546†	507.7	4.86	mg/L	0.047	4.86	mg/L	0.047	0.96%
Cd 228.802†	419.9	0.0237	mg/L	0.00023	0.0237	mg/L	0.00023	0.97%
Co 228.616†	1861.2	0.0958	mg/L	0.00095	0.0958	mg/L	0.00095	0.99%
Cr 267.716†	27533.9	0.237	mg/L	0.0042	0.237	mg/L	0.0042	1.75%
Cu 327.393†	34986.8	0.237	mg/L	0.0003	0.237	mg/L	0.0003	0.13%
Fe 239.562†	839.4	1.91	mg/L	0.039	1.91	mg/L	0.039	2.04%
Mg 279.077†	3914.2	4.90	mg/L	0.091	4.90	mg/L	0.091	1.85%
Mn 257.610†	110436.7	0.245	mg/L	0.0044	0.245	mg/L	0.0044	1.79%
Mo 202.031†	6474.2	0.478	mg/L	0.0065	0.478	mg/L	0.0065	1.37%
Ni 231.604†	8346.3	0.243	mg/L	0.0036	0.243	mg/L	0.0036	1.48%
Pb 220.353†	1412.7	0.236	mg/L	0.0024	0.236	mg/L	0.0024	1.01%
Sb 206.836†	909.1	0.568	mg/L	0.0052	0.568	mg/L	0.0052	0.92%
Se 196.026†	267.4	0.189	mg/L	0.0024	0.189	mg/L	0.0024	1.26%
Si 251.611†	84790.6	2.39	mg/L	0.024	2.39	mg/L	0.024	1.02%
Sn 189.927†	-0.6	-0.00001	mg/L	0.000176	-0.00001	mg/L	0.000176	>999.9%
Ti 334.940†	357126.2	0.483	mg/L	0.0007	0.483	mg/L	0.0007	0.13%
Tl 190.801†	405.4	0.244	mg/L	0.0042	0.244	mg/L	0.0042	1.73%
V 290.880†	72134.0	0.472	mg/L	0.0081	0.472	mg/L	0.0081	1.72%
Zn 206.200†	15663.4	0.472	mg/L	0.0112	0.472	mg/L	0.0112	2.38%
K 766.490†	62613.7	24.2	mg/L	0.18	24.2	mg/L	0.18	0.76%
Na 589.592†	326077.1	24.4	mg/L	0.38	24.4	mg/L	0.38	1.54%
Sr 407.771†	500206.8	0.486	mg/L	0.0402	0.486	mg/L	0.0402	8.27%
Li 670.784†	39825.8	0.496	mg/L	0.0043	0.496	mg/L	0.0043	0.87%

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Sequence No.: 14 **Autosampler Location: 40**
Sample ID: L1102059701 WG357435-01 **Date Collected: 2/24/2011 3:02:28 PM**
Analyst: PDM **Data Type: Original**

Approved: February 25, 2011

Pierre Morris

Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102059701 WG357435-01

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102059701 WG357435-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4667950.3						45876.43	0.98%
YRADIAL	296760.6						8458.15	2.85%
Ga 417.206	1255192.7						5793.61	0.46%
GaRADIAL	63546.6						810.58	1.28%
Ag 328.068†	1229.5	0.00624	mg/L	0.000525	0.00624	mg/L	0.000525	8.41%
Al 396.153†	178.8	0.0141	mg/L	0.01974	0.0141	mg/L	0.01974	140.39%
As 188.979†	11.8	0.00379	mg/L	0.004101	0.00379	mg/L	0.004101	108.19%
Ba 233.527†	336.1	0.00552	mg/L	0.000149	0.00552	mg/L	0.000149	2.70%
Be 234.861†	24.0	0.00019	mg/L	0.000025	0.00019	mg/L	0.000025	13.01%
B 249.677†	377.8	0.0109	mg/L	0.00029	0.0109	mg/L	0.00029	2.67%
Ca 227.546†	32863.0	306	mg/L	1.9	306	mg/L	1.9	0.61%
Cd 228.802†	2.2	0.00010	mg/L	0.000202	0.00010	mg/L	0.000202	199.09%
Co 228.616†	156.6	0.00808	mg/L	0.000142	0.00808	mg/L	0.000142	1.76%
Cr 267.716†	395.2	0.00275	mg/L	0.000154	0.00275	mg/L	0.000154	5.61%
Cu 327.393†	-1493.9	-0.00963	mg/L	0.001173	-0.00963	mg/L	0.001173	12.18%
Fe 239.562†	34.6	0.0743	mg/L	0.00326	0.0743	mg/L	0.00326	4.39%
Mg 279.077†	136748.3	171	mg/L	2.5	171	mg/L	2.5	1.45%
Mn 257.610†	464487.8	1.02	mg/L	0.001	1.02	mg/L	0.001	0.07%
Mo 202.031†	-0.2	0.00006	mg/L	0.000625	0.00006	mg/L	0.000625	>999.9%
Ni 231.604†	1833.3	0.0532	mg/L	0.00041	0.0532	mg/L	0.00041	0.77%
Pb 220.353†	-21.9	0.0108	mg/L	0.00089	0.0108	mg/L	0.00089	8.27%
Sb 206.836†	15.9	0.0103	mg/L	0.00268	0.0103	mg/L	0.00268	26.13%
Se 196.026†	-48.7	0.0413	mg/L	0.00920	0.0413	mg/L	0.00920	22.25%
Si 251.611†	42105.6	1.18	mg/L	0.006	1.18	mg/L	0.006	0.53%
Sn 189.927†	12.1	0.00216	mg/L	0.001632	0.00216	mg/L	0.001632	75.42%
Ti 334.940†	-2487.6	-0.00027	mg/L	0.000076	-0.00027	mg/L	0.000076	28.25%
Tl 190.801†	157.4	0.0671	mg/L	0.00171	0.0671	mg/L	0.00171	2.55%
V 290.880†	-1515.3	-0.00888	mg/L	0.001008	-0.00888	mg/L	0.001008	11.35%
Zn 206.200†	1437.9	0.0429	mg/L	0.00052	0.0429	mg/L	0.00052	1.20%
K 766.490†	8917.3	3.28	mg/L	0.028	3.28	mg/L	0.028	0.86%
Na 589.592†	1883098.0	147	mg/L	3.4	147	mg/L	3.4	2.29%
Sr 407.771†	280613.7	0.273	mg/L	0.0245	0.273	mg/L	0.0245	8.99%
Li 670.784†	2384.8	0.0291	mg/L	0.00130	0.0291	mg/L	0.00130	4.46%

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Sequence No.: 15 **Autosampler Location: 41**
Sample ID: L1102059701D WG357435-04 **Date Collected: 2/24/2011 3:09:19 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102059701D WG357435-04

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102059701D WG357435-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4585829.2						64161.17	1.40%
YRADIAL	287800.3						2718.23	0.94%
Ga 417.206	1227883.8						27331.17	2.23%
GaRADIAL	60942.7						745.39	1.22%
Ag 328.068†	1160.3	0.00591	mg/L	0.000466	0.00591	mg/L	0.000466	7.90%
Al 396.153†	253.7	0.0292	mg/L	0.00291	0.0292	mg/L	0.00291	9.98%
As 188.979†	9.2	0.00132	mg/L	0.003779	0.00132	mg/L	0.003779	287.15%
Ba 233.527†	339.6	0.00558	mg/L	0.000032	0.00558	mg/L	0.000032	0.57%
Be 234.861†	22.0	0.00019	mg/L	0.000016	0.00019	mg/L	0.000016	8.87%
B 249.677†	245.2	0.00839	mg/L	0.000792	0.00839	mg/L	0.000792	9.44%
Ca 227.546†	33112.5	308	mg/L	10.2	308	mg/L	10.2	3.31%

Approved: February 25, 2011

Pierre Morris

Cd 228.802†	1.8	0.00009 mg/L	0.000318	0.00009 mg/L	0.000318	355.27%
Co 228.616†	149.4	0.00771 mg/L	0.000156	0.00771 mg/L	0.000156	2.02%
Cr 267.716†	390.7	0.00271 mg/L	0.000048	0.00271 mg/L	0.000048	1.76%
Cu 327.393†	-1598.9	-0.0103 mg/L	0.00035	-0.0103 mg/L	0.00035	3.36%
Fe 239.562†	33.2	0.0710 mg/L	0.01130	0.0710 mg/L	0.01130	15.91%
Mg 279.077†	137266.2	172 mg/L	2.4	172 mg/L	2.4	1.42%
Mn 257.610†	462230.2	1.02 mg/L	0.003	1.02 mg/L	0.003	0.29%
Mo 202.031†	-1.2	-0.00001 mg/L	0.000548	-0.00001 mg/L	0.000548	>999.9%
Ni 231.604†	1832.1	0.0532 mg/L	0.00085	0.0532 mg/L	0.00085	1.60%
Pb 220.353†	-35.7	0.00860 mg/L	0.001585	0.00860 mg/L	0.001585	18.43%
Sb 206.836†	19.0	0.0122 mg/L	0.00151	0.0122 mg/L	0.00151	12.36%
Se 196.026†	-44.3	0.0450 mg/L	0.00196	0.0450 mg/L	0.00196	4.35%
Si 251.611†	42676.0	1.20 mg/L	0.037	1.20 mg/L	0.037	3.12%
Sn 189.927†	-2.0	-0.00027 mg/L	0.000949	-0.00027 mg/L	0.000949	355.30%
Ti 334.940†	-2162.8	0.00019 mg/L	0.000144	0.00019 mg/L	0.000144	74.10%
Tl 190.801†	155.0	0.0656 mg/L	0.00893	0.0656 mg/L	0.00893	13.62%
V 290.880†	-1577.5	-0.00928 mg/L	0.001058	-0.00928 mg/L	0.001058	11.40%
Zn 206.200†	1448.5	0.0432 mg/L	0.00104	0.0432 mg/L	0.00104	2.41%
K 766.490†	8996.2	3.31 mg/L	0.121	3.31 mg/L	0.121	3.65%
Na 589.592†	1922400.4	150 mg/L	2.0	150 mg/L	2.0	1.36%
Sr 407.771†	281452.1	0.274 mg/L	0.0253	0.274 mg/L	0.0253	9.24%
Li 670.784†	2606.5	0.0319 mg/L	0.00160	0.0319 mg/L	0.00160	5.03%

Sequence No.: 16 **Autosampler Location: 42**
Sample ID: L1102059701S WG357435-05 **Date Collected: 2/24/2011 3:16:05 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102059701S WG357435-05

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102059701S WG357435-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4600727.4						29701.36	0.65%
YRADIAL	299919.5						2794.89	0.93%
Ga 417.206	1246035.1						10245.58	0.82%
GaRADIAL	64356.7						1262.35	1.96%
Ag 328.068†	40169.4	0.196	mg/L	0.0018	0.196	mg/L	0.0018	0.92%
Al 396.153†	24374.8	4.89	mg/L	0.034	4.89	mg/L	0.034	0.69%
As 188.979†	221.5	0.195	mg/L	0.0039	0.195	mg/L	0.0039	2.01%
Ba 233.527†	28860.4	0.488	mg/L	0.0042	0.488	mg/L	0.0042	0.85%
Be 234.861†	13847.2	0.0242	mg/L	0.00006	0.0242	mg/L	0.00006	0.26%
B 249.677†	51843.4	0.967	mg/L	0.0053	0.967	mg/L	0.0053	0.54%
Ca 227.546†	33691.6	314	mg/L	2.7	314	mg/L	2.7	0.85%
Cd 228.802†	418.1	0.0236	mg/L	0.00022	0.0236	mg/L	0.00022	0.95%
Co 228.616†	1987.3	0.102	mg/L	0.0006	0.102	mg/L	0.0006	0.59%
Cr 267.716†	28159.3	0.242	mg/L	0.0025	0.242	mg/L	0.0025	1.05%
Cu 327.393†	34044.0	0.230	mg/L	0.0018	0.230	mg/L	0.0018	0.76%
Fe 239.562†	867.5	1.97	mg/L	0.036	1.97	mg/L	0.036	1.84%
Mg 279.077†	140740.4	176	mg/L	0.3	176	mg/L	0.3	0.20%
Mn 257.610†	577745.8	1.27	mg/L	0.005	1.27	mg/L	0.005	0.43%
Mo 202.031†	6738.1	0.498	mg/L	0.0028	0.498	mg/L	0.0028	0.57%
Ni 231.604†	10035.2	0.292	mg/L	0.0014	0.292	mg/L	0.0014	0.47%
Pb 220.353†	1366.0	0.243	mg/L	0.0010	0.243	mg/L	0.0010	0.43%
Sb 206.836†	940.8	0.588	mg/L	0.0067	0.588	mg/L	0.0067	1.14%
Se 196.026†	233.5	0.242	mg/L	0.0043	0.242	mg/L	0.0043	1.79%
Si 251.611†	129305.0	3.67	mg/L	0.016	3.67	mg/L	0.016	0.43%
Sn 189.927†	11.2	0.00202	mg/L	0.000910	0.00202	mg/L	0.000910	45.13%
Ti 334.940†	368435.8	0.501	mg/L	0.0048	0.501	mg/L	0.0048	0.96%
Tl 190.801†	548.5	0.302	mg/L	0.0079	0.302	mg/L	0.0079	2.63%
V 290.880†	73814.0	0.483	mg/L	0.0035	0.483	mg/L	0.0035	0.72%
Zn 206.200†	16423.4	0.494	mg/L	0.0070	0.494	mg/L	0.0070	1.41%
K 766.490†	73708.4	28.3	mg/L	0.22	28.3	mg/L	0.22	0.77%
Na 589.592†	2200138.9	173	mg/L	4.0	173	mg/L	4.0	2.31%
Sr 407.771†	788867.8	0.767	mg/L	0.0623	0.767	mg/L	0.0623	8.13%
Li 670.784†	43653.9	0.544	mg/L	0.0008	0.544	mg/L	0.0008	0.14%

Approved: February 25, 2011

Pierre Morris

Sequence No.: 17 **Autosampler Location: 43**
Sample ID: L1102059702 **Date Collected: 2/24/2011 3:22:47 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102059702

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102059702

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4664586.7						63531.43	1.36%
YRADIAL	297523.2						5428.38	1.82%
Ga 417.206	1264539.3						34923.69	2.76%
GaRADIAL	63031.1						673.45	1.07%
Ag 328.068†	1133.9	0.00591	mg/L	0.000423	0.00591	mg/L	0.000423	7.15%
Al 396.153†	36.8	-0.0146	mg/L	0.00816	-0.0146	mg/L	0.00816	56.08%
As 188.979†	7.5	0.00015	mg/L	0.001430	0.00015	mg/L	0.001430	937.41%
Ba 233.527†	955.6	0.0160	mg/L	0.00018	0.0160	mg/L	0.00018	1.14%
Be 234.861†	6.7	0.00003	mg/L	0.000026	0.00003	mg/L	0.000026	75.56%
B 249.677†	303.3	0.00943	mg/L	0.000630	0.00943	mg/L	0.000630	6.69%
Ca 227.546†	30905.8	288	mg/L	9.6	288	mg/L	9.6	3.34%
Cd 228.802†	-0.3	-0.00012	mg/L	0.000080	-0.00012	mg/L	0.000080	68.16%
Co 228.616†	7.1	0.00029	mg/L	0.000258	0.00029	mg/L	0.000258	89.92%
Cr 267.716†	315.4	0.00250	mg/L	0.000056	0.00250	mg/L	0.000056	2.26%
Cu 327.393†	-1396.9	-0.00897	mg/L	0.000966	-0.00897	mg/L	0.000966	10.77%
Fe 239.562†	20.1	0.0423	mg/L	0.01515	0.0423	mg/L	0.01515	35.85%
Mg 279.077†	120833.3	151	mg/L	4.5	151	mg/L	4.5	2.96%
Mn 257.610†	9981.7	0.0209	mg/L	0.00027	0.0209	mg/L	0.00027	1.28%
Mo 202.031†	-0.3	-0.00016	mg/L	0.000300	-0.00016	mg/L	0.000300	192.55%
Ni 231.604†	12.2	0.00015	mg/L	0.000385	0.00015	mg/L	0.000385	260.24%
Pb 220.353†	-30.3	0.00860	mg/L	0.000839	0.00860	mg/L	0.000839	9.76%
Sb 206.836†	18.8	0.0120	mg/L	0.00165	0.0120	mg/L	0.00165	13.70%
Se 196.026†	-39.7	0.0435	mg/L	0.00311	0.0435	mg/L	0.00311	7.16%
Si 251.611†	23339.0	0.643	mg/L	0.0177	0.643	mg/L	0.0177	2.76%
Sn 189.927†	1.6	0.00037	mg/L	0.000216	0.00037	mg/L	0.000216	59.18%
Ti 334.940†	-2523.5	-0.00050	mg/L	0.000129	-0.00050	mg/L	0.000129	25.94%
Tl 190.801†	151.3	0.0638	mg/L	0.00681	0.0638	mg/L	0.00681	10.67%
V 290.880†	-1428.8	-0.00831	mg/L	0.000783	-0.00831	mg/L	0.000783	9.42%
Zn 206.200†	105.6	0.00285	mg/L	0.000195	0.00285	mg/L	0.000195	6.86%
K 766.490†	8886.5	3.27	mg/L	0.160	3.27	mg/L	0.160	4.90%
Na 589.592†	1833033.6	143	mg/L	1.3	143	mg/L	1.3	0.93%
Sr 407.771†	277257.8	0.269	mg/L	0.0216	0.269	mg/L	0.0216	8.01%
Li 670.784†	2498.1	0.0305	mg/L	0.00274	0.0305	mg/L	0.00274	8.99%

Sequence No.: 18 **Autosampler Location: 44**
Sample ID: L1102061701 **Date Collected: 2/24/2011 3:29:28 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102061701

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102061701

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4944964.9						59923.87	1.21%
YRADIAL	302563.3						10351.32	3.42%
Ga 417.206	1353623.6						32253.85	2.38%
GaRADIAL	63108.9						953.36	1.51%
Ag 328.068†	69.2	0.00069	mg/L	0.000102	0.00069	mg/L	0.000102	14.74%
Al 396.153†	250.3	0.0286	mg/L	0.00104	0.0286	mg/L	0.00104	3.63%
As 188.979†	2.3	0.00091	mg/L	0.000711	0.00091	mg/L	0.000711	77.86%

Approved: February 25, 2011

Pierre Morris

Ba 233.527†	765.3	0.0128 mg/L	0.00023	0.0128 mg/L	0.00023	1.81%
Be 234.861†	277.9	0.00010 mg/L	0.000096	0.00010 mg/L	0.000096	95.76%
B 249.677†	4634.9	0.0991 mg/L	0.00441	0.0991 mg/L	0.00441	4.45%
Ca 227.546†	2543.3	23.7 mg/L	0.51	23.7 mg/L	0.51	2.17%
Cd 228.802†	2.4	0.00006 mg/L	0.000226	0.00006 mg/L	0.000226	379.72%
Co 228.616†	1.2	-0.00008 mg/L	0.000354	-0.00008 mg/L	0.000354	456.10%
Cr 267.716†	123.5	0.00083 mg/L	0.000107	0.00083 mg/L	0.000107	12.89%
Cu 327.393†	-180.1	-0.00058 mg/L	0.000898	-0.00058 mg/L	0.000898	153.82%
Fe 239.562†	916.8	2.09 mg/L	0.052	2.09 mg/L	0.052	2.51%
Mg 279.077†	4730.7	5.93 mg/L	0.161	5.93 mg/L	0.161	2.71%
Mn 257.610†	31133.5	0.0692 mg/L	0.00186	0.0692 mg/L	0.00186	2.69%
Mo 202.031†	55.2	0.00406 mg/L	0.000228	0.00406 mg/L	0.000228	5.61%
Ni 231.604†	31.8	0.00076 mg/L	0.000329	0.00076 mg/L	0.000329	43.64%
Pb 220.353†	-10.6	-0.00088 mg/L	0.001284	-0.00088 mg/L	0.001284	145.38%
Sb 206.836†	5.3	0.00367 mg/L	0.001558	0.00367 mg/L	0.001558	42.42%
Se 196.026†	-16.4	-0.00547 mg/L	0.005560	-0.00547 mg/L	0.005560	101.70%
Si 251.611†	144559.4	4.11 mg/L	0.163	4.11 mg/L	0.163	3.96%
Sn 189.927†	-4.3	-0.00067 mg/L	0.000900	-0.00067 mg/L	0.000900	135.03%
Ti 334.940†	-302.5	-0.00014 mg/L	0.000137	-0.00014 mg/L	0.000137	100.72%
Tl 190.801†	47.9	0.0271 mg/L	0.00222	0.0271 mg/L	0.00222	8.20%
V 290.880†	27.9	0.00136 mg/L	0.000940	0.00136 mg/L	0.000940	69.17%
Zn 206.200†	126.4	0.00342 mg/L	0.000168	0.00342 mg/L	0.000168	4.93%
K 766.490†	4224.8	1.61 mg/L	0.027	1.61 mg/L	0.027	1.71%
Na 589.592†	171626.9	12.8 mg/L	0.15	12.8 mg/L	0.15	1.16%
Sr 407.771†	54257.8	0.0525 mg/L	0.00304	0.0525 mg/L	0.00304	5.79%
Li 670.784†	23127.6	0.288 mg/L	0.0049	0.288 mg/L	0.0049	1.72%

User canceled analysis.

Approved: February 25, 2011

Pierce Morris

Analysis Begun

Start Time: 2/24/2011 3:36:33 PM **Plasma On Time: 2/24/2011 7:06:53 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\00PDM.sif
Batch ID:
Results Data Set: 022411H6
Results Library: C:\pe\peicp2\Results\Results.mdb

Sequence No.: 1 **Autosampler Location: 45**
Sample ID: L1102061701PS WG357494-01 **Date Collected: 2/24/2011 3:36:36 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102061701PS WG357494-01

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102061701PS WG357494-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4865396.6						27461.16	0.56%
YRADIAL	311335.6						7910.29	2.54%
Ga 417.206	1311355.0						14076.93	1.07%
GaRADIAL	64154.1						612.10	0.95%
Ag 328.068†	39846.8	0.194	mg/L	0.0014	0.194	mg/L	0.0014	0.73%
Al 396.153†	25171.8	5.05	mg/L	0.056	5.05	mg/L	0.056	1.11%
As 188.979†	209.8	0.190	mg/L	0.0023	0.190	mg/L	0.0023	1.21%
Ba 233.527†	30559.8	0.516	mg/L	0.0052	0.516	mg/L	0.0052	1.00%
Be 234.861†	14202.9	0.0243	mg/L	0.00024	0.0243	mg/L	0.00024	1.00%
B 249.677†	56688.4	1.07	mg/L	0.009	1.07	mg/L	0.009	0.82%
Ca 227.546†	2904.3	27.2	mg/L	0.31	27.2	mg/L	0.31	1.14%
Cd 228.802†	419.8	0.0237	mg/L	0.00026	0.0237	mg/L	0.00026	1.09%
Co 228.616†	1940.2	0.0999	mg/L	0.00050	0.0999	mg/L	0.00050	0.50%
Cr 267.716†	29260.4	0.252	mg/L	0.0032	0.252	mg/L	0.0032	1.27%
Cu 327.393†	36024.6	0.244	mg/L	0.0029	0.244	mg/L	0.0029	1.19%
Fe 239.562†	1638.8	3.73	mg/L	0.046	3.73	mg/L	0.046	1.24%
Mg 279.077†	8067.8	10.1	mg/L	0.19	10.1	mg/L	0.19	1.85%
Mn 257.610†	143152.0	0.318	mg/L	0.0026	0.318	mg/L	0.0026	0.83%
Mo 202.031†	6929.3	0.512	mg/L	0.0046	0.512	mg/L	0.0046	0.91%
Ni 231.604†	8647.9	0.252	mg/L	0.0012	0.252	mg/L	0.0012	0.46%
Pb 220.353†	1463.4	0.246	mg/L	0.0016	0.246	mg/L	0.0016	0.63%
Sb 206.836†	920.5	0.576	mg/L	0.0076	0.576	mg/L	0.0076	1.31%
Se 196.026†	257.8	0.188	mg/L	0.0036	0.188	mg/L	0.0036	1.91%
Si 251.611†	222292.8	6.32	mg/L	0.048	6.32	mg/L	0.048	0.76%
Sn 189.927†	-15.2	-0.00253	mg/L	0.000825	-0.00253	mg/L	0.000825	32.56%
Ti 334.940†	369075.6	0.499	mg/L	0.0014	0.499	mg/L	0.0014	0.27%
Tl 190.801†	467.8	0.279	mg/L	0.0051	0.279	mg/L	0.0051	1.84%
V 290.880†	76667.9	0.502	mg/L	0.0046	0.502	mg/L	0.0046	0.92%
Zn 206.200†	16266.1	0.490	mg/L	0.0031	0.490	mg/L	0.0031	0.63%
K 766.490†	67135.4	25.9	mg/L	0.39	25.9	mg/L	0.39	1.52%
Na 589.592†	481779.6	36.2	mg/L	0.18	36.2	mg/L	0.18	0.50%
Sr 407.771†	571819.9	0.555	mg/L	0.0395	0.555	mg/L	0.0395	7.12%
Li 670.784†	61399.2	0.765	mg/L	0.0057	0.765	mg/L	0.0057	0.74%

Sequence No.: 2 **Autosampler Location: 46**
Sample ID: L1102061701DL WG357494-02 **Date Collected: 2/24/2011 3:44:12 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102061701DL WG357494-02

Analyte	Back Pressure	Flow

Approved: February 25, 2011

Pierre Morris

All	169.0 kPa	0.50 L/min

Mean Data: L1102061701DL WG357494-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5033274.1						14878.10	0.30%
YRADIAL	316097.1						14435.93	4.57%
Ga 417.206	1338435.0						9550.46	0.71%
GaRADIAL	65187.0						3592.59	5.51%
Ag 328.068†	-40.4	0.00026	mg/L	0.000368	0.00026	mg/L	0.000368	140.11%
Al 396.153†	88.1	-0.00420	mg/L	0.004305	-0.00420	mg/L	0.004305	102.47%
As 188.979†	3.3	0.00204	mg/L	0.001221	0.00204	mg/L	0.001221	59.82%
Ba 233.527†	150.5	0.00241	mg/L	0.000076	0.00241	mg/L	0.000076	3.15%
Be 234.861†	36.9	0.00001	mg/L	0.000046	0.00001	mg/L	0.000046	339.67%
B 249.677†	1029.0	0.0246	mg/L	0.00143	0.0246	mg/L	0.00143	5.80%
Ca 227.546†	526.2	4.87	mg/L	0.035	4.87	mg/L	0.035	0.71%
Cd 228.802†	-1.5	-0.00017	mg/L	0.000146	-0.00017	mg/L	0.000146	86.76%
Co 228.616†	0.7	-0.00006	mg/L	0.000269	-0.00006	mg/L	0.000269	449.68%
Cr 267.716†	22.0	-0.00002	mg/L	0.000097	-0.00002	mg/L	0.000097	414.13%
Cu 327.393†	-19.0	0.00034	mg/L	0.000432	0.00034	mg/L	0.000432	126.51%
Fe 239.562†	179.9	0.410	mg/L	0.0206	0.410	mg/L	0.0206	5.01%
Mg 279.077†	941.3	1.17	mg/L	0.051	1.17	mg/L	0.051	4.31%
Mn 257.610†	7399.0	0.0160	mg/L	0.00006	0.0160	mg/L	0.00006	0.40%
Mo 202.031†	9.2	0.00056	mg/L	0.000360	0.00056	mg/L	0.000360	63.88%
Ni 231.604†	3.0	-0.00007	mg/L	0.000161	-0.00007	mg/L	0.000161	233.53%
Pb 220.353†	0.6	0.00013	mg/L	0.000300	0.00013	mg/L	0.000300	232.64%
Sb 206.836†	-1.8	-0.00075	mg/L	0.001244	-0.00075	mg/L	0.001244	166.68%
Se 196.026†	-0.9	0.00019	mg/L	0.003884	0.00019	mg/L	0.003884	>999.9%
Si 251.611†	30143.4	0.838	mg/L	0.0127	0.838	mg/L	0.0127	1.51%
Sn 189.927†	-10.7	-0.00175	mg/L	0.001248	-0.00175	mg/L	0.001248	71.21%
Ti 334.940†	-65.9	0.00000	mg/L	0.000203	0.00000	mg/L	0.000203	>999.9%
Tl 190.801†	7.6	0.00511	mg/L	0.002779	0.00511	mg/L	0.002779	54.40%
V 290.880†	55.9	0.00141	mg/L	0.000694	0.00141	mg/L	0.000694	49.05%
Zn 206.200†	57.8	0.00139	mg/L	0.000072	0.00139	mg/L	0.000072	5.19%
K 766.490†	856.5	0.324	mg/L	0.0360	0.324	mg/L	0.0360	11.11%
Na 589.592†	35250.7	2.61	mg/L	0.031	2.61	mg/L	0.031	1.17%
Sr 407.771†	10515.8	0.0101	mg/L	0.00103	0.0101	mg/L	0.00103	10.13%
Li 670.784†	4703.3	0.0580	mg/L	0.00023	0.0580	mg/L	0.00023	0.40%

Sequence No.: 3 **Autosampler Location: 47**
Sample ID: L1102061703 **Date Collected: 2/24/2011 3:50:53 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102061703

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102061703

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5099480.4						52488.17	1.03%
YRADIAL	310429.8						2427.63	0.78%
Ga 417.206	1387065.2						18382.79	1.33%
GaRADIAL	64589.3						694.63	1.08%
Ag 328.068†	109.3	0.00089	mg/L	0.000195	0.00089	mg/L	0.000195	21.90%
Al 396.153†	264.6	0.0315	mg/L	0.00164	0.0315	mg/L	0.00164	5.20%
As 188.979†	1.0	-0.00020	mg/L	0.002481	-0.00020	mg/L	0.002481	>999.9%
Ba 233.527†	774.6	0.0129	mg/L	0.00012	0.0129	mg/L	0.00012	0.91%
Be 234.861†	274.0	0.00011	mg/L	0.000057	0.00011	mg/L	0.000057	54.19%
B 249.677†	4481.3	0.0959	mg/L	0.00070	0.0959	mg/L	0.00070	0.73%
Ca 227.546†	2326.4	21.6	mg/L	0.21	21.6	mg/L	0.21	0.97%
Cd 228.802†	-0.7	-0.00011	mg/L	0.000056	-0.00011	mg/L	0.000056	51.10%
Co 228.616†	-1.3	-0.00021	mg/L	0.000281	-0.00021	mg/L	0.000281	133.70%
Cr 267.716†	84.2	0.00049	mg/L	0.000011	0.00049	mg/L	0.000011	2.17%
Cu 327.393†	112.5	0.00138	mg/L	0.000658	0.00138	mg/L	0.000658	47.85%
Fe 239.562†	879.7	2.00	mg/L	0.026	2.00	mg/L	0.026	1.30%
Mg 279.077†	4272.0	5.35	mg/L	0.045	5.35	mg/L	0.045	0.84%

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Mn 257.610†	27687.1	0.0616 mg/L	0.00052	0.0616 mg/L	0.00052	0.84%
Mo 202.031†	14.9	0.00108 mg/L	0.000464	0.00108 mg/L	0.000464	43.09%
Ni 231.604†	17.6	0.00034 mg/L	0.000350	0.00034 mg/L	0.000350	101.74%
Pb 220.353†	-0.5	0.00067 mg/L	0.000644	0.00067 mg/L	0.000644	96.29%
Sb 206.836†	5.7	0.00392 mg/L	0.002323	0.00392 mg/L	0.002323	59.19%
Se 196.026†	-18.6	-0.00749 mg/L	0.006193	-0.00749 mg/L	0.006193	82.65%
Si 251.611†	142923.3	4.06 mg/L	0.034	4.06 mg/L	0.034	0.84%
Sn 189.927†	-7.5	-0.00122 mg/L	0.000301	-0.00122 mg/L	0.000301	24.75%
Ti 334.940†	869.7	0.00143 mg/L	0.002248	0.00143 mg/L	0.002248	157.32%
Tl 190.801†	39.2	0.0222 mg/L	0.00445	0.0222 mg/L	0.00445	20.06%
V 290.880†	-287.5	-0.00071 mg/L	0.000774	-0.00071 mg/L	0.000774	109.56%
Zn 206.200†	160.0	0.00443 mg/L	0.000186	0.00443 mg/L	0.000186	4.20%
K 766.490†	4144.0	1.58 mg/L	0.064	1.58 mg/L	0.064	4.03%
Na 589.592†	169819.5	12.6 mg/L	0.15	12.6 mg/L	0.15	1.20%
Sr 407.771†	52282.4	0.0505 mg/L	0.00359	0.0505 mg/L	0.00359	7.10%
Li 670.784†	22826.4	0.284 mg/L	0.0018	0.284 mg/L	0.0018	0.63%

Sequence No.: 4 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/24/2011 3:57:34 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4908005.8						4323.87	0.09%
YRADIAL	299076.8						1812.31	0.61%
Ga 417.206	1254871.0						17961.75	1.43%
GaRADIAL	61492.5						1155.63	1.88%
Ag 328.068†	80132.2	0.390	mg/L	0.0074	0.390	mg/L	0.0074	1.90%
QC value within limits for Ag 328.068 Recovery = 97.59%								
Al 396.153†	50371.5	10.1	mg/L	0.03	10.1	mg/L	0.03	0.30%
QC value within limits for Al 396.153 Recovery = 101.21%								
As 188.979†	422.1	0.384	mg/L	0.0036	0.384	mg/L	0.0036	0.95%
QC value within limits for As 188.979 Recovery = 95.94%								
Ba 233.527†	57971.2	0.980	mg/L	0.0054	0.980	mg/L	0.0054	0.55%
QC value within limits for Ba 233.527 Recovery = 97.98%								
Be 234.861†	28380.3	0.0492	mg/L	0.00086	0.0492	mg/L	0.00086	1.75%
QC value within limits for Be 234.861 Recovery = 98.38%								
B 249.677†	25954.0	0.490	mg/L	0.0101	0.490	mg/L	0.0101	2.07%
QC value within limits for B 249.677 Recovery = 98.06%								
Ca 227.546†	1046.4	10.0	mg/L	0.10	10.0	mg/L	0.10	0.97%
QC value within limits for Ca 227.546 Recovery = 100.44%								
Cd 228.802†	870.4	0.0491	mg/L	0.00047	0.0491	mg/L	0.00047	0.95%
QC value within limits for Cd 228.802 Recovery = 98.26%								
Co 228.616†	3776.8	0.195	mg/L	0.0006	0.195	mg/L	0.0006	0.31%
QC value within limits for Co 228.616 Recovery = 97.28%								
Cr 267.716†	56686.7	0.488	mg/L	0.0027	0.488	mg/L	0.0027	0.55%
QC value within limits for Cr 267.716 Recovery = 97.59%								
Cu 327.393†	72639.3	0.491	mg/L	0.0098	0.491	mg/L	0.0098	2.01%
QC value within limits for Cu 327.393 Recovery = 98.20%								
Fe 239.562†	1718.4	3.91	mg/L	0.064	3.91	mg/L	0.064	1.64%
QC value within limits for Fe 239.562 Recovery = 97.83%								
Mg 279.077†	7959.5	9.98	mg/L	0.082	9.98	mg/L	0.082	0.82%
QC value within limits for Mg 279.077 Recovery = 99.77%								
Mn 257.610†	222991.0	0.494	mg/L	0.0032	0.494	mg/L	0.0032	0.65%
QC value within limits for Mn 257.610 Recovery = 98.90%								
Mo 202.031†	13206.6	0.975	mg/L	0.0049	0.975	mg/L	0.0049	0.51%
QC value within limits for Mo 202.031 Recovery = 97.53%								
Ni 231.604†	16774.1	0.489	mg/L	0.0040	0.489	mg/L	0.0040	0.82%
QC value within limits for Ni 231.604 Recovery = 97.70%								
Pb 220.353†	2880.7	0.482	mg/L	0.0015	0.482	mg/L	0.0015	0.31%
QC value within limits for Pb 220.353 Recovery = 96.31%								
Sb 206.836†	1869.8	1.17	mg/L	0.015	1.17	mg/L	0.015	1.30%
QC value within limits for Sb 206.836 Recovery = 97.39%								

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Se 196.026†	554.7	0.392 mg/L	0.0049	0.392 mg/L	0.0049	1.24%
QC value within limits for Se 196.026 Recovery = 97.94%						
Si 251.611†	169898.6	4.82 mg/L	0.110	4.82 mg/L	0.110	2.28%
QC value within limits for Si 251.611 Recovery = 96.37%						
Sn 189.927†	5691.0	0.981 mg/L	0.0053	0.981 mg/L	0.0053	0.54%
QC value within limits for Sn 189.927 Recovery = 98.08%						
Ti 334.940†	723963.5	0.979 mg/L	0.0039	0.979 mg/L	0.0039	0.39%
QC value within limits for Ti 334.940 Recovery = 97.89%						
Tl 190.801†	833.8	0.501 mg/L	0.0029	0.501 mg/L	0.0029	0.58%
QC value within limits for Tl 190.801 Recovery = 100.10%						
V 290.880†	148405.6	0.970 mg/L	0.0061	0.970 mg/L	0.0061	0.63%
QC value within limits for V 290.880 Recovery = 97.00%						
Zn 206.200†	32077.8	0.966 mg/L	0.0040	0.966 mg/L	0.0040	0.41%
QC value within limits for Zn 206.200 Recovery = 96.60%						
K 766.490†	128119.6	49.7 mg/L	0.20	49.7 mg/L	0.20	0.41%
QC value within limits for K 766.490 Recovery = 99.35%						
Na 589.592†	662864.5	50.0 mg/L	0.60	50.0 mg/L	0.60	1.20%
QC value within limits for Na 589.592 Recovery = 99.99%						
Sr 407.771†	1037842.0	1.01 mg/L	0.076	1.01 mg/L	0.076	7.52%
QC value within limits for Sr 407.771 Recovery = 100.85%						
Li 670.784†	80724.9	1.01 mg/L	0.011	1.01 mg/L	0.011	1.14%
QC value within limits for Li 670.784 Recovery = 100.61%						

All analyte(s) passed QC.

Sequence No.: 5 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/24/2011 4:04:20 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5074862.5						8208.06	0.16%
YRADIAL	306996.9						8105.62	2.64%
Ga 417.206	1287344.0						20521.66	1.59%
GaRADIAL	62591.3						344.04	0.55%
Ag 328.068†	-131.1	-0.00015	mg/L	0.000561	-0.00015	mg/L	0.000561	364.26%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	58.4	-0.0102	mg/L	0.01764	-0.0102	mg/L	0.01764	172.68%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	4.2	0.00283	mg/L	0.000496	0.00283	mg/L	0.000496	17.49%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.7	-0.00013	mg/L	0.000083	-0.00013	mg/L	0.000083	61.46%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	2.5	0.00003	mg/L	0.000025	0.00003	mg/L	0.000025	71.82%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	75.5	0.00498	mg/L	0.000781	0.00498	mg/L	0.000781	15.69%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	10.1	0.0655	mg/L	0.02167	0.0655	mg/L	0.02167	33.09%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	1.7	0.00001	mg/L	0.000150	0.00001	mg/L	0.000150	>999.9%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	2.5	0.00005	mg/L	0.000212	0.00005	mg/L	0.000212	447.52%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-4.3	-0.00024	mg/L	0.000096	-0.00024	mg/L	0.000096	39.40%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	11.4	0.00051	mg/L	0.000264	0.00051	mg/L	0.000264	52.18%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-1.2	-0.00218	mg/L	0.002071	-0.00218	mg/L	0.002071	95.06%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	3.2	-0.00099	mg/L	0.007830	-0.00099	mg/L	0.007830	789.01%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	18.7	-0.00045	mg/L	0.000017	-0.00045	mg/L	0.000017	3.80%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-0.4	-0.00017	mg/L	0.000147	-0.00017	mg/L	0.000147	87.99%

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QC value within limits for Mo 202.031 Recovery = Not calculated

Ni 231.604†	4.1	-0.00003 mg/L	0.000147	-0.00003 mg/L	0.000147	443.75%
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	2.1	0.00016 mg/L	0.000491	0.00016 mg/L	0.000491	305.64%
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	-2.9	-0.00145 mg/L	0.002178	-0.00145 mg/L	0.002178	149.97%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	5.8	0.00353 mg/L	0.001384	0.00353 mg/L	0.001384	39.21%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-23.1	-0.0245 mg/L	0.00027	-0.0245 mg/L	0.00027	1.09%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-3.3	-0.00048 mg/L	0.000488	-0.00048 mg/L	0.000488	101.61%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-2.0	0.00003 mg/L	0.000174	0.00003 mg/L	0.000174	499.80%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-3.0	-0.00073 mg/L	0.002663	-0.00073 mg/L	0.002663	367.00%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	-38.6	0.00077 mg/L	0.000640	0.00077 mg/L	0.000640	83.63%
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-33.8	-0.00135 mg/L	0.000185	-0.00135 mg/L	0.000185	13.69%
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	-7.9	-0.00593 mg/L	0.007175	-0.00593 mg/L	0.007175	120.94%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	99.7	0.00128 mg/L	0.003339	0.00128 mg/L	0.003339	260.94%
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	-25.3	-0.00007 mg/L	0.000198	-0.00007 mg/L	0.000198	282.28%
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	36.5	-0.00015 mg/L	0.000740	-0.00015 mg/L	0.000740	485.97%
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 6 **Autosampler Location: 48**
Sample ID: L1102061904 **Date Collected: 2/24/2011 4:11:02 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102061904

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102061904

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4432404.8						8176.68	0.18%
YRADIAL	291899.5						9052.93	3.10%
Ga 417.206	1160197.0						6467.64	0.56%
GaRADIAL	61407.8						452.10	0.74%
Ag 328.068†	-16.6	0.00035	mg/L	0.000459	0.00035	mg/L	0.000459	129.73%
Al 396.153†	1061.6	0.192	mg/L	0.0101	0.192	mg/L	0.0101	5.26%
As 188.979†	8.0	0.00532	mg/L	0.001013	0.00532	mg/L	0.001013	19.05%
Ba 233.527†	955.5	0.0160	mg/L	0.00016	0.0160	mg/L	0.00016	1.03%
Be 234.861†	-34.3	0.00002	mg/L	0.000041	0.00002	mg/L	0.000041	195.10%
B 249.677†	15309.7	0.287	mg/L	0.0029	0.287	mg/L	0.0029	1.00%
Ca 227.546†	4262.7	39.7	mg/L	0.21	39.7	mg/L	0.21	0.53%
Cd 228.802†	3.5	0.00044	mg/L	0.000099	0.00044	mg/L	0.000099	22.65%
Co 228.616†	597.5	0.0311	mg/L	0.00019	0.0311	mg/L	0.00019	0.60%
Cr 267.716†	51.8	0.00024	mg/L	0.000091	0.00024	mg/L	0.000091	38.71%
Cu 327.393†	-245.5	-0.00261	mg/L	0.000139	-0.00261	mg/L	0.000139	5.32%
Fe 239.562†	5.2	0.0122	mg/L	0.00421	0.0122	mg/L	0.00421	34.48%
Mg 279.077†	6420.8	8.05	mg/L	0.182	8.05	mg/L	0.182	2.27%
Mn 257.610†	198.9	0.00764	mg/L	0.000098	0.00764	mg/L	0.000098	1.29%
Mo 202.031†	468.5	0.0344	mg/L	0.00045	0.0344	mg/L	0.00045	1.30%
Ni 231.604†	926.7	0.0268	mg/L	0.00036	0.0268	mg/L	0.00036	1.35%
Pb 220.353†	-2.9	0.00141	mg/L	0.001345	0.00141	mg/L	0.001345	95.41%
Sb 206.836†	9.6	0.00659	mg/L	0.001638	0.00659	mg/L	0.001638	24.87%
Se 196.026†	-18.2	-0.00340	mg/L	0.001023	-0.00340	mg/L	0.001023	30.10%
Si 251.611†	79655.8	2.25	mg/L	0.023	2.25	mg/L	0.023	1.00%
Sn 189.927†	20.3	0.00359	mg/L	0.000826	0.00359	mg/L	0.000826	23.02%
Ti 334.940†	-532.7	-0.00029	mg/L	0.000140	-0.00029	mg/L	0.000140	48.69%

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Tl 190.801†	58.6	0.0316 mg/L	0.00307	0.0316 mg/L	0.00307	9.69%
V 290.880†	282.1	0.00284 mg/L	0.000106	0.00284 mg/L	0.000106	3.74%
Zn 206.200†	740.9	0.0219 mg/L	0.00033	0.0219 mg/L	0.00033	1.51%
K 766.490†	13298.6	5.12 mg/L	0.262	5.12 mg/L	0.262	5.11%
Na 589.592†	Saturated2					
Sr 407.771†	240265.3	0.234 mg/L	0.0224	0.234 mg/L	0.0224	9.59%
Li 670.784†	718309.3	8.96 mg/L	0.094	8.96 mg/L	0.094	1.05%

Sequence No.: 7 **Autosampler Location: 49**
Sample ID: L1102061906 **Date Collected: 2/24/2011 4:17:50 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102061906

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102061906

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4995351.9						72678.78	1.45%
YRADIAL	306856.6						3401.43	1.11%
Ga 417.206	1323643.7						19628.68	1.48%
GaRADIAL	64045.0						539.42	0.84%
Ag 328.068†	126.1	0.00085	mg/L	0.000628	0.00085	mg/L	0.000628	74.18%
Al 396.153†	26275.7	5.28	mg/L	0.053	5.28	mg/L	0.053	1.01%
As 188.979†	8.6	0.00641	mg/L	0.001614	0.00641	mg/L	0.001614	25.21%
Ba 233.527†	4867.4	0.0819	mg/L	0.00134	0.0819	mg/L	0.00134	1.63%
Be 234.861†	641.4	0.00037	mg/L	0.000029	0.00037	mg/L	0.000029	7.82%
B 249.677†	1683.0	0.0468	mg/L	0.00164	0.0468	mg/L	0.00164	3.50%
Ca 227.546†	3862.6	35.9	mg/L	0.58	35.9	mg/L	0.58	1.60%
Cd 228.802†	0.4	-0.00007	mg/L	0.000195	-0.00007	mg/L	0.000195	295.66%
Co 228.616†	45.8	0.00181	mg/L	0.000261	0.00181	mg/L	0.000261	14.41%
Cr 267.716†	722.3	0.00582	mg/L	0.000229	0.00582	mg/L	0.000229	3.93%
Cu 327.393†	580.1	0.00496	mg/L	0.000408	0.00496	mg/L	0.000408	8.23%
Fe 239.562†	1697.2	3.87	mg/L	0.007	3.87	mg/L	0.007	0.18%
Mg 279.077†	7559.2	9.47	mg/L	0.043	9.47	mg/L	0.043	0.45%
Mn 257.610†	74987.3	0.167	mg/L	0.0022	0.167	mg/L	0.0022	1.33%
Mo 202.031†	17.6	0.00139	mg/L	0.000810	0.00139	mg/L	0.000810	58.42%
Ni 231.604†	196.4	0.00555	mg/L	0.000209	0.00555	mg/L	0.000209	3.76%
Pb 220.353†	8.7	0.00295	mg/L	0.000599	0.00295	mg/L	0.000599	20.29%
Sb 206.836†	6.6	0.00448	mg/L	0.000386	0.00448	mg/L	0.000386	8.62%
Se 196.026†	-20.0	-0.00483	mg/L	0.001816	-0.00483	mg/L	0.001816	37.57%
Si 251.611†	391189.8	11.2	mg/L	0.14	11.2	mg/L	0.14	1.22%
Sn 189.927†	-13.4	-0.00222	mg/L	0.000233	-0.00222	mg/L	0.000233	10.47%
Ti 334.940†	122922.6	0.167	mg/L	0.0156	0.167	mg/L	0.0156	9.35%
Tl 190.801†	55.2	0.0324	mg/L	0.00205	0.0324	mg/L	0.00205	6.34%
V 290.880†	918.7	0.00731	mg/L	0.000432	0.00731	mg/L	0.000432	5.91%
Zn 206.200†	522.1	0.0153	mg/L	0.00034	0.0153	mg/L	0.00034	2.21%
K 766.490†	9593.5	3.66	mg/L	0.049	3.66	mg/L	0.049	1.34%
Na 589.592†	361169.5	27.0	mg/L	0.26	27.0	mg/L	0.26	0.96%
Sr 407.771†	224286.4	0.218	mg/L	0.0185	0.218	mg/L	0.0185	8.51%
Li 670.784†	1133.2	0.0135	mg/L	0.00087	0.0135	mg/L	0.00087	6.42%

Sequence No.: 8 **Autosampler Location: 50**
Sample ID: L1102062101 **Date Collected: 2/24/2011 4:24:29 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102062101

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102062101

Analyte	Mean Corrected	Calib.			Sample			

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Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	4930425.8						42925.17	0.87%
YRADIAL	312958.4						1651.58	0.53%
Ga 417.206	1323629.5						38925.45	2.94%
GaRADIAL	64899.3						1131.99	1.74%
Ag 328.068†	98.3	0.00079	mg/L	0.000433	0.00079	mg/L	0.000433	54.77%
Al 396.153†	3910.4	0.766	mg/L	0.0151	0.766	mg/L	0.0151	1.98%
As 188.979†	63.3	0.0559	mg/L	0.00286	0.0559	mg/L	0.00286	5.12%
Ba 233.527†	7340.3	0.124	mg/L	0.0013	0.124	mg/L	0.0013	1.08%
Be 234.861†	203.7	0.00028	mg/L	0.000016	0.00028	mg/L	0.000016	5.69%
B 249.677†	16000.5	0.303	mg/L	0.0109	0.303	mg/L	0.0109	3.59%
Ca 227.546†	6547.9	60.9	mg/L	1.98	60.9	mg/L	1.98	3.24%
Cd 228.802†	4.9	-0.00014	mg/L	0.000196	-0.00014	mg/L	0.000196	138.41%
Co 228.616†	47.3	0.00227	mg/L	0.000337	0.00227	mg/L	0.000337	14.85%
Cr 267.716†	818.3	0.00679	mg/L	0.000166	0.00679	mg/L	0.000166	2.44%
Cu 327.393†	447.6	0.00356	mg/L	0.001032	0.00356	mg/L	0.001032	29.00%
Fe 239.562†	324.9	0.740	mg/L	0.0139	0.740	mg/L	0.0139	1.88%
Mg 279.077†	9055.5	11.3	mg/L	0.30	11.3	mg/L	0.30	2.65%
Mn 257.610†	37532.6	0.0837	mg/L	0.00154	0.0837	mg/L	0.00154	1.84%
Mo 202.031†	324.7	0.0239	mg/L	0.00019	0.0239	mg/L	0.00019	0.80%
Ni 231.604†	222.4	0.00630	mg/L	0.000020	0.00630	mg/L	0.000020	0.31%
Pb 220.353†	-10.8	0.00105	mg/L	0.002160	0.00105	mg/L	0.002160	205.41%
Sb 206.836†	7.6	0.00531	mg/L	0.000512	0.00531	mg/L	0.000512	9.64%
Se 196.026†	-25.6	-0.00314	mg/L	0.001374	-0.00314	mg/L	0.001374	43.81%
Si 251.611†	133264.1	3.79	mg/L	0.107	3.79	mg/L	0.107	2.82%
Sn 189.927†	-7.0	-0.00113	mg/L	0.000560	-0.00113	mg/L	0.000560	49.60%
Ti 334.940†	19680.9	0.0273	mg/L	0.00200	0.0273	mg/L	0.00200	7.35%
Tl 190.801†	86.3	0.0466	mg/L	0.00561	0.0466	mg/L	0.00561	12.04%
V 290.880†	2669.2	0.0185	mg/L	0.00103	0.0185	mg/L	0.00103	5.57%
Zn 206.200†	271.2	0.00782	mg/L	0.000608	0.00782	mg/L	0.000608	7.77%
K 766.490†	10452.8	3.98	mg/L	0.098	3.98	mg/L	0.098	2.45%
Na 589.592†	571520.1	43.0	mg/L	0.33	43.0	mg/L	0.33	0.76%
Sr 407.771†	756621.1	0.735	mg/L	0.0557	0.735	mg/L	0.0557	7.57%
Li 670.784†	7180.8	0.0889	mg/L	0.00242	0.0889	mg/L	0.00242	2.73%

Sequence No.: 9 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/24/2011 4:31:14 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4842341.0						30107.05	0.62%
YRADIAL	292383.2						4560.53	1.56%
Ga 417.206	1223456.2						11888.71	0.97%
GaRADIAL	60370.9						201.55	0.33%
Ag 328.068†	83028.8	0.404	mg/L	0.0062	0.404	mg/L	0.0062	1.54%
QC value within limits for Ag 328.068 Recovery = 101.11%								
Al 396.153†	51603.5	10.4	mg/L	0.03	10.4	mg/L	0.03	0.30%
QC value within limits for Al 396.153 Recovery = 103.68%								
As 188.979†	434.5	0.395	mg/L	0.0070	0.395	mg/L	0.0070	1.78%
QC value within limits for As 188.979 Recovery = 98.76%								
Ba 233.527†	59532.6	1.01	mg/L	0.013	1.01	mg/L	0.013	1.34%
QC value within limits for Ba 233.527 Recovery = 100.62%								
Be 234.861†	29529.7	0.0512	mg/L	0.00086	0.0512	mg/L	0.00086	1.68%
QC value within limits for Be 234.861 Recovery = 102.37%								
B 249.677†	26950.7	0.509	mg/L	0.0095	0.509	mg/L	0.0095	1.87%
QC value within limits for B 249.677 Recovery = 101.82%								
Ca 227.546†	1082.9	10.4	mg/L	0.09	10.4	mg/L	0.09	0.89%
QC value within limits for Ca 227.546 Recovery = 103.95%								
Cd 228.802†	896.3	0.0506	mg/L	0.00047	0.0506	mg/L	0.00047	0.92%
QC value within limits for Cd 228.802 Recovery = 101.14%								
Co 228.616†	3851.1	0.198	mg/L	0.0015	0.198	mg/L	0.0015	0.76%
QC value within limits for Co 228.616 Recovery = 99.18%								

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Cr 267.716†            58126.1       0.500 mg/L        0.0075       0.500 mg/L        0.0075   1.51%
   QC value within limits for Cr 267.716  Recovery = 100.07%
Cu 327.393†            75469.6       0.510 mg/L        0.0076       0.510 mg/L        0.0076   1.50%
   QC value within limits for Cu 327.393  Recovery = 102.02%
Fe 239.562†             1773.5        4.04 mg/L         0.039        4.04 mg/L         0.039   0.96%
   QC value within limits for Fe 239.562  Recovery = 100.97%
Mg 279.077†             8203.3        10.3 mg/L          0.06        10.3 mg/L          0.06   0.60%
   QC value within limits for Mg 279.077  Recovery = 102.83%
Mn 257.610†           228486.8       0.507 mg/L        0.0077       0.507 mg/L        0.0077   1.51%
   QC value within limits for Mn 257.610  Recovery = 101.34%
Mo 202.031†            13716.1        1.01 mg/L         0.007        1.01 mg/L         0.007   0.69%
   QC value within limits for Mo 202.031  Recovery = 101.29%
Ni 231.604†            17316.5       0.504 mg/L        0.0067       0.504 mg/L        0.0067   1.34%
   QC value within limits for Ni 231.604  Recovery = 100.87%
Pb 220.353†             2931.0       0.490 mg/L        0.0019       0.490 mg/L        0.0019   0.39%
   QC value within limits for Pb 220.353  Recovery = 98.01%
Sb 206.836†             1922.4        1.20 mg/L         0.011        1.20 mg/L         0.011   0.95%
   QC value within limits for Sb 206.836  Recovery = 100.14%
Se 196.026†              574.3       0.406 mg/L        0.0039       0.406 mg/L        0.0039   0.97%
   QC value within limits for Se 196.026  Recovery = 101.40%
Si 251.611†           176853.4        5.02 mg/L         0.070        5.02 mg/L         0.070   1.40%
   QC value within limits for Si 251.611  Recovery = 100.34%
Sn 189.927†             5797.2       0.999 mg/L        0.0076       0.999 mg/L        0.0076   0.76%
   QC value within limits for Sn 189.927  Recovery = 99.91%
Ti 334.940†           743446.2        1.01 mg/L         0.002        1.01 mg/L         0.002   0.23%
   QC value within limits for Ti 334.940  Recovery = 100.53%
Tl 190.801†              839.3       0.504 mg/L        0.0092       0.504 mg/L        0.0092   1.82%
   QC value within limits for Tl 190.801  Recovery = 100.80%
V 290.880†            152223.2       0.995 mg/L        0.0152       0.995 mg/L        0.0152   1.53%
   QC value within limits for V 290.880  Recovery = 99.50%
Zn 206.200†             32870.6       0.990 mg/L        0.0124       0.990 mg/L        0.0124   1.25%
   QC value within limits for Zn 206.200  Recovery = 98.99%
K 766.490†            131513.5        51.0 mg/L          0.42        51.0 mg/L          0.42   0.83%
   QC value within limits for K 766.490  Recovery = 102.01%
Na 589.592†           677490.1        51.1 mg/L          0.37        51.1 mg/L          0.37   0.73%
   QC value within limits for Na 589.592  Recovery = 102.23%
Sr 407.771†          1075572.6        1.05 mg/L         0.092        1.05 mg/L         0.092   8.84%
   QC value within limits for Sr 407.771  Recovery = 104.51%
Li 670.784†            82856.5        1.03 mg/L         0.005        1.03 mg/L         0.005   0.46%
   QC value within limits for Li 670.784  Recovery = 103.26%
All analyte(s) passed QC.
```

Sequence No.: 10 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/24/2011 4:37:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5088120.1						7554.65	0.15%
YRADIAL	305991.8						6092.59	1.99%
Ga 417.206	1270674.6						12180.93	0.96%
GaRADIAL	62705.6						409.87	0.65%
Ag 328.068†	-76.9	0.00011	mg/L	0.000187	0.00011	mg/L	0.000187	169.97%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	67.6	-0.00836	mg/L	0.004423	-0.00836	mg/L	0.004423	52.90%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.4	-0.00063	mg/L	0.001023	-0.00063	mg/L	0.001023	162.99%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.2	-0.00013	mg/L	0.000098	-0.00013	mg/L	0.000098	77.50%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-1.3	0.00003	mg/L	0.000010	0.00003	mg/L	0.000010	35.88%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	13.4	0.00382	mg/L	0.000120	0.00382	mg/L	0.000120	3.15%

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QC value within limits for B 249.677 Recovery = Not calculated

Ca 227.546†	3.3	0.00231 mg/L	0.027548	0.00231 mg/L	0.027548	>999.9%	
QC value within limits for Ca 227.546 Recovery = Not calculated							
Cd 228.802†	-1.7	-0.00016 mg/L	0.000036	-0.00016 mg/L	0.000036	21.96%	
QC value within limits for Cd 228.802 Recovery = Not calculated							
Co 228.616†	-0.2	-0.00009 mg/L	0.000161	-0.00009 mg/L	0.000161	175.45%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-6.2	-0.00026 mg/L	0.000067	-0.00026 mg/L	0.000067	25.68%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 327.393†	-38.6	0.00017 mg/L	0.000742	0.00017 mg/L	0.000742	437.81%	
QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe 239.562†	-2.2	-0.00437 mg/L	0.004256	-0.00437 mg/L	0.004256	97.30%	
QC value within limits for Fe 239.562 Recovery = Not calculated							
Mg 279.077†	-0.5	-0.00567 mg/L	0.001883	-0.00567 mg/L	0.001883	33.18%	
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	4.5	-0.00048 mg/L	0.000006	-0.00048 mg/L	0.000006	1.25%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-2.5	-0.00032 mg/L	0.000065	-0.00032 mg/L	0.000065	20.35%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	1.5	-0.00011 mg/L	0.000328	-0.00011 mg/L	0.000328	306.53%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	0.7	-0.00008 mg/L	0.000236	-0.00008 mg/L	0.000236	309.07%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	-0.1	0.00031 mg/L	0.002931	0.00031 mg/L	0.002931	952.02%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	7.9	0.00496 mg/L	0.004788	0.00496 mg/L	0.004788	96.60%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-6.4	-0.0240 mg/L	0.00007	-0.0240 mg/L	0.00007	0.29%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-4.5	-0.00068 mg/L	0.000282	-0.00068 mg/L	0.000282	41.29%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	98.0	0.00017 mg/L	0.000167	0.00017 mg/L	0.000167	98.81%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-9.5	-0.00449 mg/L	0.001020	-0.00449 mg/L	0.001020	22.72%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	9.3	0.00108 mg/L	0.001185	0.00108 mg/L	0.001185	109.78%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-44.3	-0.00167 mg/L	0.000132	-0.00167 mg/L	0.000132	7.90%	
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	82.0	0.0286 mg/L	0.03351	0.0286 mg/L	0.03351	117.23%	
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	817.7	0.0545 mg/L	0.00613	0.0545 mg/L	0.00613	11.24%	
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	-148.2	-0.00019 mg/L	0.000175	-0.00019 mg/L	0.000175	92.32%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	90.1	0.00052 mg/L	0.000935	0.00052 mg/L	0.000935	181.09%	
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 51**
Sample ID: PBW 33 WG357152-02 **Date Collected: 2/24/2011 4:44:35 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 33 WG357152-02

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: PBW 33 WG357152-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5113984.4						107785.27	2.11%
YRADIAL	308930.8						5726.64	1.85%
Ga 417.206	1353185.5						53264.21	3.94%
GaRADIAL	63640.3						901.62	1.42%
Ag 328.068†	20.8	0.00058	mg/L	0.000925	0.00058	mg/L	0.000925	158.74%
Al 396.153†	111.6	0.00050	mg/L	0.011977	0.00050	mg/L	0.011977	>999.9%
As 188.979†	0.2	-0.00081	mg/L	0.000768	-0.00081	mg/L	0.000768	94.53%
Ba 233.527†	0.1	-0.00012	mg/L	0.000078	-0.00012	mg/L	0.000078	64.02%

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Be 234.861†	25.6	0.00007 mg/L	0.000048	0.00007 mg/L	0.000048	65.31%
B 249.677†	-147.9	0.00084 mg/L	0.000823	0.00084 mg/L	0.000823	97.69%
Ca 227.546†	4.4	0.0122 mg/L	0.03340	0.0122 mg/L	0.03340	272.85%
Cd 228.802†	-0.3	-0.00008 mg/L	0.000129	-0.00008 mg/L	0.000129	166.15%
Co 228.616†	0.7	-0.00005 mg/L	0.000173	-0.00005 mg/L	0.000173	376.14%
Cr 267.716†	-13.0	-0.00032 mg/L	0.000041	-0.00032 mg/L	0.000041	12.89%
Cu 327.393†	-54.7	0.00006 mg/L	0.000661	0.00006 mg/L	0.000661	>999.9%
Fe 239.562†	-0.3	-0.00003 mg/L	0.004632	-0.00003 mg/L	0.004632	>999.9%
Mg 279.077†	2.7	-0.00165 mg/L	0.001580	-0.00165 mg/L	0.001580	96.03%
Mn 257.610†	75.0	-0.00033 mg/L	0.000030	-0.00033 mg/L	0.000030	9.11%
Mo 202.031†	-0.8	-0.00020 mg/L	0.000498	-0.00020 mg/L	0.000498	251.55%
Ni 231.604†	-1.7	-0.00020 mg/L	0.000191	-0.00020 mg/L	0.000191	95.20%
Pb 220.353†	0.3	-0.00014 mg/L	0.000228	-0.00014 mg/L	0.000228	158.12%
Sb 206.836†	-3.0	-0.00148 mg/L	0.001635	-0.00148 mg/L	0.001635	110.54%
Se 196.026†	0.2	-0.00042 mg/L	0.005990	-0.00042 mg/L	0.005990	>999.9%
Si 251.611†	105.2	-0.0208 mg/L	0.00060	-0.0208 mg/L	0.00060	2.86%
Sn 189.927†	-9.7	-0.00159 mg/L	0.000522	-0.00159 mg/L	0.000522	32.76%
Ti 334.940†	14.1	0.00006 mg/L	0.000097	0.00006 mg/L	0.000097	173.31%
Tl 190.801†	-5.1	-0.00195 mg/L	0.002559	-0.00195 mg/L	0.002559	131.39%
V 290.880†	-44.4	0.00073 mg/L	0.000669	0.00073 mg/L	0.000669	91.76%
Zn 206.200†	-6.7	-0.00054 mg/L	0.000298	-0.00054 mg/L	0.000298	55.69%
K 766.490†	-18.3	-0.00996 mg/L	0.013117	-0.00996 mg/L	0.013117	131.64%
Na 589.592†	303.1	0.0164 mg/L	0.01252	0.0164 mg/L	0.01252	76.49%
Sr 407.771†	-235.2	-0.00027 mg/L	0.000050	-0.00027 mg/L	0.000050	18.33%
Li 670.784†	107.1	0.00073 mg/L	0.000377	0.00073 mg/L	0.000377	51.69%

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Sequence No.: 12 **Autosampler Location: 52**
Sample ID: LCSW 33 WG357152-03 **Date Collected: 2/24/2011 4:51:16 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 33 WG357152-03

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: LCSW 33 WG357152-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5043159.6						60094.82	1.19%
YRADIAL	315401.6						5144.15	1.63%
Ga 417.206	1302966.7						38133.40	2.93%
GaRADIAL	64080.3						392.75	0.61%
Ag 328.068†	38864.5	0.190	mg/L	0.0076	0.190	mg/L	0.0076	3.99%
Al 396.153†	24829.6	4.98	mg/L	0.033	4.98	mg/L	0.033	0.66%
As 188.979†	202.0	0.183	mg/L	0.0049	0.183	mg/L	0.0049	2.69%
Ba 233.527†	28255.0	0.477	mg/L	0.0114	0.477	mg/L	0.0114	2.40%
Be 234.861†	13662.0	0.0237	mg/L	0.00107	0.0237	mg/L	0.00107	4.53%
B 249.677†	50664.1	0.945	mg/L	0.0420	0.945	mg/L	0.0420	4.44%
Ca 227.546†	509.9	4.88	mg/L	0.118	4.88	mg/L	0.118	2.42%
Cd 228.802†	418.9	0.0236	mg/L	0.00076	0.0236	mg/L	0.00076	3.22%
Co 228.616†	1854.3	0.0955	mg/L	0.00110	0.0955	mg/L	0.00110	1.15%
Cr 267.716†	27344.8	0.235	mg/L	0.0049	0.235	mg/L	0.0049	2.07%
Cu 327.393†	35125.0	0.238	mg/L	0.0101	0.238	mg/L	0.0101	4.24%
Fe 239.562†	816.5	1.86	mg/L	0.007	1.86	mg/L	0.007	0.37%
Mg 279.077†	3831.3	4.80	mg/L	0.029	4.80	mg/L	0.029	0.61%
Mn 257.610†	109735.5	0.243	mg/L	0.0058	0.243	mg/L	0.0058	2.37%
Mo 202.031†	6414.1	0.474	mg/L	0.0117	0.474	mg/L	0.0117	2.48%
Ni 231.604†	8257.4	0.240	mg/L	0.0059	0.240	mg/L	0.0059	2.46%
Pb 220.353†	1402.2	0.234	mg/L	0.0017	0.234	mg/L	0.0017	0.72%
Sb 206.836†	900.6	0.563	mg/L	0.0125	0.563	mg/L	0.0125	2.21%
Se 196.026†	272.6	0.192	mg/L	0.0059	0.192	mg/L	0.0059	3.08%
Si 251.611†	85231.3	2.41	mg/L	0.100	2.41	mg/L	0.100	4.15%
Sn 189.927†	2919.9	0.503	mg/L	0.0067	0.503	mg/L	0.0067	1.34%
Ti 334.940†	352819.3	0.477	mg/L	0.0022	0.477	mg/L	0.0022	0.46%
Tl 190.801†	402.1	0.242	mg/L	0.0018	0.242	mg/L	0.0018	0.75%
V 290.880†	71655.0	0.469	mg/L	0.0121	0.469	mg/L	0.0121	2.57%
Zn 206.200†	15415.9	0.464	mg/L	0.0091	0.464	mg/L	0.0091	1.97%
K 766.490†	62056.1	23.9	mg/L	0.18	23.9	mg/L	0.18	0.75%
Na 589.592†	325163.7	24.3	mg/L	0.25	24.3	mg/L	0.25	1.03%

Approved: February 25, 2011

Pierre Morris

Sr 407.771†	510950.3	0.496	mg/L	0.0382	0.496	mg/L	0.0382 7.70%
Li 670.784†	39595.6	0.493	mg/L	0.0031	0.493	mg/L	0.0031 0.63%

Sequence No.: 13 **Autosampler Location: 53**
Sample ID: L1102051306 WG357152-01 **Date Collected: 2/24/2011 4:58:02 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051306 WG357152-01

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102051306 WG357152-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4882379.1						47564.49	0.97%
YRADIAL	304189.9						5109.42	1.68%
Ga 417.206	1309223.3						22264.81	1.70%
GaRADIAL	62898.0						1735.01	2.76%
Ag 328.068†	178.2	0.00115	mg/L	0.001254	0.00115	mg/L	0.001254	109.31%
Al 396.153†	217.4	0.0218	mg/L	0.01346	0.0218	mg/L	0.01346	61.83%
As 188.979†	7.7	0.00486	mg/L	0.001113	0.00486	mg/L	0.001113	22.88%
Ba 233.527†	5349.9	0.0901	mg/L	0.00096	0.0901	mg/L	0.00096	1.07%
Be 234.861†	57.4	0.00010	mg/L	0.000005	0.00010	mg/L	0.000005	5.07%
B 249.677†	2019.1	0.0422	mg/L	0.00081	0.0422	mg/L	0.00081	1.92%
Ca 227.546†	6392.3	59.5	mg/L	1.18	59.5	mg/L	1.18	1.99%
Cd 228.802†	2.7	0.00005	mg/L	0.000282	0.00005	mg/L	0.000282	561.50%
Co 228.616†	8.3	0.00031	mg/L	0.000187	0.00031	mg/L	0.000187	59.67%
Cr 267.716†	293.8	0.00229	mg/L	0.000115	0.00229	mg/L	0.000115	5.02%
Cu 327.393†	-394.5	-0.00220	mg/L	0.000488	-0.00220	mg/L	0.000488	22.19%
Fe 239.562†	112.2	0.255	mg/L	0.0084	0.255	mg/L	0.0084	3.29%
Mg 279.077†	18689.7	23.4	mg/L	0.44	23.4	mg/L	0.44	1.89%
Mn 257.610†	30464.6	0.0681	mg/L	0.00117	0.0681	mg/L	0.00117	1.72%
Mo 202.031†	102.8	0.00748	mg/L	0.000219	0.00748	mg/L	0.000219	2.93%
Ni 231.604†	64.4	0.00169	mg/L	0.000378	0.00169	mg/L	0.000378	22.40%
Pb 220.353†	-10.2	0.00099	mg/L	0.000307	0.00099	mg/L	0.000307	30.98%
Sb 206.836†	9.7	0.00643	mg/L	0.001297	0.00643	mg/L	0.001297	20.18%
Se 196.026†	-32.0	-0.00811	mg/L	0.006383	-0.00811	mg/L	0.006383	78.70%
Si 251.611†	157048.5	4.47	mg/L	0.147	4.47	mg/L	0.147	3.29%
Sn 189.927†	-8.1	-0.00132	mg/L	0.001264	-0.00132	mg/L	0.001264	96.01%
Ti 334.940†	46.7	0.00069	mg/L	0.000118	0.00069	mg/L	0.000118	16.98%
Tl 190.801†	89.7	0.0483	mg/L	0.00431	0.0483	mg/L	0.00431	8.92%
V 290.880†	-604.0	-0.00292	mg/L	0.001457	-0.00292	mg/L	0.001457	49.95%
Zn 206.200†	105.8	0.00285	mg/L	0.000266	0.00285	mg/L	0.000266	9.34%
K 766.490†	9728.2	3.70	mg/L	0.064	3.70	mg/L	0.064	1.72%
Na 589.592†	592558.6	44.6	mg/L	0.28	44.6	mg/L	0.28	0.63%
Sr 407.771†	880018.9	0.855	mg/L	0.0607	0.855	mg/L	0.0607	7.10%
Li 670.784†	2243.4	0.0274	mg/L	0.00155	0.0274	mg/L	0.00155	5.66%

Sequence No.: 14 **Autosampler Location: 54**
Sample ID: L1102051307S WG357152-04 **Date Collected: 2/24/2011 5:04:44 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051307S WG357152-04

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102051307S WG357152-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4792733.6						53300.92	1.11%
YRADIAL	295683.9						2772.53	0.94%
Ga 417.206	1284210.6						24581.17	1.91%
GaRADIAL	62393.0						1462.99	2.34%

Approved: February 25, 2011

Pierre Morris

Ag 328.068†	39516.9	0.193 mg/L	0.0038	0.193 mg/L	0.0038	1.95%
Al 396.153†	24899.4	4.99 mg/L	0.025	4.99 mg/L	0.025	0.50%
As 188.979†	214.4	0.193 mg/L	0.0034	0.193 mg/L	0.0034	1.77%
Ba 233.527†	34232.5	0.578 mg/L	0.0078	0.578 mg/L	0.0078	1.35%
Be 234.861†	14053.4	0.0244 mg/L	0.00034	0.0244 mg/L	0.00034	1.39%
B 249.677†	53949.5	1.01 mg/L	0.018	1.01 mg/L	0.018	1.81%
Ca 227.546†	6988.8	65.2 mg/L	1.11	65.2 mg/L	1.11	1.70%
Cd 228.802†	417.4	0.0235 mg/L	0.00049	0.0235 mg/L	0.00049	2.10%
Co 228.616†	1883.5	0.0969 mg/L	0.00132	0.0969 mg/L	0.00132	1.36%
Cr 267.716†	28786.1	0.248 mg/L	0.0037	0.248 mg/L	0.0037	1.49%
Cu 327.393†	34868.1	0.236 mg/L	0.0049	0.236 mg/L	0.0049	2.07%
Fe 239.562†	979.6	2.23 mg/L	0.033	2.23 mg/L	0.033	1.48%
Mg 279.077†	22654.5	28.4 mg/L	0.30	28.4 mg/L	0.30	1.06%
Mn 257.610†	143502.2	0.319 mg/L	0.0042	0.319 mg/L	0.0042	1.31%
Mo 202.031†	6906.5	0.510 mg/L	0.0049	0.510 mg/L	0.0049	0.96%
Ni 231.604†	8414.5	0.245 mg/L	0.0025	0.245 mg/L	0.0025	1.01%
Pb 220.353†	1433.7	0.243 mg/L	0.0032	0.243 mg/L	0.0032	1.33%
Sb 206.836†	931.6	0.583 mg/L	0.0095	0.583 mg/L	0.0095	1.63%
Se 196.026†	247.0	0.189 mg/L	0.0056	0.189 mg/L	0.0056	2.98%
Si 251.611†	248154.2	7.06 mg/L	0.124	7.06 mg/L	0.124	1.76%
Sn 189.927†	3024.9	0.521 mg/L	0.0061	0.521 mg/L	0.0061	1.17%
Ti 334.940†	370059.8	0.501 mg/L	0.0035	0.501 mg/L	0.0035	0.71%
Tl 190.801†	497.3	0.293 mg/L	0.0008	0.293 mg/L	0.0008	0.26%
V 290.880†	75069.3	0.491 mg/L	0.0055	0.491 mg/L	0.0055	1.12%
Zn 206.200†	15768.7	0.475 mg/L	0.0095	0.475 mg/L	0.0095	2.00%
K 766.490†	73616.4	28.4 mg/L	0.05	28.4 mg/L	0.05	0.18%
Na 589.592†	917275.8	69.7 mg/L	3.50	69.7 mg/L	3.50	5.02%
Sr 407.771†	1447040.0	1.41 mg/L	0.085	1.41 mg/L	0.085	6.05%
Li 670.784†	41960.7	0.523 mg/L	0.0010	0.523 mg/L	0.0010	0.19%

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Sequence No.: 15 **Autosampler Location: 55**
Sample ID: L1102051308SD WG357152-05 **Date Collected: 2/24/2011 5:11:32 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051308SD WG357152-05

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102051308SD WG357152-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4882717.0						90642.79	1.86%
YRADIAL	301983.9						2518.17	0.83%
Ga 417.206	1289287.0						42680.86	3.31%
GaRADIAL	63318.5						1532.53	2.42%
Ag 328.068†	39206.8	0.191	mg/L	0.0071	0.191	mg/L	0.0071	3.72%
Al 396.153†	24445.4	4.90	mg/L	0.022	4.90	mg/L	0.022	0.45%
As 188.979†	209.1	0.188	mg/L	0.0062	0.188	mg/L	0.0062	3.28%
Ba 233.527†	33340.6	0.563	mg/L	0.0112	0.563	mg/L	0.0112	1.98%
Be 234.861†	13913.5	0.0241	mg/L	0.00069	0.0241	mg/L	0.00069	2.85%
B 249.677†	53746.3	1.00	mg/L	0.038	1.00	mg/L	0.038	3.78%
Ca 227.546†	6741.9	62.9	mg/L	1.65	62.9	mg/L	1.65	2.63%
Cd 228.802†	417.6	0.0235	mg/L	0.00088	0.0235	mg/L	0.00088	3.74%
Co 228.616†	1839.4	0.0946	mg/L	0.00159	0.0946	mg/L	0.00159	1.68%
Cr 267.716†	28174.1	0.242	mg/L	0.0052	0.242	mg/L	0.0052	2.13%
Cu 327.393†	34691.1	0.235	mg/L	0.0089	0.235	mg/L	0.0089	3.81%
Fe 239.562†	950.0	2.16	mg/L	0.056	2.16	mg/L	0.056	2.60%
Mg 279.077†	21809.9	27.3	mg/L	0.21	27.3	mg/L	0.21	0.76%
Mn 257.610†	139599.7	0.310	mg/L	0.0063	0.310	mg/L	0.0063	2.01%
Mo 202.031†	6744.8	0.498	mg/L	0.0085	0.498	mg/L	0.0085	1.71%
Ni 231.604†	8200.7	0.239	mg/L	0.0043	0.239	mg/L	0.0043	1.80%
Pb 220.353†	1390.1	0.235	mg/L	0.0050	0.235	mg/L	0.0050	2.14%
Sb 206.836†	920.2	0.575	mg/L	0.0166	0.575	mg/L	0.0166	2.88%
Se 196.026†	239.9	0.184	mg/L	0.0037	0.184	mg/L	0.0037	1.99%
Si 251.611†	242884.3	6.91	mg/L	0.254	6.91	mg/L	0.254	3.68%
Sn 189.927†	2939.2	0.507	mg/L	0.0087	0.507	mg/L	0.0087	1.72%
Ti 334.940†	364679.7	0.494	mg/L	0.0101	0.494	mg/L	0.0101	2.05%
Tl 190.801†	480.5	0.283	mg/L	0.0085	0.283	mg/L	0.0085	2.99%

Approved: February 25, 2011

Pierre Morris

V 290.880†	73120.2	0.478	mg/L	0.0111	0.478	mg/L	0.0111 2.31%
Zn 206.200†	15424.9	0.464	mg/L	0.0068	0.464	mg/L	0.0068 1.47%
K 766.490†	72144.9	27.8	mg/L	0.18	27.8	mg/L	0.18 0.65%
Na 589.592†	899238.6	68.3	mg/L	1.44	68.3	mg/L	1.44 2.11%
Sr 407.771†	1379414.0	1.34	mg/L	0.085	1.34	mg/L	0.085 6.35%
Li 670.784†	41291.1	0.514	mg/L	0.0012	0.514	mg/L	0.0012 0.24%

Sequence No.: 16 **Autosampler Location: 56**
Sample ID: L1102053301 **Date Collected: 2/24/2011 5:18:17 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053301

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102053301

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4721990.8						157049.55	3.33%
YRADIAL	291646.3						3773.99	1.29%
Ga 417.206	1225653.8						45394.96	3.70%
GaRADIAL	60142.2						1526.26	2.54%
Ag 328.068†	-109.7	-0.00021	mg/L	0.000400	-0.00021	mg/L	0.000400	193.30%
Al 396.153†	-18.9	-0.0258	mg/L	0.00840	-0.0258	mg/L	0.00840	32.56%
As 188.979†	4.4	0.00266	mg/L	0.002815	0.00266	mg/L	0.002815	105.85%
Ba 233.527†	4594.7	0.0773	mg/L	0.00309	0.0773	mg/L	0.00309	4.00%
Be 234.861†	15.7	0.00000	mg/L	0.000010	0.00000	mg/L	0.000010	306.83%
B 249.677†	4207.0	0.0828	mg/L	0.00442	0.0828	mg/L	0.00442	5.33%
Ca 227.546†	2258.3	21.0	mg/L	0.91	21.0	mg/L	0.91	4.33%
Cd 228.802†	2.5	0.00006	mg/L	0.000115	0.00006	mg/L	0.000115	192.87%
Co 228.616†	7.1	0.00025	mg/L	0.000188	0.00025	mg/L	0.000188	73.59%
Cr 267.716†	246.7	0.00191	mg/L	0.000121	0.00191	mg/L	0.000121	6.34%
Cu 327.393†	-282.2	-0.00145	mg/L	0.000623	-0.00145	mg/L	0.000623	43.07%
Fe 239.562†	120.4	0.274	mg/L	0.0049	0.274	mg/L	0.0049	1.80%
Mg 279.077†	25632.3	32.1	mg/L	1.36	32.1	mg/L	1.36	4.22%
Mn 257.610†	4184.9	0.0157	mg/L	0.00059	0.0157	mg/L	0.00059	3.75%
Mo 202.031†	3.3	0.00012	mg/L	0.000520	0.00012	mg/L	0.000520	424.81%
Ni 231.604†	49.6	0.00128	mg/L	0.000051	0.00128	mg/L	0.000051	4.00%
Pb 220.353†	-0.6	0.00070	mg/L	0.000176	0.00070	mg/L	0.000176	25.17%
Sb 206.836†	3.8	0.00273	mg/L	0.002042	0.00273	mg/L	0.002042	74.83%
Se 196.026†	-9.1	-0.00160	mg/L	0.001341	-0.00160	mg/L	0.001341	83.70%
Si 251.611†	433647.4	12.4	mg/L	0.57	12.4	mg/L	0.57	4.59%
Sn 189.927†	-1.2	-0.00012	mg/L	0.000600	-0.00012	mg/L	0.000600	518.07%
Ti 334.940†	-223.0	-0.00006	mg/L	0.000101	-0.00006	mg/L	0.000101	183.25%
Tl 190.801†	43.5	0.0247	mg/L	0.00248	0.0247	mg/L	0.00248	10.03%
V 290.880†	-754.0	-0.00389	mg/L	0.001766	-0.00389	mg/L	0.001766	45.42%
Zn 206.200†	123.6	0.00338	mg/L	0.000662	0.00338	mg/L	0.000662	19.57%
K 766.490†	6547.8	2.01	mg/L	0.041	2.01	mg/L	0.041	2.05%
Na 589.592†	5653172.7	507	mg/L	15.8	507	mg/L	15.8	3.12%
Sr 407.771†	688567.0	0.669	mg/L	0.0428	0.669	mg/L	0.0428	6.40%
Li 670.784†	3184.4	0.0391	mg/L	0.00220	0.0391	mg/L	0.00220	5.62%

Sequence No.: 17 **Autosampler Location: 57**
Sample ID: L1102053301PS WG357224-03 **Date Collected: 2/24/2011 5:25:04 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053301PS WG357224-03

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102053301PS WG357224-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Approved: February 25, 2011

Pierre Morris

Y 371.029	4781898.6					17302.02	0.36%
YRADIAL	297036.4					3482.56	1.17%
Ga 417.206	1259809.6					28629.34	2.27%
GaRADIAL	62419.6					818.37	1.31%
Ag 328.068†	40505.8	0.197	mg/L	0.0127	0.197 mg/L	0.0127	6.45%
Al 396.153†	26260.8	5.27	mg/L	0.020	5.27 mg/L	0.020	0.37%
As 188.979†	212.7	0.193	mg/L	0.0161	0.193 mg/L	0.0161	8.36%
Ba 233.527†	32979.1	0.557	mg/L	0.0330	0.557 mg/L	0.0330	5.93%
Be 234.861†	14342.3	0.0248	mg/L	0.00186	0.0248 mg/L	0.00186	7.49%
B 249.677†	57075.1	1.07	mg/L	0.068	1.07 mg/L	0.068	6.38%
Ca 227.546†	2466.6	23.1	mg/L	0.65	23.1 mg/L	0.65	2.82%
Cd 228.802†	427.5	0.0241	mg/L	0.00190	0.0241 mg/L	0.00190	7.89%
Co 228.616†	1874.6	0.0965	mg/L	0.00737	0.0965 mg/L	0.00737	7.64%
Cr 267.716†	28510.8	0.245	mg/L	0.0163	0.245 mg/L	0.0163	6.65%
Cu 327.393†	36519.4	0.247	mg/L	0.0176	0.247 mg/L	0.0176	7.14%
Fe 239.562†	1023.7	2.33	mg/L	0.031	2.33 mg/L	0.031	1.33%
Mg 279.077†	25421.6	31.9	mg/L	0.14	31.9 mg/L	0.14	0.43%
Mn 257.610†	116007.7	0.263	mg/L	0.0169	0.263 mg/L	0.0169	6.43%
Mo 202.031†	6656.4	0.492	mg/L	0.0368	0.492 mg/L	0.0368	7.48%
Ni 231.604†	8344.7	0.243	mg/L	0.0181	0.243 mg/L	0.0181	7.44%
Pb 220.353†	1409.2	0.236	mg/L	0.0170	0.236 mg/L	0.0170	7.18%
Sb 206.836†	932.1	0.583	mg/L	0.0460	0.583 mg/L	0.0460	7.89%
Se 196.026†	271.1	0.196	mg/L	0.0127	0.196 mg/L	0.0127	6.47%
Si 251.611†	462283.2	13.2	mg/L	0.24	13.2 mg/L	0.24	1.80%
Sn 189.927†	-13.3	-0.00220	mg/L	0.000645	-0.00220 mg/L	0.000645	29.28%
Ti 334.940†	372389.3	0.504	mg/L	0.0275	0.504 mg/L	0.0275	5.46%
Tl 190.801†	429.9	0.257	mg/L	0.0166	0.257 mg/L	0.0166	6.45%
V 290.880†	74932.6	0.490	mg/L	0.0335	0.490 mg/L	0.0335	6.83%
Zn 206.200†	16334.7	0.492	mg/L	0.0302	0.492 mg/L	0.0302	6.13%
K 766.490†	74285.5	28.3	mg/L	0.13	28.3 mg/L	0.13	0.46%
Na 589.592†	5175522.3	454	mg/L	12.7	454 mg/L	12.7	2.80%
Sr 407.771†	1169004.4	1.14	mg/L	0.068	1.14 mg/L	0.068	6.00%
Li 670.784†	45469.8	0.566	mg/L	0.0054	0.566 mg/L	0.0054	0.95%

Sequence No.: 18 **Autosampler Location: 58**
Sample ID: L1102053301DL WG357224-04 **Date Collected: 2/24/2011 5:31:53 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053301DL WG357224-04

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102053301DL WG357224-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4746980.0						20931.06	0.44%
YRADIAL	297797.9						7579.06	2.55%
Ga 417.206	1231942.4						6141.97	0.50%
GaRADIAL	61316.9						1078.61	1.76%
Ag 328.068†	-85.1	0.00004	mg/L	0.000732	0.00004	mg/L	0.000732	>999.9%
Al 396.153†	-11.6	-0.0243	mg/L	0.01771	-0.0243	mg/L	0.01771	72.81%
As 188.979†	-1.6	-0.00253	mg/L	0.001561	-0.00253	mg/L	0.001561	61.72%
Ba 233.527†	961.2	0.0161	mg/L	0.00015	0.0161	mg/L	0.00015	0.94%
Be 234.861†	-8.4	0.00000	mg/L	0.000004	0.00000	mg/L	0.000004	99.06%
B 249.677†	1366.7	0.0292	mg/L	0.00041	0.0292	mg/L	0.00041	1.42%
Ca 227.546†	454.7	4.20	mg/L	0.137	4.20	mg/L	0.137	3.26%
Cd 228.802†	2.2	0.00007	mg/L	0.000085	0.00007	mg/L	0.000085	115.02%
Co 228.616†	-4.5	-0.00032	mg/L	0.000052	-0.00032	mg/L	0.000052	15.88%
Cr 267.716†	30.0	0.00005	mg/L	0.000043	0.00005	mg/L	0.000043	83.48%
Cu 327.393†	-137.3	-0.00049	mg/L	0.001128	-0.00049	mg/L	0.001128	230.75%
Fe 239.562†	24.5	0.0562	mg/L	0.00307	0.0562	mg/L	0.00307	5.45%
Mg 279.077†	5091.8	6.38	mg/L	0.100	6.38	mg/L	0.100	1.57%
Mn 257.610†	1082.0	0.00321	mg/L	0.000015	0.00321	mg/L	0.000015	0.48%
Mo 202.031†	0.6	-0.00009	mg/L	0.000856	-0.00009	mg/L	0.000856	987.94%
Ni 231.604†	19.0	0.00040	mg/L	0.000348	0.00040	mg/L	0.000348	87.23%
Pb 220.353†	4.1	0.00068	mg/L	0.000921	0.00068	mg/L	0.000921	136.15%
Sb 206.836†	1.1	0.00104	mg/L	0.003273	0.00104	mg/L	0.003273	314.66%
Se 196.026†	-1.3	-0.00039	mg/L	0.001106	-0.00039	mg/L	0.001106	283.61%

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Si 251.611†	90756.2	2.57	mg/L	0.041	2.57	mg/L	0.041 1.59%
Sn 189.927†	-7.1	-0.00114	mg/L	0.000517	-0.00114	mg/L	0.000517 45.52%
Ti 334.940†	24.4	0.00011	mg/L	0.000113	0.00011	mg/L	0.000113 100.91%
Tl 190.801†	3.8	0.00290	mg/L	0.002333	0.00290	mg/L	0.002333 80.54%
V 290.880†	-115.0	0.00027	mg/L	0.000634	0.00027	mg/L	0.000634 233.43%
Zn 206.200†	19.9	0.00026	mg/L	0.000055	0.00026	mg/L	0.000055 20.95%
K 766.490†	1330.7	0.419	mg/L	0.0161	0.419	mg/L	0.0161 3.85%
Na 589.592†	1179453.5	90.2	mg/L	0.99	90.2	mg/L	0.99 1.09%
Sr 407.771†	137435.8	0.134	mg/L	0.0097	0.134	mg/L	0.0097 7.26%
Li 670.784†	724.6	0.00843	mg/L	0.000908	0.00843	mg/L	0.000908 10.77%

Sequence No.: 19 **Autosampler Location: 59**
Sample ID: L1102053302 **Date Collected: 2/24/2011 5:38:37 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053302

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102053302

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4676576.4						25066.61	0.54%
YRADIAL	293003.6						3908.94	1.33%
Ga 417.206	1224840.2						9240.54	0.75%
GaRADIAL	60993.6						1057.17	1.73%
Ag 328.068†	-32.7	0.00017	mg/L	0.000639	0.00017	mg/L	0.000639	384.34%
Al 396.153†	65.4	-0.00879	mg/L	0.008559	-0.00879	mg/L	0.008559	97.39%
As 188.979†	1.7	0.00018	mg/L	0.002071	0.00018	mg/L	0.002071	>999.9%
Ba 233.527†	4806.9	0.0809	mg/L	0.00078	0.0809	mg/L	0.00078	0.97%
Be 234.861†	16.9	0.00000	mg/L	0.000017	0.00000	mg/L	0.000017	>999.9%
B 249.677†	4083.0	0.0807	mg/L	0.00142	0.0807	mg/L	0.00142	1.77%
Ca 227.546†	2297.7	21.3	mg/L	0.27	21.3	mg/L	0.27	1.25%
Cd 228.802†	1.0	-0.00001	mg/L	0.000110	-0.00001	mg/L	0.000110	863.29%
Co 228.616†	0.8	-0.00008	mg/L	0.000099	-0.00008	mg/L	0.000099	131.03%
Cr 267.716†	290.7	0.00229	mg/L	0.000051	0.00229	mg/L	0.000051	2.23%
Cu 327.393†	-101.4	-0.00022	mg/L	0.000677	-0.00022	mg/L	0.000677	302.27%
Fe 239.562†	134.2	0.305	mg/L	0.0074	0.305	mg/L	0.0074	2.42%
Mg 279.077†	25467.8	31.9	mg/L	0.49	31.9	mg/L	0.49	1.53%
Mn 257.610†	4549.6	0.0164	mg/L	0.00018	0.0164	mg/L	0.00018	1.10%
Mo 202.031†	2.2	0.00004	mg/L	0.000337	0.00004	mg/L	0.000337	848.34%
Ni 231.604†	60.5	0.00160	mg/L	0.000144	0.00160	mg/L	0.000144	9.03%
Pb 220.353†	-4.6	0.00006	mg/L	0.000740	0.00006	mg/L	0.000740	>999.9%
Sb 206.836†	0.8	0.00084	mg/L	0.001213	0.00084	mg/L	0.001213	144.24%
Se 196.026†	-14.4	-0.00523	mg/L	0.001135	-0.00523	mg/L	0.001135	21.69%
Si 251.611†	442458.0	12.6	mg/L	0.12	12.6	mg/L	0.12	0.94%
Sn 189.927†	-3.9	-0.00059	mg/L	0.000668	-0.00059	mg/L	0.000668	113.53%
Ti 334.940†	-212.7	-0.00004	mg/L	0.000154	-0.00004	mg/L	0.000154	406.81%
Tl 190.801†	32.8	0.0184	mg/L	0.00277	0.0184	mg/L	0.00277	15.08%
V 290.880†	-718.6	-0.00366	mg/L	0.000635	-0.00366	mg/L	0.000635	17.37%
Zn 206.200†	168.3	0.00472	mg/L	0.000143	0.00472	mg/L	0.000143	3.03%
K 766.490†	6343.4	1.95	mg/L	0.100	1.95	mg/L	0.100	5.13%
Na 589.592†	5495986.3	489	mg/L	6.6	489	mg/L	6.6	1.34%
Sr 407.771†	683724.8	0.665	mg/L	0.0556	0.665	mg/L	0.0556	8.36%
Li 670.784†	2908.2	0.0357	mg/L	0.00076	0.0357	mg/L	0.00076	2.13%

Sequence No.: 20 **Autosampler Location: 60**
Sample ID: L1102053701 **Date Collected: 2/24/2011 5:45:24 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053701

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

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Mean Data: L1102053701

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5010356.9						53171.59	1.06%
YRADIAL	304990.3						5540.34	1.82%
Ga 417.206	1300130.3						10743.67	0.83%
GaRADIAL	62810.9						408.10	0.65%
Ag 328.068†	-130.6	-0.00016	mg/L	0.000359	-0.00016	mg/L	0.000359	228.07%
Al 396.153†	814.1	0.142	mg/L	0.0131	0.142	mg/L	0.0131	9.23%
As 188.979†	0.1	-0.00087	mg/L	0.000410	-0.00087	mg/L	0.000410	47.33%
Ba 233.527†	96.9	0.00151	mg/L	0.000076	0.00151	mg/L	0.000076	5.02%
Be 234.861†	22.1	0.00004	mg/L	0.000009	0.00004	mg/L	0.000009	21.18%
B 249.677†	2650.8	0.0531	mg/L	0.00143	0.0531	mg/L	0.00143	2.69%
Ca 227.546†	121.3	1.10	mg/L	0.088	1.10	mg/L	0.088	8.00%
Cd 228.802†	1.4	0.00002	mg/L	0.000255	0.00002	mg/L	0.000255	>999.9%
Co 228.616†	3.7	0.00010	mg/L	0.000121	0.00010	mg/L	0.000121	120.97%
Cr 267.716†	83.7	0.00051	mg/L	0.000161	0.00051	mg/L	0.000161	31.71%
Cu 327.393†	667.9	0.00494	mg/L	0.000855	0.00494	mg/L	0.000855	17.30%
Fe 239.562†	54.6	0.125	mg/L	0.0055	0.125	mg/L	0.0055	4.37%
Mg 279.077†	61.0	0.0714	mg/L	0.00506	0.0714	mg/L	0.00506	7.10%
Mn 257.610†	4389.6	0.00924	mg/L	0.000161	0.00924	mg/L	0.000161	1.75%
Mo 202.031†	-3.1	-0.00035	mg/L	0.000315	-0.00035	mg/L	0.000315	89.26%
Ni 231.604†	16.5	0.00033	mg/L	0.000168	0.00033	mg/L	0.000168	50.86%
Pb 220.353†	11.5	0.00176	mg/L	0.000299	0.00176	mg/L	0.000299	17.00%
Sb 206.836†	0.3	0.00053	mg/L	0.000475	0.00053	mg/L	0.000475	89.10%
Se 196.026†	3.5	0.00222	mg/L	0.003164	0.00222	mg/L	0.003164	142.47%
Si 251.611†	10967.7	0.290	mg/L	0.0115	0.290	mg/L	0.0115	3.98%
Sn 189.927†	-8.1	-0.00131	mg/L	0.000671	-0.00131	mg/L	0.000671	51.10%
Ti 334.940†	2636.4	0.00361	mg/L	0.000412	0.00361	mg/L	0.000412	11.40%
Tl 190.801†	-4.1	-0.00138	mg/L	0.001780	-0.00138	mg/L	0.001780	128.60%
V 290.880†	166.7	0.00212	mg/L	0.000658	0.00212	mg/L	0.000658	31.05%
Zn 206.200†	97.7	0.00260	mg/L	0.000243	0.00260	mg/L	0.000243	9.36%
K 766.490†	385.0	0.144	mg/L	0.0124	0.144	mg/L	0.0124	8.57%
Na 589.592†	8894.4	0.653	mg/L	0.0151	0.653	mg/L	0.0151	2.31%
Sr 407.771†	794.8	0.00071	mg/L	0.000141	0.00071	mg/L	0.000141	19.84%
Li 670.784†	46.6	-0.00003	mg/L	0.000795	-0.00003	mg/L	0.000795	>999.9%

Sequence No.: 21 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/24/2011 5:52:07 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4862284.5						34753.30	0.71%
YRADIAL	298822.3						2160.84	0.72%
Ga 417.206	1245581.8						7728.80	0.62%
GaRADIAL	61487.5						796.56	1.30%
Ag 328.068†	80524.8	0.392	mg/L	0.0036	0.392	mg/L	0.0036	0.92%
QC value within limits for Ag 328.068 Recovery = 98.06%								
Al 396.153†	50211.1	10.1	mg/L	0.10	10.1	mg/L	0.10	0.99%
QC value within limits for Al 396.153 Recovery = 100.88%								
As 188.979†	428.0	0.389	mg/L	0.0027	0.389	mg/L	0.0027	0.68%
QC value within limits for As 188.979 Recovery = 97.30%								
Ba 233.527†	58290.4	0.985	mg/L	0.0118	0.985	mg/L	0.0118	1.20%
QC value within limits for Ba 233.527 Recovery = 98.52%								
Be 234.861†	28651.5	0.0497	mg/L	0.00056	0.0497	mg/L	0.00056	1.12%
QC value within limits for Be 234.861 Recovery = 99.33%								
B 249.677†	26272.7	0.496	mg/L	0.0024	0.496	mg/L	0.0024	0.49%
QC value within limits for B 249.677 Recovery = 99.25%								
Ca 227.546†	1057.7	10.2	mg/L	0.08	10.2	mg/L	0.08	0.80%
QC value within limits for Ca 227.546 Recovery = 101.54%								
Cd 228.802†	878.9	0.0496	mg/L	0.00043	0.0496	mg/L	0.00043	0.87%

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QC value within limits for Cd 228.802 Recovery = 99.22%
Co 228.616† 3833.8 0.198 mg/L 0.0011 0.198 mg/L 0.0011 0.58%
QC value within limits for Co 228.616 Recovery = 98.76%
Cr 267.716† 56822.7 0.489 mg/L 0.0048 0.489 mg/L 0.0048 0.97%
QC value within limits for Cr 267.716 Recovery = 97.83%
Cu 327.393† 72912.8 0.493 mg/L 0.0019 0.493 mg/L 0.0019 0.39%
QC value within limits for Cu 327.393 Recovery = 98.57%
Fe 239.562† 1719.1 3.91 mg/L 0.033 3.91 mg/L 0.033 0.84%
QC value within limits for Fe 239.562 Recovery = 97.87%
Mg 279.077† 7963.0 9.98 mg/L 0.040 9.98 mg/L 0.040 0.41%
QC value within limits for Mg 279.077 Recovery = 99.81%
Mn 257.610† 223635.1 0.496 mg/L 0.0059 0.496 mg/L 0.0059 1.20%
QC value within limits for Mn 257.610 Recovery = 99.19%
Mo 202.031† 13301.3 0.982 mg/L 0.0071 0.982 mg/L 0.0071 0.72%
QC value within limits for Mo 202.031 Recovery = 98.23%
Ni 231.604† 16994.1 0.495 mg/L 0.0062 0.495 mg/L 0.0062 1.25%
QC value within limits for Ni 231.604 Recovery = 98.99%
Pb 220.353† 2933.8 0.490 mg/L 0.0046 0.490 mg/L 0.0046 0.95%
QC value within limits for Pb 220.353 Recovery = 98.07%
Sb 206.836† 1890.2 1.18 mg/L 0.006 1.18 mg/L 0.006 0.48%
QC value within limits for Sb 206.836 Recovery = 98.45%
Se 196.026† 572.4 0.404 mg/L 0.0033 0.404 mg/L 0.0033 0.82%
QC value within limits for Se 196.026 Recovery = 101.04%
Si 251.611† 170839.9 4.85 mg/L 0.048 4.85 mg/L 0.048 1.00%
QC value within limits for Si 251.611 Recovery = 96.91%
Sn 189.927† 5770.6 0.994 mg/L 0.0069 0.994 mg/L 0.0069 0.70%
QC value within limits for Sn 189.927 Recovery = 99.45%
Ti 334.940† 730334.3 0.988 mg/L 0.0047 0.988 mg/L 0.0047 0.48%
QC value within limits for Ti 334.940 Recovery = 98.75%
Tl 190.801† 833.3 0.500 mg/L 0.0073 0.500 mg/L 0.0073 1.45%
QC value within limits for Tl 190.801 Recovery = 100.06%
V 290.880† 148847.6 0.973 mg/L 0.0091 0.973 mg/L 0.0091 0.93%
QC value within limits for V 290.880 Recovery = 97.29%
Zn 206.200† 32245.3 0.971 mg/L 0.0126 0.971 mg/L 0.0126 1.30%
QC value within limits for Zn 206.200 Recovery = 97.11%
K 766.490† 128524.3 49.8 mg/L 0.58 49.8 mg/L 0.58 1.17%
QC value within limits for K 766.490 Recovery = 99.67%
Na 589.592† 662013.4 49.9 mg/L 0.48 49.9 mg/L 0.48 0.96%
QC value within limits for Na 589.592 Recovery = 99.86%
Sr 407.771† 1054449.8 1.02 mg/L 0.059 1.02 mg/L 0.059 5.72%
QC value within limits for Sr 407.771 Recovery = 102.46%
Li 670.784† 81003.7 1.01 mg/L 0.006 1.01 mg/L 0.006 0.60%
QC value within limits for Li 670.784 Recovery = 100.95%
All analyte(s) passed QC.

Sequence No.: 22 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/24/2011 5:58:47 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5105562.2						16571.11	0.32%
YRADIAL	298267.4						3922.89	1.32%
Ga 417.206	1281795.9						26449.38	2.06%
GaRADIAL	60854.9						1382.78	2.27%
Ag 328.068†	-161.0	-0.00030	mg/L	0.000213	-0.00030	mg/L	0.000213	71.29%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	70.5	-0.00778	mg/L	0.015409	-0.00778	mg/L	0.015409	198.03%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	3.0	0.00177	mg/L	0.001374	0.00177	mg/L	0.001374	77.41%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-4.1	-0.00019	mg/L	0.000115	-0.00019	mg/L	0.000115	59.98%
QC value within limits for Ba 233.527 Recovery = Not calculated								

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Be 234.861†	-2.1	0.00003 mg/L	0.000009	0.00003 mg/L	0.000009	34.30%
QC value within limits for Be 234.861 Recovery = Not calculated						
B 249.677†	264.8	0.00847 mg/L	0.000768	0.00847 mg/L	0.000768	9.06%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	3.9	0.00784 mg/L	0.046354	0.00784 mg/L	0.046354	591.23%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Cd 228.802†	1.4	0.00000 mg/L	0.000123	0.00000 mg/L	0.000123	>999.9%
QC value within limits for Cd 228.802 Recovery = Not calculated						
Co 228.616†	1.3	-0.00001 mg/L	0.000190	-0.00001 mg/L	0.000190	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-10.1	-0.00029 mg/L	0.000055	-0.00029 mg/L	0.000055	18.56%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	-2.3	0.00041 mg/L	0.000512	0.00041 mg/L	0.000512	123.45%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	-2.3	-0.00474 mg/L	0.002252	-0.00474 mg/L	0.002252	47.54%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	-3.6	-0.00950 mg/L	0.003710	-0.00950 mg/L	0.003710	39.05%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-9.4	-0.00051 mg/L	0.000009	-0.00051 mg/L	0.000009	1.68%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	2.7	0.00006 mg/L	0.000383	0.00006 mg/L	0.000383	611.38%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	3.2	-0.00006 mg/L	0.000048	-0.00006 mg/L	0.000048	82.38%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-0.5	-0.00028 mg/L	0.000645	-0.00028 mg/L	0.000645	228.06%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	-1.6	-0.00063 mg/L	0.001420	-0.00063 mg/L	0.001420	225.44%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-2.5	-0.00230 mg/L	0.004067	-0.00230 mg/L	0.004067	176.48%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-10.1	-0.0241 mg/L	0.00037	-0.0241 mg/L	0.00037	1.53%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	0.9	0.00024 mg/L	0.000688	0.00024 mg/L	0.000688	283.73%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	161.6	0.00026 mg/L	0.000179	0.00026 mg/L	0.000179	70.06%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-9.4	-0.00447 mg/L	0.001687	-0.00447 mg/L	0.001687	37.78%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	-77.4	0.00051 mg/L	0.000187	0.00051 mg/L	0.000187	36.48%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	-65.1	-0.00229 mg/L	0.000114	-0.00229 mg/L	0.000114	4.97%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	145.7	0.0531 mg/L	0.02717	0.0531 mg/L	0.02717	51.21%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	1020.1	0.0695 mg/L	0.01391	0.0695 mg/L	0.01391	20.01%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	-77.9	-0.00012 mg/L	0.000055	-0.00012 mg/L	0.000055	45.75%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	95.6	0.00058 mg/L	0.001722	0.00058 mg/L	0.001722	294.47%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 23 **Autosampler Location: 61**
Sample ID: L1102053702 **Date Collected: 2/24/2011 6:05:24 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053702

Analyte	**Back Pressure**	**Flow**
All	169.0 kPa	0.50 L/min

Mean Data: L1102053702

Analyte	**Mean Corrected Intensity**	**Calib. Conc.**	**Units**	**Std.Dev.**	**Sample Conc.**	**Units**	**Std.Dev.**	**RSD**
Y 371.029	5125431.9						34435.50	0.67%
YRADIAL	301962.1						6330.17	2.10%
Ga 417.206	1326766.5						12416.02	0.94%
GaRADIAL	62234.3						1490.47	2.39%
Ag 328.068†	-29.1	0.00034	mg/L	0.000479	0.00034	mg/L	0.000479	142.23%

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Al 396.153†	552.0	0.0893 mg/L	0.01694	0.0893 mg/L	0.01694	18.96%
As 188.979†	-0.1	-0.00110 mg/L	0.001945	-0.00110 mg/L	0.001945	177.45%
Ba 233.527†	100.8	0.00158 mg/L	0.000014	0.00158 mg/L	0.000014	0.91%
Be 234.861†	19.0	0.00005 mg/L	0.000039	0.00005 mg/L	0.000039	84.18%
B 249.677†	2320.6	0.0468 mg/L	0.00138	0.0468 mg/L	0.00138	2.94%
Ca 227.546†	41.5	0.358 mg/L	0.0424	0.358 mg/L	0.0424	11.85%
Cd 228.802†	-2.3	-0.00019 mg/L	0.000172	-0.00019 mg/L	0.000172	88.52%
Co 228.616†	-3.3	-0.00026 mg/L	0.000240	-0.00026 mg/L	0.000240	92.12%
Cr 267.716†	38.2	0.00012 mg/L	0.000035	0.00012 mg/L	0.000035	29.45%
Cu 327.393†	1681.7	0.0118 mg/L	0.00077	0.0118 mg/L	0.00077	6.51%
Fe 239.562†	34.8	0.0799 mg/L	0.00058	0.0799 mg/L	0.00058	0.72%
Mg 279.077†	21.8	0.0222 mg/L	0.00501	0.0222 mg/L	0.00501	22.59%
Mn 257.610†	2591.6	0.00525 mg/L	0.000051	0.00525 mg/L	0.000051	0.98%
Mo 202.031†	-1.3	-0.00023 mg/L	0.000039	-0.00023 mg/L	0.000039	17.16%
Ni 231.604†	3.6	-0.00005 mg/L	0.000212	-0.00005 mg/L	0.000212	466.45%
Pb 220.353†	7.2	0.00100 mg/L	0.000330	0.00100 mg/L	0.000330	32.80%
Sb 206.836†	-3.4	-0.00176 mg/L	0.001146	-0.00176 mg/L	0.001146	65.05%
Se 196.026†	-0.7	-0.00092 mg/L	0.006496	-0.00092 mg/L	0.006496	705.84%
Si 251.611†	5818.4	0.143 mg/L	0.0057	0.143 mg/L	0.0057	3.98%
Sn 189.927†	-4.3	-0.00065 mg/L	0.000708	-0.00065 mg/L	0.000708	108.15%
Ti 334.940†	987.3	0.00138 mg/L	0.000146	0.00138 mg/L	0.000146	10.62%
Tl 190.801†	-9.5	-0.00448 mg/L	0.000775	-0.00448 mg/L	0.000775	17.29%
V 290.880†	61.4	0.00143 mg/L	0.000330	0.00143 mg/L	0.000330	23.17%
Zn 206.200†	126.1	0.00346 mg/L	0.000136	0.00346 mg/L	0.000136	3.94%
K 766.490†	249.3	0.0926 mg/L	0.00427	0.0926 mg/L	0.00427	4.62%
Na 589.592†	5486.2	0.401 mg/L	0.0079	0.401 mg/L	0.0079	1.96%
Sr 407.771†	79.5	0.00002 mg/L	0.000084	0.00002 mg/L	0.000084	381.80%
Li 670.784†	86.5	0.00047 mg/L	0.001917	0.00047 mg/L	0.001917	406.17%

Sequence No.: 24 **Autosampler Location: 62**
Sample ID: L1102053703 **Date Collected: 2/24/2011 6:12:05 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053703

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102053703

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5110091.7						45860.57	0.90%
YRADIAL	318144.8						7233.22	2.27%
Ga 417.206	1319535.2						25235.42	1.91%
GaRADIAL	64803.6						784.36	1.21%
Ag 328.068†	-103.5	-0.00002	mg/L	0.000647	-0.00002	mg/L	0.000647	>999.9%
Al 396.153†	134.3	0.00510	mg/L	0.012588	0.00510	mg/L	0.012588	246.89%
As 188.979†	2.6	0.00136	mg/L	0.003552	0.00136	mg/L	0.003552	261.38%
Ba 233.527†	5.1	-0.00004	mg/L	0.000036	-0.00004	mg/L	0.000036	94.92%
Be 234.861†	4.3	0.00004	mg/L	0.000004	0.00004	mg/L	0.000004	10.52%
B 249.677†	2560.0	0.0510	mg/L	0.00217	0.0510	mg/L	0.00217	4.26%
Ca 227.546†	9.7	0.0611	mg/L	0.05572	0.0611	mg/L	0.05572	91.24%
Cd 228.802†	-2.8	-0.00023	mg/L	0.000081	-0.00023	mg/L	0.000081	34.33%
Co 228.616†	0.2	-0.00007	mg/L	0.000292	-0.00007	mg/L	0.000292	392.77%
Cr 267.716†	32.9	0.00008	mg/L	0.000073	0.00008	mg/L	0.000073	95.25%
Cu 327.393†	486.0	0.00370	mg/L	0.000868	0.00370	mg/L	0.000868	23.45%
Fe 239.562†	0.9	0.00262	mg/L	0.004350	0.00262	mg/L	0.004350	165.77%
Mg 279.077†	8.3	0.00537	mg/L	0.002410	0.00537	mg/L	0.002410	44.88%
Mn 257.610†	153.7	-0.00013	mg/L	0.000034	-0.00013	mg/L	0.000034	26.18%
Mo 202.031†	0.1	-0.00013	mg/L	0.000483	-0.00013	mg/L	0.000483	379.42%
Ni 231.604†	-3.8	-0.00026	mg/L	0.000131	-0.00026	mg/L	0.000131	50.51%
Pb 220.353†	4.4	0.00054	mg/L	0.000317	0.00054	mg/L	0.000317	59.13%
Sb 206.836†	-4.2	-0.00226	mg/L	0.002274	-0.00226	mg/L	0.002274	100.53%
Se 196.026†	2.2	0.00100	mg/L	0.002596	0.00100	mg/L	0.002596	259.04%
Si 251.611†	2162.3	0.0380	mg/L	0.00183	0.0380	mg/L	0.00183	4.82%
Sn 189.927†	-5.8	-0.00092	mg/L	0.000612	-0.00092	mg/L	0.000612	66.59%
Ti 334.940†	163.2	0.00026	mg/L	0.000082	0.00026	mg/L	0.000082	31.71%
Tl 190.801†	-9.5	-0.00453	mg/L	0.002714	-0.00453	mg/L	0.002714	59.95%
V 290.880†	-54.5	0.00066	mg/L	0.000781	0.00066	mg/L	0.000781	117.87%

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Zn 206.200†	52.9	0.00126	mg/L	0.000249	0.00126	mg/L	0.000249 19.87%
K 766.490†	66.0	0.0217	mg/L	0.04073	0.0217	mg/L	0.04073 187.40%
Na 589.592†	10074.4	0.741	mg/L	0.0043	0.741	mg/L	0.0043 0.58%
Sr 407.771†	-109.4	-0.00015	mg/L	0.000022	-0.00015	mg/L	0.000022 14.29%
Li 670.784†	98.7	0.00062	mg/L	0.001182	0.00062	mg/L	0.001182 189.69%

Sequence No.: 25 **Autosampler Location: 63**
Sample ID: L1102053704 **Date Collected: 2/24/2011 6:18:47 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053704

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102053704

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5180232.0						57067.23	1.10%
YRADIAL	312704.2						8331.34	2.66%
Ga 417.206	1333681.7						31115.51	2.33%
GaRADIAL	64232.8						981.35	1.53%
Ag 328.068†	-33.5	0.00032	mg/L	0.001020	0.00032	mg/L	0.001020	320.32%
Al 396.153†	73.6	-0.00716	mg/L	0.006903	-0.00716	mg/L	0.006903	96.42%
As 188.979†	0.5	-0.00051	mg/L	0.001663	-0.00051	mg/L	0.001663	326.63%
Ba 233.527†	0.2	-0.00012	mg/L	0.000052	-0.00012	mg/L	0.000052	43.21%
Be 234.861†	7.2	0.00004	mg/L	0.000016	0.00004	mg/L	0.000016	39.00%
B 249.677†	2132.7	0.0431	mg/L	0.00174	0.0431	mg/L	0.00174	4.04%
Ca 227.546†	7.7	0.0427	mg/L	0.02657	0.0427	mg/L	0.02657	62.21%
Cd 228.802†	-1.8	-0.00016	mg/L	0.000150	-0.00016	mg/L	0.000150	90.82%
Co 228.616†	3.9	0.00012	mg/L	0.000077	0.00012	mg/L	0.000077	63.62%
Cr 267.716†	33.2	0.00008	mg/L	0.000064	0.00008	mg/L	0.000064	80.43%
Cu 327.393†	-50.0	0.00009	mg/L	0.000477	0.00009	mg/L	0.000477	508.90%
Fe 239.562†	0.2	0.00106	mg/L	0.002142	0.00106	mg/L	0.002142	202.02%
Mg 279.077†	0.5	-0.00446	mg/L	0.001244	-0.00446	mg/L	0.001244	27.88%
Mn 257.610†	18.5	-0.00043	mg/L	0.000017	-0.00043	mg/L	0.000017	3.83%
Mo 202.031†	1.4	-0.00004	mg/L	0.000396	-0.00004	mg/L	0.000396	>999.9%
Ni 231.604†	-1.4	-0.00019	mg/L	0.000140	-0.00019	mg/L	0.000140	73.76%
Pb 220.353†	-2.4	-0.00060	mg/L	0.001517	-0.00060	mg/L	0.001517	253.99%
Sb 206.836†	-0.7	-0.00004	mg/L	0.001472	-0.00004	mg/L	0.001472	>999.9%
Se 196.026†	4.0	0.00222	mg/L	0.002722	0.00222	mg/L	0.002722	122.64%
Si 251.611†	1914.3	0.0309	mg/L	0.00174	0.0309	mg/L	0.00174	5.62%
Sn 189.927†	-8.8	-0.00144	mg/L	0.000459	-0.00144	mg/L	0.000459	31.95%
Ti 334.940†	249.0	0.00037	mg/L	0.000063	0.00037	mg/L	0.000063	16.75%
Tl 190.801†	-9.8	-0.00469	mg/L	0.001877	-0.00469	mg/L	0.001877	39.99%
V 290.880†	-123.5	0.00021	mg/L	0.001081	0.00021	mg/L	0.001081	509.13%
Zn 206.200†	-19.1	-0.00091	mg/L	0.000054	-0.00091	mg/L	0.000054	5.99%
K 766.490†	-24.4	-0.0126	mg/L	0.00698	-0.0126	mg/L	0.00698	55.33%
Na 589.592†	4374.3	0.318	mg/L	0.0076	0.318	mg/L	0.0076	2.39%
Sr 407.771†	11.4	-0.00003	mg/L	0.000066	-0.00003	mg/L	0.000066	188.86%
Li 670.784†	-15.9	-0.00081	mg/L	0.001106	-0.00081	mg/L	0.001106	137.32%

Sequence No.: 26 **Autosampler Location: 64**
Sample ID: L1102053705 **Date Collected: 2/24/2011 6:25:24 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053705

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102053705

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5190975.5						42406.02	0.82%

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YRADIAL	312363.3					3931.70	1.26%
Ga 417.206	1352797.9					37238.10	2.75%
GaRADIAL	63976.2					1419.81	2.22%
Ag 328.068†	-66.6	0.00016	mg/L	0.000666	0.00016 mg/L	0.000666	421.34%
Al 396.153†	96.8	-0.00248	mg/L	0.010857	-0.00248 mg/L	0.010857	438.64%
As 188.979†	0.3	-0.00069	mg/L	0.000056	-0.00069 mg/L	0.000056	8.19%
Ba 233.527†	-1.7	-0.00015	mg/L	0.000123	-0.00015 mg/L	0.000123	80.84%
Be 234.861†	25.7	0.00007	mg/L	0.000052	0.00007 mg/L	0.000052	70.92%
B 249.677†	2013.7	0.0409	mg/L	0.00182	0.0409 mg/L	0.00182	4.44%
Ca 227.546†	6.4	0.0312	mg/L	0.05765	0.0312 mg/L	0.05765	184.64%
Cd 228.802†	1.0	0.00000	mg/L	0.000067	0.00000 mg/L	0.000067	>999.9%
Co 228.616†	1.8	0.00001	mg/L	0.000182	0.00001 mg/L	0.000182	>999.9%
Cr 267.716†	17.0	-0.00006	mg/L	0.000121	-0.00006 mg/L	0.000121	201.23%
Cu 327.393†	151.7	0.00145	mg/L	0.000320	0.00145 mg/L	0.000320	22.08%
Fe 239.562†	-0.1	0.00031	mg/L	0.002527	0.00031 mg/L	0.002527	828.06%
Mg 279.077†	5.4	0.00170	mg/L	0.008274	0.00170 mg/L	0.008274	487.36%
Mn 257.610†	57.8	-0.00035	mg/L	0.000017	-0.00035 mg/L	0.000017	4.99%
Mo 202.031†	-1.3	-0.00023	mg/L	0.000385	-0.00023 mg/L	0.000385	167.55%
Ni 231.604†	5.7	0.00001	mg/L	0.000167	0.00001 mg/L	0.000167	>999.9%
Pb 220.353†	3.3	0.00035	mg/L	0.001191	0.00035 mg/L	0.001191	342.78%
Sb 206.836†	-4.8	-0.00264	mg/L	0.000705	-0.00264 mg/L	0.000705	26.69%
Se 196.026†	1.1	0.00019	mg/L	0.000374	0.00019 mg/L	0.000374	199.31%
Si 251.611†	1936.3	0.0315	mg/L	0.00188	0.0315 mg/L	0.00188	5.96%
Sn 189.927†	-11.3	-0.00187	mg/L	0.000803	-0.00187 mg/L	0.000803	42.89%
Ti 334.940†	54.3	0.00011	mg/L	0.000027	0.00011 mg/L	0.000027	24.88%
Tl 190.801†	-6.8	-0.00290	mg/L	0.002306	-0.00290 mg/L	0.002306	79.52%
V 290.880†	-106.0	0.00033	mg/L	0.000586	0.00033 mg/L	0.000586	179.17%
Zn 206.200†	-10.0	-0.00063	mg/L	0.000142	-0.00063 mg/L	0.000142	22.31%
K 766.490†	-52.2	-0.0233	mg/L	0.01834	-0.0233 mg/L	0.01834	78.71%
Na 589.592†	4360.7	0.317	mg/L	0.0106	0.317 mg/L	0.0106	3.33%
Sr 407.771†	-238.5	-0.00028	mg/L	0.000068	-0.00028 mg/L	0.000068	24.62%
Li 670.784†	76.4	0.00035	mg/L	0.000614	0.00035 mg/L	0.000614	177.78%

Sequence No.: 27 **Autosampler Location: 65**
Sample ID: L1102053706 **Date Collected: 2/24/2011 6:32:05 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053706

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102053706

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5153026.7						19348.47	0.38%
YRADIAL	306877.4						3714.90	1.21%
Ga 417.206	1328384.8						6693.20	0.50%
GaRADIAL	63002.9						617.65	0.98%
Ag 328.068†	-141.1	-0.00021	mg/L	0.000142	-0.00021	mg/L	0.000142	69.25%
Al 396.153†	246.2	0.0277	mg/L	0.01792	0.0277	mg/L	0.01792	64.80%
As 188.979†	-0.4	-0.00132	mg/L	0.003510	-0.00132	mg/L	0.003510	264.91%
Ba 233.527†	28.2	0.00035	mg/L	0.000007	0.00035	mg/L	0.000007	1.86%
Be 234.861†	10.9	0.00004	mg/L	0.000023	0.00004	mg/L	0.000023	55.49%
B 249.677†	1977.2	0.0403	mg/L	0.00084	0.0403	mg/L	0.00084	2.08%
Ca 227.546†	14.9	0.110	mg/L	0.0298	0.110	mg/L	0.0298	26.99%
Cd 228.802†	0.2	-0.00005	mg/L	0.000147	-0.00005	mg/L	0.000147	320.28%
Co 228.616†	1.7	0.00000	mg/L	0.000217	0.00000	mg/L	0.000217	>999.9%
Cr 267.716†	59.8	0.00031	mg/L	0.000078	0.00031	mg/L	0.000078	25.54%
Cu 327.393†	1339.5	0.00945	mg/L	0.000940	0.00945	mg/L	0.000940	9.95%
Fe 239.562†	13.8	0.0320	mg/L	0.01011	0.0320	mg/L	0.01011	31.60%
Mg 279.077†	17.6	0.0170	mg/L	0.00625	0.0170	mg/L	0.00625	36.73%
Mn 257.610†	780.9	0.00125	mg/L	0.000004	0.00125	mg/L	0.000004	0.28%
Mo 202.031†	-5.1	-0.00051	mg/L	0.000487	-0.00051	mg/L	0.000487	95.28%
Ni 231.604†	-1.0	-0.00018	mg/L	0.000186	-0.00018	mg/L	0.000186	103.62%
Pb 220.353†	4.7	0.00057	mg/L	0.001166	0.00057	mg/L	0.001166	203.96%
Sb 206.836†	-1.3	-0.00043	mg/L	0.000436	-0.00043	mg/L	0.000436	101.83%
Se 196.026†	1.0	0.00019	mg/L	0.001431	0.00019	mg/L	0.001431	768.56%
Si 251.611†	3407.2	0.0736	mg/L	0.00306	0.0736	mg/L	0.00306	4.16%

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Sn 189.927†	-10.4	-0.00171 mg/L	0.000296	-0.00171 mg/L	0.000296	17.34%
Ti 334.940†	440.9	0.00063 mg/L	0.000137	0.00063 mg/L	0.000137	21.65%
Tl 190.801†	-10.9	-0.00529 mg/L	0.001518	-0.00529 mg/L	0.001518	28.70%
V 290.880†	-52.6	0.00068 mg/L	0.000855	0.00068 mg/L	0.000855	126.06%
Zn 206.200†	78.7	0.00203 mg/L	0.000028	0.00203 mg/L	0.000028	1.39%
K 766.490†	170.6	0.0624 mg/L	0.02862	0.0624 mg/L	0.02862	45.89%
Na 589.592†	4995.2	0.364 mg/L	0.0180	0.364 mg/L	0.0180	4.95%
Sr 407.771†	26.9	-0.00002 mg/L	0.000198	-0.00002 mg/L	0.000198	843.81%
Li 670.784†	82.5	0.00042 mg/L	0.001614	0.00042 mg/L	0.001614	382.09%

Sequence No.: 28 **Autosampler Location: 66**
Sample ID: L1102053707 **Date Collected: 2/24/2011 6:38:46 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053707

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102053707

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5108487.1						38284.22	0.75%
YRADIAL	305131.4						3789.47	1.24%
Ga 417.206	1313520.4						13174.75	1.00%
GaRADIAL	62578.0						1174.06	1.88%
Ag 328.068†	-186.4	-0.00042	mg/L	0.000553	-0.00042	mg/L	0.000553	131.00%
Al 396.153†	59.3	-0.0100	mg/L	0.00908	-0.0100	mg/L	0.00908	90.46%
As 188.979†	1.3	0.00019	mg/L	0.000563	0.00019	mg/L	0.000563	297.56%
Ba 233.527†	2.9	-0.00007	mg/L	0.000082	-0.00007	mg/L	0.000082	111.10%
Be 234.861†	-3.2	0.00002	mg/L	0.000005	0.00002	mg/L	0.000005	22.34%
B 249.677†	2348.4	0.0471	mg/L	0.00161	0.0471	mg/L	0.00161	3.42%
Ca 227.546†	12.9	0.0915	mg/L	0.05180	0.0915	mg/L	0.05180	56.59%
Cd 228.802†	1.2	0.00000	mg/L	0.000074	0.00000	mg/L	0.000074	>999.9%
Co 228.616†	5.7	0.00021	mg/L	0.000453	0.00021	mg/L	0.000453	211.47%
Cr 267.716†	21.9	-0.00002	mg/L	0.000059	-0.00002	mg/L	0.000059	339.84%
Cu 327.393†	-52.1	0.00008	mg/L	0.000226	0.00008	mg/L	0.000226	284.77%
Fe 239.562†	-0.2	0.00014	mg/L	0.006203	0.00014	mg/L	0.006203	>999.9%
Mg 279.077†	-4.3	-0.0105	mg/L	0.00626	-0.0105	mg/L	0.00626	59.85%
Mn 257.610†	8.9	-0.00045	mg/L	0.000021	-0.00045	mg/L	0.000021	4.56%
Mo 202.031†	-0.9	-0.00020	mg/L	0.000285	-0.00020	mg/L	0.000285	143.02%
Ni 231.604†	6.0	0.00002	mg/L	0.000379	0.00002	mg/L	0.000379	>999.9%
Pb 220.353†	-0.8	-0.00032	mg/L	0.000447	-0.00032	mg/L	0.000447	141.12%
Sb 206.836†	-3.7	-0.00195	mg/L	0.000407	-0.00195	mg/L	0.000407	20.91%
Se 196.026†	3.5	0.00190	mg/L	0.002336	0.00190	mg/L	0.002336	123.15%
Si 251.611†	2051.7	0.0348	mg/L	0.00038	0.0348	mg/L	0.00038	1.10%
Sn 189.927†	-9.7	-0.00160	mg/L	0.000949	-0.00160	mg/L	0.000949	59.45%
Ti 334.940†	5.2	0.00004	mg/L	0.000054	0.00004	mg/L	0.000054	120.76%
Tl 190.801†	-12.8	-0.00643	mg/L	0.002736	-0.00643	mg/L	0.002736	42.55%
V 290.880†	-7.8	0.00097	mg/L	0.000020	0.00097	mg/L	0.000020	2.11%
Zn 206.200†	-17.7	-0.00087	mg/L	0.000042	-0.00087	mg/L	0.000042	4.90%
K 766.490†	-54.4	-0.0245	mg/L	0.05338	-0.0245	mg/L	0.05338	217.81%
Na 589.592†	9147.2	0.672	mg/L	0.0164	0.672	mg/L	0.0164	2.43%
Sr 407.771†	-200.1	-0.00024	mg/L	0.000076	-0.00024	mg/L	0.000076	31.78%
Li 670.784†	-54.0	-0.00128	mg/L	0.001253	-0.00128	mg/L	0.001253	97.82%

Sequence No.: 29 **Autosampler Location: 67**
Sample ID: L1102053708 **Date Collected: 2/24/2011 6:45:23 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053708

Analyte	Back Pressure	Flow
All	168.0 kPa	0.50 L/min

Approved: February 25, 2011

Pierre Morris

Mean Data: L1102053708

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5147760.1						42615.87	0.83%
YRADIAL	316304.9						8330.35	2.63%
Ga 417.206	1347035.7						16701.92	1.24%
GaRADIAL	64761.7						1809.28	2.79%
Ag 328.068†	-18.2	0.00039	mg/L	0.000425	0.00039	mg/L	0.000425	109.60%
Al 396.153†	508.0	0.0804	mg/L	0.01021	0.0804	mg/L	0.01021	12.70%
As 188.979†	-1.2	-0.00205	mg/L	0.002956	-0.00205	mg/L	0.002956	144.06%
Ba 233.527†	182.0	0.00294	mg/L	0.000059	0.00294	mg/L	0.000059	2.00%
Be 234.861†	32.3	0.00007	mg/L	0.000020	0.00007	mg/L	0.000020	30.10%
B 249.677†	1835.6	0.0379	mg/L	0.00107	0.0379	mg/L	0.00107	2.83%
Ca 227.546†	11.7	0.0804	mg/L	0.03563	0.0804	mg/L	0.03563	44.33%
Cd 228.802†	1.0	0.00001	mg/L	0.000018	0.00001	mg/L	0.000018	327.98%
Co 228.616†	3.0	0.00007	mg/L	0.000041	0.00007	mg/L	0.000041	61.33%
Cr 267.716†	137.8	0.00097	mg/L	0.000192	0.00097	mg/L	0.000192	19.74%
Cu 327.393†	1972.7	0.0137	mg/L	0.00081	0.0137	mg/L	0.00081	5.92%
Fe 239.562†	39.8	0.0912	mg/L	0.00344	0.0912	mg/L	0.00344	3.78%
Mg 279.077†	14.0	0.0124	mg/L	0.00302	0.0124	mg/L	0.00302	24.28%
Mn 257.610†	4153.4	0.00869	mg/L	0.000078	0.00869	mg/L	0.000078	0.90%
Mo 202.031†	-0.7	-0.00018	mg/L	0.000086	-0.00018	mg/L	0.000086	47.28%
Ni 231.604†	9.3	0.00012	mg/L	0.000120	0.00012	mg/L	0.000120	100.96%
Pb 220.353†	75.2	0.0122	mg/L	0.00033	0.0122	mg/L	0.00033	2.72%
Sb 206.836†	-3.7	-0.00196	mg/L	0.001306	-0.00196	mg/L	0.001306	66.71%
Se 196.026†	3.5	0.00193	mg/L	0.000505	0.00193	mg/L	0.000505	26.19%
Si 251.611†	6721.5	0.168	mg/L	0.0036	0.168	mg/L	0.0036	2.15%
Sn 189.927†	-3.8	-0.00057	mg/L	0.000357	-0.00057	mg/L	0.000357	62.44%
Ti 334.940†	943.1	0.00131	mg/L	0.000232	0.00131	mg/L	0.000232	17.67%
Tl 190.801†	-6.0	-0.00243	mg/L	0.002249	-0.00243	mg/L	0.002249	92.38%
V 290.880†	34.5	0.00125	mg/L	0.000344	0.00125	mg/L	0.000344	27.49%
Zn 206.200†	202.9	0.00577	mg/L	0.000177	0.00577	mg/L	0.000177	3.06%
K 766.490†	189.2	0.0694	mg/L	0.02590	0.0694	mg/L	0.02590	37.34%
Na 589.592†	6674.1	0.489	mg/L	0.0051	0.489	mg/L	0.0051	1.05%
Sr 407.771†	102.3	0.00004	mg/L	0.000062	0.00004	mg/L	0.000062	145.83%
Li 670.784†	22.2	-0.00033	mg/L	0.000922	-0.00033	mg/L	0.000922	279.39%

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Sequence No.: 30 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/24/2011 6:52:07 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4886957.1						19144.42	0.39%
YRADIAL	298665.1						1931.80	0.65%
Ga 417.206	1243690.3						15366.29	1.24%
GaRADIAL	61428.2						849.98	1.38%
Ag 328.068†	80763.9	0.393	mg/L	0.0078	0.393	mg/L	0.0078	1.98%
QC value within limits for Ag 328.068 Recovery = 98.35%								
Al 396.153†	50601.2	10.2	mg/L	0.03	10.2	mg/L	0.03	0.25%
QC value within limits for Al 396.153 Recovery = 101.67%								
As 188.979†	430.3	0.391	mg/L	0.0055	0.391	mg/L	0.0055	1.42%
QC value within limits for As 188.979 Recovery = 97.82%								
Ba 233.527†	58354.2	0.986	mg/L	0.0133	0.986	mg/L	0.0133	1.35%
QC value within limits for Ba 233.527 Recovery = 98.62%								
Be 234.861†	28648.6	0.0497	mg/L	0.00113	0.0497	mg/L	0.00113	2.27%
QC value within limits for Be 234.861 Recovery = 99.31%								
B 249.677†	25858.6	0.489	mg/L	0.0082	0.489	mg/L	0.0082	1.67%
QC value within limits for B 249.677 Recovery = 97.70%								
Ca 227.546†	1058.7	10.2	mg/L	0.11	10.2	mg/L	0.11	1.05%
QC value within limits for Ca 227.546 Recovery = 101.65%								
Cd 228.802†	880.5	0.0497	mg/L	0.00037	0.0497	mg/L	0.00037	0.75%
QC value within limits for Cd 228.802 Recovery = 99.36%								

Approved: February 25, 2011

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Co 228.616†	3824.0	0.197 mg/L	0.0006	0.197 mg/L	0.0006	0.32%
QC value within limits for Co 228.616 Recovery = 98.50%						
Cr 267.716†	56989.9	0.491 mg/L	0.0051	0.491 mg/L	0.0051	1.04%
QC value within limits for Cr 267.716 Recovery = 98.12%						
Cu 327.393†	73113.3	0.494 mg/L	0.0088	0.494 mg/L	0.0088	1.79%
QC value within limits for Cu 327.393 Recovery = 98.84%						
Fe 239.562†	1722.4	3.92 mg/L	0.035	3.92 mg/L	0.035	0.89%
QC value within limits for Fe 239.562 Recovery = 98.06%						
Mg 279.077†	7994.8	10.0 mg/L	0.03	10.0 mg/L	0.03	0.28%
QC value within limits for Mg 279.077 Recovery = 100.21%						
Mn 257.610†	223968.0	0.497 mg/L	0.0057	0.497 mg/L	0.0057	1.14%
QC value within limits for Mn 257.610 Recovery = 99.34%						
Mo 202.031†	13255.5	0.979 mg/L	0.0139	0.979 mg/L	0.0139	1.42%
QC value within limits for Mo 202.031 Recovery = 97.89%						
Ni 231.604†	17031.7	0.496 mg/L	0.0077	0.496 mg/L	0.0077	1.55%
QC value within limits for Ni 231.604 Recovery = 99.21%						
Pb 220.353†	2917.9	0.488 mg/L	0.0018	0.488 mg/L	0.0018	0.37%
QC value within limits for Pb 220.353 Recovery = 97.54%						
Sb 206.836†	1895.3	1.18 mg/L	0.014	1.18 mg/L	0.014	1.15%
QC value within limits for Sb 206.836 Recovery = 98.71%						
Se 196.026†	570.2	0.403 mg/L	0.0073	0.403 mg/L	0.0073	1.82%
QC value within limits for Se 196.026 Recovery = 100.66%						
Si 251.611†	172017.7	4.88 mg/L	0.110	4.88 mg/L	0.110	2.25%
QC value within limits for Si 251.611 Recovery = 97.58%						
Sn 189.927†	5766.7	0.994 mg/L	0.0034	0.994 mg/L	0.0034	0.34%
QC value within limits for Sn 189.927 Recovery = 99.38%						
Ti 334.940†	731962.5	0.990 mg/L	0.0031	0.990 mg/L	0.0031	0.31%
QC value within limits for Ti 334.940 Recovery = 98.98%						
Tl 190.801†	834.2	0.501 mg/L	0.0007	0.501 mg/L	0.0007	0.13%
QC value within limits for Tl 190.801 Recovery = 100.17%						
V 290.880†	148778.9	0.972 mg/L	0.0105	0.972 mg/L	0.0105	1.08%
QC value within limits for V 290.880 Recovery = 97.25%						
Zn 206.200†	32494.4	0.979 mg/L	0.0143	0.979 mg/L	0.0143	1.46%
QC value within limits for Zn 206.200 Recovery = 97.86%						
K 766.490†	129045.5	50.0 mg/L	0.35	50.0 mg/L	0.35	0.70%
QC value within limits for K 766.490 Recovery = 100.08%						
Na 589.592†	666046.1	50.2 mg/L	0.55	50.2 mg/L	0.55	1.09%
QC value within limits for Na 589.592 Recovery = 100.47%						
Sr 407.771†	1062904.5	1.03 mg/L	0.074	1.03 mg/L	0.074	7.14%
QC value within limits for Sr 407.771 Recovery = 103.28%						
Li 670.784†	80786.3	1.01 mg/L	0.005	1.01 mg/L	0.005	0.52%
QC value within limits for Li 670.784 Recovery = 100.68%						

All analyte(s) passed QC.

Sequence No.: 31 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/24/2011 6:58:46 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5095087.6						29176.66	0.57%
YRADIAL	303924.2						5880.04	1.93%
Ga 417.206	1289459.4						18563.47	1.44%
GaRADIAL	62271.9						929.23	1.49%
Ag 328.068†	-36.0	0.00031	mg/L	0.000444	0.00031	mg/L	0.000444	144.45%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	34.4	-0.0151	mg/L	0.01200	-0.0151	mg/L	0.01200	79.70%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.0	-0.00007	mg/L	0.001053	-0.00007	mg/L	0.001053	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-3.0	-0.00017	mg/L	0.000149	-0.00017	mg/L	0.000149	85.49%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-6.0	0.00002	mg/L	0.000014	0.00002	mg/L	0.000014	68.02%

Approved: February 25, 2011

Pierce Morris

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   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†             -233.0    -0.00073 mg/L      0.000427    -0.00073 mg/L      0.000427  58.58%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†              10.7      0.0709 mg/L       0.09643      0.0709 mg/L       0.09643 136.11%
   QC value within limits for Ca 227.546  Recovery = Not calculated
Cd 228.802†               0.4    -0.00005 mg/L      0.000176    -0.00005 mg/L      0.000176 388.18%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†              -3.7    -0.00028 mg/L      0.000069    -0.00028 mg/L      0.000069  24.95%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†               7.1    -0.00015 mg/L      0.000078    -0.00015 mg/L      0.000078  53.82%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†            -122.4    -0.00039 mg/L      0.000745    -0.00039 mg/L      0.000745 188.94%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†              -1.5    -0.00275 mg/L      0.002499    -0.00275 mg/L      0.002499  90.94%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†               2.5    -0.00191 mg/L      0.007277    -0.00191 mg/L      0.007277 381.73%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†             -10.2    -0.00051 mg/L      0.000019    -0.00051 mg/L      0.000019   3.75%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†               0.3    -0.00012 mg/L      0.000117    -0.00012 mg/L      0.000117 100.46%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†              -3.4    -0.00025 mg/L      0.000162    -0.00025 mg/L      0.000162  64.69%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†              -0.3    -0.00024 mg/L      0.000889    -0.00024 mg/L      0.000889 370.26%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†              -2.0    -0.00090 mg/L      0.001296    -0.00090 mg/L      0.001296 144.59%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.3     0.00178 mg/L      0.002362     0.00178 mg/L      0.002362 132.66%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             -39.5     -0.0250 mg/L       0.00026     -0.0250 mg/L       0.00026   1.06%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -1.0    -0.00009 mg/L      0.000151    -0.00009 mg/L      0.000151 167.99%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†              47.2     0.00010 mg/L      0.000169     0.00010 mg/L      0.000169 166.55%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             -10.0    -0.00477 mg/L      0.002410    -0.00477 mg/L      0.002410  50.55%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              -63.2     0.00061 mg/L      0.000292     0.00061 mg/L      0.000292  48.27%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†             -77.7    -0.00267 mg/L      0.000136    -0.00267 mg/L      0.000136   5.10%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              -40.3     -0.0184 mg/L       0.02298     -0.0184 mg/L       0.02298 124.79%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†              30.4    -0.00386 mg/L      0.004309    -0.00386 mg/L      0.004309 111.68%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†             -85.8    -0.00013 mg/L      0.000103    -0.00013 mg/L      0.000103  79.76%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              58.1     0.00012 mg/L      0.001557     0.00012 mg/L      0.001557 >999.9%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 32        WG356894-01                 Autosampler Location: 68
Sample ID: L1102044501 WG357894-01                  Date Collected: 2/24/2011 7:05:23 PM
Analyst: PDM                                        Data Type: Original
Initial Sample Wt:                                  Initial Sample Vol:
Dilution:                                           Sample Prep Vol:

---------------------------------- WG356894-01 ----------------------------------------------------------
Nebulizer Parameters: L1102044501 WG357894-01
Analyte                 Back Pressure     Flow
All                     169.0 kPa         0.50 L/min

-----------------------WG356894-01 ------------------------------------------------------------------------
Mean Data: L1102044501 WG357894-01
                  Mean Corrected          Calib.                              Sample
Analyte              Intensity      Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029           4499189.7                                                    13660.51   0.30%
YRADIAL              287185.9                                                     4306.26   1.50%
Ga 417.206          1228832.1                                                     3708.35   0.30%
GaRADIAL              61816.6                                                      483.41   0.78%
Ag 328.068†            1352.5     0.00687 mg/L      0.000294     0.00687 mg/L      0.000294   4.28%
Al 396.153†              90.8    -0.00367 mg/L      0.007999    -0.00367 mg/L      0.007999 218.23%
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Approved: February 25, 2011

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As 188.979†	8.5	-0.00126 mg/L	0.002895	-0.00126 mg/L	0.002895	229.39%
Ba 233.527†	453.2	0.00749 mg/L	0.000168	0.00749 mg/L	0.000168	2.24%
Be 234.861†	48.6	0.00014 mg/L	0.000031	0.00014 mg/L	0.000031	22.26%
B 249.677†	241.5	0.00836 mg/L	0.000082	0.00836 mg/L	0.000082	0.98%
Ca 227.546†	43567.2	406 mg/L	5.1	406 mg/L	5.1	1.25%
Cd 228.802†	3.8	0.00015 mg/L	0.000175	0.00015 mg/L	0.000175	119.81%
Co 228.616†	56.4	0.00286 mg/L	0.000040	0.00286 mg/L	0.000040	1.39%
Cr 267.716†	580.4	0.00464 mg/L	0.000143	0.00464 mg/L	0.000143	3.08%
Cu 327.393†	-2035.2	-0.0133 mg/L	0.00030	-0.0133 mg/L	0.00030	2.27%
Fe 239.562†	31.0	0.0583 mg/L	0.01670	0.0583 mg/L	0.01670	28.62%
Mg 279.077†	364528.3	457 mg/L	2.3	457 mg/L	2.3	0.50%
Mn 257.610†	149879.1	0.325 mg/L	0.0048	0.325 mg/L	0.0048	1.49%
Mo 202.031†	-15.0	-0.00118 mg/L	0.000275	-0.00118 mg/L	0.000275	23.36%
Ni 231.604†	769.0	0.0222 mg/L	0.00017	0.0222 mg/L	0.00017	0.75%
Pb 220.353†	-20.3	0.0159 mg/L	0.00141	0.0159 mg/L	0.00141	8.88%
Sb 206.836†	17.7	0.0114 mg/L	0.00275	0.0114 mg/L	0.00275	24.16%
Se 196.026†	-51.5	0.0646 mg/L	0.00152	0.0646 mg/L	0.00152	2.35%
Si 251.611†	92360.6	2.62 mg/L	0.031	2.62 mg/L	0.031	1.20%
Sn 189.927†	4.1	0.00079 mg/L	0.001902	0.00079 mg/L	0.001902	241.08%
Ti 334.940†	-3545.1	-0.00070 mg/L	0.000029	-0.00070 mg/L	0.000029	4.12%
Tl 190.801†	163.2	0.0606 mg/L	0.00660	0.0606 mg/L	0.00660	10.90%
V 290.880†	-1757.0	-0.0105 mg/L	0.00074	-0.0105 mg/L	0.00074	7.09%
Zn 206.200†	802.1	0.0238 mg/L	0.00027	0.0238 mg/L	0.00027	1.15%
K 766.490†	27855.4	10.6 mg/L	0.11	10.6 mg/L	0.11	1.07%
Na 589.592†	1514467.4	117 mg/L	0.6	117 mg/L	0.6	0.49%
Sr 407.771†	585588.9	0.569 mg/L	0.0390	0.569 mg/L	0.0390	6.85%
Li 670.784†	2639.5	0.0323 mg/L	0.00112	0.0323 mg/L	0.00112	3.45%

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Sequence No.: 33 WG356894-04 **Autosampler Location: 69**
Sample ID: L1102044501D ~~**WG357894-04**~~ **Date Collected: 2/24/2011 7:12:08 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

---WG356894-04---

Nebulizer Parameters: L1102044501D ~~**WG357894-04**~~

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

---WG356894-04---

Mean Data: L1102044501D ~~**WG357894-04**~~

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4532862.1						72190.65	1.59%
YRADIAL	281553.5						963.97	0.34%
Ga 417.206	1241698.7						21933.60	1.77%
GaRADIAL	61049.8						1100.57	1.80%
Ag 328.068†	1438.1	0.00728	mg/L	0.000575	0.00728	mg/L	0.000575	7.90%
Al 396.153†	51.5	-0.0116	mg/L	0.00785	-0.0116	mg/L	0.00785	67.72%
As 188.979†	5.4	-0.00409	mg/L	0.006632	-0.00409	mg/L	0.006632	161.98%
Ba 233.527†	448.4	0.00741	mg/L	0.000166	0.00741	mg/L	0.000166	2.24%
Be 234.861†	49.9	0.00014	mg/L	0.000019	0.00014	mg/L	0.000019	12.91%
B 249.677†	156.3	0.00677	mg/L	0.000285	0.00677	mg/L	0.000285	4.21%
Ca 227.546†	43313.3	403	mg/L	6.2	403	mg/L	6.2	1.53%
Cd 228.802†	6.0	0.00029	mg/L	0.000185	0.00029	mg/L	0.000185	64.58%
Co 228.616†	54.8	0.00278	mg/L	0.000028	0.00278	mg/L	0.000028	1.00%
Cr 267.716†	572.4	0.00457	mg/L	0.000285	0.00457	mg/L	0.000285	6.24%
Cu 327.393†	-1861.1	-0.0121	mg/L	0.00073	-0.0121	mg/L	0.00073	6.04%
Fe 239.562†	29.3	0.0543	mg/L	0.01554	0.0543	mg/L	0.01554	28.62%
Mg 279.077†	369957.8	464	mg/L	2.8	464	mg/L	2.8	0.60%
Mn 257.610†	149751.9	0.324	mg/L	0.0043	0.324	mg/L	0.0043	1.32%
Mo 202.031†	-6.8	-0.00057	mg/L	0.000775	-0.00057	mg/L	0.000775	135.14%
Ni 231.604†	772.8	0.0223	mg/L	0.00037	0.0223	mg/L	0.00037	1.64%
Pb 220.353†	-30.4	0.0141	mg/L	0.00180	0.0141	mg/L	0.00180	12.75%
Sb 206.836†	21.4	0.0136	mg/L	0.00141	0.0136	mg/L	0.00141	10.34%
Se 196.026†	-43.0	0.0699	mg/L	0.00373	0.0699	mg/L	0.00373	5.33%
Si 251.611†	91993.8	2.61	mg/L	0.039	2.61	mg/L	0.039	1.49%
Sn 189.927†	-1.6	-0.00020	mg/L	0.001682	-0.00020	mg/L	0.001682	835.69%
Ti 334.940†	-3460.9	-0.00061	mg/L	0.000064	-0.00061	mg/L	0.000064	10.48%
Tl 190.801†	161.7	0.0599	mg/L	0.00648	0.0599	mg/L	0.00648	10.81%
V 290.880†	-1921.8	-0.0115	mg/L	0.00027	-0.0115	mg/L	0.00027	2.32%
Zn 206.200†	812.1	0.0241	mg/L	0.00069	0.0241	mg/L	0.00069	2.88%

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K 766.490†	27820.5	10.6	mg/L	0.07	10.6	mg/L	0.07	0.63%
Na 589.592†	1522844.2	118	mg/L	1.6	118	mg/L	1.6	1.36%
Sr 407.771†	587629.9	0.571	mg/L	0.0399	0.571	mg/L	0.0399	6.99%
Li 670.784†	2592.6	0.0317	mg/L	0.00065	0.0317	mg/L	0.00065	2.05%

WG356894-05

Sequence No.: 34 **Autosampler Location: 70**
Sample ID: L1102044501S ~~WG357894-05~~ **Date Collected: 2/24/2011 7:18:52 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

WG356894-05

Nebulizer Parameters: L1102044501S ~~WG357894-05~~

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

WG356894-05

Mean Data: L1102044501S ~~WG357894-05~~

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4537675.4						18065.38	0.40%
YRADIAL	286573.8						4122.66	1.44%
Ga 417.206	1242905.3						10422.85	0.84%
GaRADIAL	62728.2						1302.21	2.08%
Ag 328.068†	39855.9	0.194	mg/L	0.0012	0.194	mg/L	0.0012	0.59%
Al 396.153†	24022.0	4.81	mg/L	0.114	4.81	mg/L	0.114	2.38%
As 188.979†	210.7	0.183	mg/L	0.0032	0.183	mg/L	0.0032	1.75%
Ba 233.527†	28070.6	0.474	mg/L	0.0032	0.474	mg/L	0.0032	0.68%
Be 234.861†	13258.5	0.0231	mg/L	0.00017	0.0231	mg/L	0.00017	0.74%
B 249.677†	50418.0	0.941	mg/L	0.0050	0.941	mg/L	0.0050	0.53%
Ca 227.546†	43941.7	409	mg/L	5.2	409	mg/L	5.2	1.26%
Cd 228.802†	407.9	0.0230	mg/L	0.00036	0.0230	mg/L	0.00036	1.58%
Co 228.616†	1844.9	0.0950	mg/L	0.00048	0.0950	mg/L	0.00048	0.50%
Cr 267.716†	27715.3	0.238	mg/L	0.0006	0.238	mg/L	0.0006	0.23%
Cu 327.393†	33068.8	0.224	mg/L	0.0030	0.224	mg/L	0.0030	1.35%
Fe 239.562†	868.7	1.97	mg/L	0.037	1.97	mg/L	0.037	1.89%
Mg 279.077†	378005.8	474	mg/L	13.2	474	mg/L	13.2	2.79%
Mn 257.610†	257968.4	0.564	mg/L	0.0031	0.564	mg/L	0.0031	0.56%
Mo 202.031†	6574.1	0.485	mg/L	0.0006	0.485	mg/L	0.0006	0.12%
Ni 231.604†	8752.8	0.255	mg/L	0.0004	0.255	mg/L	0.0004	0.15%
Pb 220.353†	1323.1	0.241	mg/L	0.0018	0.241	mg/L	0.0018	0.75%
Sb 206.836†	919.8	0.575	mg/L	0.0052	0.575	mg/L	0.0052	0.90%
Se 196.026†	237.4	0.269	mg/L	0.0082	0.269	mg/L	0.0082	3.05%
Si 251.611†	173486.6	4.93	mg/L	0.029	4.93	mg/L	0.029	0.59%
Sn 189.927†	-1.2	-0.00012	mg/L	0.000917	-0.00012	mg/L	0.000917	747.52%
Ti 334.940†	356311.3	0.486	mg/L	0.0044	0.486	mg/L	0.0044	0.91%
Tl 190.801†	530.1	0.281	mg/L	0.0023	0.281	mg/L	0.0023	0.83%
V 290.880†	71635.3	0.469	mg/L	0.0037	0.469	mg/L	0.0037	0.78%
Zn 206.200†	15280.0	0.460	mg/L	0.0037	0.460	mg/L	0.0037	0.81%
K 766.490†	92810.6	35.8	mg/L	0.89	35.8	mg/L	0.89	2.48%
Na 589.592†	1830163.6	143	mg/L	3.2	143	mg/L	3.2	2.21%
Sr 407.771†	1121050.2	1.09	mg/L	0.052	1.09	mg/L	0.052	4.74%
Li 670.784†	43633.7	0.544	mg/L	0.0180	0.544	mg/L	0.0180	3.32%

Sequence No.: 35 **Autosampler Location: 71**
Sample ID: L1102044502 **Date Collected: 2/24/2011 7:25:54 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102044502

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102044502

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4637053.0						60432.25	1.30%
YRADIAL	296003.6						7228.04	2.44%

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Ga 417.206	1256778.4					19850.26	1.58%
GaRADIAL	63467.5					1020.86	1.61%
Ag 328.068†	1421.7	0.00720	mg/L	0.000350	0.00720 mg/L	0.000350	4.85%
Al 396.153†	49.6	-0.0120	mg/L	0.00545	-0.0120 mg/L	0.00545	45.55%
As 188.979†	11.6	0.00198	mg/L	0.004369	0.00198 mg/L	0.004369	220.90%
Ba 233.527†	1001.0	0.0167	mg/L	0.00020	0.0167 mg/L	0.00020	1.19%
Be 234.861†	67.0	0.00018	mg/L	0.000022	0.00018 mg/L	0.000022	12.43%
B 249.677†	317.3	0.00974	mg/L	0.000282	0.00974 mg/L	0.000282	2.89%
Ca 227.546†	41491.4	386	mg/L	9.7	386 mg/L	9.7	2.50%
Cd 228.802†	2.4	0.00005	mg/L	0.000150	0.00005 mg/L	0.000150	328.58%
Co 228.616†	51.5	0.00261	mg/L	0.000507	0.00261 mg/L	0.000507	19.47%
Cr 267.716†	559.2	0.00445	mg/L	0.000020	0.00445 mg/L	0.000020	0.46%
Cu 327.393†	-1825.0	-0.0119	mg/L	0.00040	-0.0119 mg/L	0.00040	3.34%
Fe 239.562†	27.1	0.0502	mg/L	0.01088	0.0502 mg/L	0.01088	21.67%
Mg 279.077†	344114.7	431	mg/L	4.8	431 mg/L	4.8	1.12%
Mn 257.610†	163219.7	0.354	mg/L	0.0055	0.354 mg/L	0.0055	1.54%
Mo 202.031†	-2.8	-0.00027	mg/L	0.000429	-0.00027 mg/L	0.000429	156.38%
Ni 231.604†	716.9	0.0207	mg/L	0.00023	0.0207 mg/L	0.00023	1.11%
Pb 220.353†	-32.2	0.0130	mg/L	0.00186	0.0130 mg/L	0.00186	14.28%
Sb 206.836†	20.9	0.0134	mg/L	0.00222	0.0134 mg/L	0.00222	16.61%
Se 196.026†	-41.6	0.0667	mg/L	0.00697	0.0667 mg/L	0.00697	10.46%
Si 251.611†	87748.4	2.48	mg/L	0.049	2.48 mg/L	0.049	1.96%
Sn 189.927†	-0.0	0.00008	mg/L	0.000504	0.00008 mg/L	0.000504	623.87%
Ti 334.940†	-3295.1	-0.00056	mg/L	0.000050	-0.00056 mg/L	0.000050	8.98%
Tl 190.801†	143.0	0.0505	mg/L	0.00421	0.0505 mg/L	0.00421	8.33%
V 290.880†	-2073.8	-0.0125	mg/L	0.00029	-0.0125 mg/L	0.00029	2.34%
Zn 206.200†	827.8	0.0246	mg/L	0.00034	0.0246 mg/L	0.00034	1.39%
K 766.490†	26465.3	10.1	mg/L	0.34	10.1 mg/L	0.34	3.37%
Na 589.592†	1431361.3	110	mg/L	1.1	110 mg/L	1.1	0.99%
Sr 407.771†	554860.9	0.539	mg/L	0.0480	0.539 mg/L	0.0480	8.91%
Li 670.784†	2489.1	0.0304	mg/L	0.00181	0.0304 mg/L	0.00181	5.96%

Sequence No.: 36 **Autosampler Location: 72**
Sample ID: L1102044503 **Date Collected: 2/24/2011 7:32:43 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102044503

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102044503

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4454864.4						39999.07	0.90%
YRADIAL	285498.1						6366.39	2.23%
Ga 417.206	1215141.1						12085.89	0.99%
GaRADIAL	61993.7						844.45	1.36%
Ag 328.068†	1258.4	0.00645	mg/L	0.000474	0.00645	mg/L	0.000474	7.34%
Al 396.153†	-49.1	-0.0319	mg/L	0.02367	-0.0319	mg/L	0.02367	74.27%
As 188.979†	15.8	0.00630	mg/L	0.006144	0.00630	mg/L	0.006144	97.56%
Ba 233.527†	480.5	0.00795	mg/L	0.000128	0.00795	mg/L	0.000128	1.61%
Be 234.861†	47.1	0.00011	mg/L	0.000011	0.00011	mg/L	0.000011	10.32%
B 249.677†	189.8	0.00756	mg/L	0.000352	0.00756	mg/L	0.000352	4.65%
Ca 227.546†	38901.6	362	mg/L	5.0	362	mg/L	5.0	1.39%
Cd 228.802†	3.1	0.00003	mg/L	0.000146	0.00003	mg/L	0.000146	440.90%
Co 228.616†	14.5	0.00068	mg/L	0.000436	0.00068	mg/L	0.000436	64.33%
Cr 267.716†	601.7	0.00491	mg/L	0.000278	0.00491	mg/L	0.000278	5.65%
Cu 327.393†	-1706.6	-0.0111	mg/L	0.00066	-0.0111	mg/L	0.00066	5.99%
Fe 239.562†	41.9	0.0838	mg/L	0.00999	0.0838	mg/L	0.00999	11.92%
Mg 279.077†	351949.0	441	mg/L	4.2	441	mg/L	4.2	0.96%
Mn 257.610†	56900.7	0.121	mg/L	0.0020	0.121	mg/L	0.0020	1.63%
Mo 202.031†	-11.7	-0.00097	mg/L	0.000494	-0.00097	mg/L	0.000494	50.83%
Ni 231.604†	445.2	0.0128	mg/L	0.00015	0.0128	mg/L	0.00015	1.21%
Pb 220.353†	-26.5	0.0128	mg/L	0.00094	0.0128	mg/L	0.00094	7.36%
Sb 206.836†	20.6	0.0131	mg/L	0.00113	0.0131	mg/L	0.00113	8.60%
Se 196.026†	-47.6	0.0565	mg/L	0.00167	0.0565	mg/L	0.00167	2.96%
Si 251.611†	84654.4	2.40	mg/L	0.033	2.40	mg/L	0.033	1.37%
Sn 189.927†	8.7	0.00158	mg/L	0.000046	0.00158	mg/L	0.000046	2.91%

Approved: February 25, 2011

Pierre Morris

Ti 334.940†	-3118.3	-0.00056	mg/L	0.000167	-0.00056	mg/L	0.000167 29.97%
Tl 190.801†	147.6	0.0550	mg/L	0.00996	0.0550	mg/L	0.00996 18.10%
V 290.880†	-2061.8	-0.0124	mg/L	0.00093	-0.0124	mg/L	0.00093 7.44%
Zn 206.200†	218.6	0.00625	mg/L	0.000193	0.00625	mg/L	0.000193 3.09%
K 766.490†	20538.5	7.74	mg/L	0.098	7.74	mg/L	0.098 1.26%
Na 589.592†	2113643.1	166	mg/L	5.4	166	mg/L	5.4 3.24%
Sr 407.771†	469920.9	0.457	mg/L	0.0250	0.457	mg/L	0.0250 5.48%
Li 670.784†	893.4	0.0105	mg/L	0.00109	0.0105	mg/L	0.00109 10.35%

Sequence No.: 37 **Autosampler Location: 73**
Sample ID: L1102044504 **Date Collected: 2/24/2011 7:39:31 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102044504

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102044504

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4502427.0						4323.86	0.10%
YRADIAL	288420.4						5954.97	2.06%
Ga 417.206	1232570.9						15545.17	1.26%
GaRADIAL	62667.9						1562.57	2.49%
Ag 328.068†	1277.2	0.00656	mg/L	0.000348	0.00656	mg/L	0.000348	5.31%
Al 396.153†	-79.5	-0.0380	mg/L	0.01203	-0.0380	mg/L	0.01203	31.67%
As 188.979†	9.5	0.00071	mg/L	0.003572	0.00071	mg/L	0.003572	503.24%
Ba 233.527†	702.5	0.0117	mg/L	0.00004	0.0117	mg/L	0.00004	0.34%
Be 234.861†	35.3	0.00010	mg/L	0.000032	0.00010	mg/L	0.000032	33.63%
B 249.677†	132.8	0.00636	mg/L	0.000438	0.00636	mg/L	0.000438	6.89%
Ca 227.546†	38148.0	355	mg/L	2.6	355	mg/L	2.6	0.74%
Cd 228.802†	1.3	-0.00003	mg/L	0.000074	-0.00003	mg/L	0.000074	255.57%
Co 228.616†	12.7	0.00058	mg/L	0.000109	0.00058	mg/L	0.000109	18.72%
Cr 267.716†	574.6	0.00468	mg/L	0.000081	0.00468	mg/L	0.000081	1.73%
Cu 327.393†	-1619.7	-0.0105	mg/L	0.00022	-0.0105	mg/L	0.00022	2.13%
Fe 239.562†	26.7	0.0495	mg/L	0.02335	0.0495	mg/L	0.02335	47.15%
Mg 279.077†	344147.4	431	mg/L	6.9	431	mg/L	6.9	1.60%
Mn 257.610†	61394.2	0.130	mg/L	0.0014	0.130	mg/L	0.0014	1.10%
Mo 202.031†	-1.4	-0.00021	mg/L	0.000531	-0.00021	mg/L	0.000531	247.50%
Ni 231.604†	438.4	0.0126	mg/L	0.00032	0.0126	mg/L	0.00032	2.55%
Pb 220.353†	-23.2	0.0130	mg/L	0.00040	0.0130	mg/L	0.00040	3.08%
Sb 206.836†	20.4	0.0130	mg/L	0.00144	0.0130	mg/L	0.00144	11.04%
Se 196.026†	-46.1	0.0559	mg/L	0.00728	0.0559	mg/L	0.00728	13.03%
Si 251.611†	82407.3	2.33	mg/L	0.019	2.33	mg/L	0.019	0.81%
Sn 189.927†	7.0	0.00129	mg/L	0.000461	0.00129	mg/L	0.000461	35.64%
Ti 334.940†	-3208.0	-0.00075	mg/L	0.000166	-0.00075	mg/L	0.000166	22.19%
Tl 190.801†	154.3	0.0596	mg/L	0.00297	0.0596	mg/L	0.00297	4.98%
V 290.880†	-1680.9	-0.00996	mg/L	0.000262	-0.00996	mg/L	0.000262	2.63%
Zn 206.200†	292.5	0.00847	mg/L	0.000036	0.00847	mg/L	0.000036	0.43%
K 766.490†	20042.2	7.56	mg/L	0.040	7.56	mg/L	0.040	0.53%
Na 589.592†	2006743.8	157	mg/L	5.7	157	mg/L	5.7	3.64%
Sr 407.771†	443617.6	0.431	mg/L	0.0317	0.431	mg/L	0.0317	7.34%
Li 670.784†	864.0	0.0102	mg/L	0.00114	0.0102	mg/L	0.00114	11.20%

Sequence No.: 38 **Autosampler Location: 74**
Sample ID: L1102044505 **Date Collected: 2/24/2011 7:46:14 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102044505

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102044505

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Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4479756.5						66618.77	1.49%
YRADIAL	284348.8						4282.91	1.51%
Ga 417.206	1238168.0						34072.00	2.75%
GaRADIAL	61739.5						932.51	1.51%
Ag 328.068†	1433.9	0.00729	mg/L	0.001001	0.00729	mg/L	0.001001	13.72%
Al 396.153†	-33.2	-0.0287	mg/L	0.00523	-0.0287	mg/L	0.00523	18.26%
As 188.979†	9.9	0.00022	mg/L	0.007023	0.00022	mg/L	0.007023	>999.9%
Ba 233.527†	436.6	0.00721	mg/L	0.000168	0.00721	mg/L	0.000168	2.33%
Be 234.861†	43.6	0.00009	mg/L	0.000040	0.00009	mg/L	0.000040	43.39%
B 249.677†	153.5	0.00685	mg/L	0.001009	0.00685	mg/L	0.001009	14.72%
Ca 227.546†	42496.5	396	mg/L	11.6	396	mg/L	11.6	2.93%
Cd 228.802†	-0.9	-0.00016	mg/L	0.000358	-0.00016	mg/L	0.000358	225.28%
Co 228.616†	18.3	0.00088	mg/L	0.000481	0.00088	mg/L	0.000481	54.72%
Cr 267.716†	650.7	0.00537	mg/L	0.000111	0.00537	mg/L	0.000111	2.06%
Cu 327.393†	-1914.1	-0.0125	mg/L	0.00031	-0.0125	mg/L	0.00031	2.47%
Fe 239.562†	38.4	0.0679	mg/L	0.01700	0.0679	mg/L	0.01700	25.01%
Mg 279.077†	580941.9	728	mg/L	4.1	728	mg/L	4.1	0.56%
Mn 257.610†	21379.3	0.0372	mg/L	0.00072	0.0372	mg/L	0.00072	1.93%
Mo 202.031†	-15.4	-0.00126	mg/L	0.000226	-0.00126	mg/L	0.000226	17.91%
Ni 231.604†	196.8	0.00552	mg/L	0.000335	0.00552	mg/L	0.000335	6.07%
Pb 220.353†	-29.7	0.0139	mg/L	0.00176	0.0139	mg/L	0.00176	12.68%
Sb 206.836†	16.6	0.0107	mg/L	0.00238	0.0107	mg/L	0.00238	22.38%
Se 196.026†	-43.4	0.0679	mg/L	0.00701	0.0679	mg/L	0.00701	10.32%
Si 251.611†	93503.5	2.65	mg/L	0.081	2.65	mg/L	0.081	3.04%
Sn 189.927†	4.4	0.00084	mg/L	0.000672	0.00084	mg/L	0.000672	80.32%
Ti 334.940†	-3258.4	-0.00041	mg/L	0.000206	-0.00041	mg/L	0.000206	49.71%
Tl 190.801†	158.1	0.0581	mg/L	0.00717	0.0581	mg/L	0.00717	12.36%
V 290.880†	-1631.0	-0.00963	mg/L	0.002583	-0.00963	mg/L	0.002583	26.82%
Zn 206.200†	246.1	0.00708	mg/L	0.000253	0.00708	mg/L	0.000253	3.57%
K 766.490†	15413.3	5.90	mg/L	0.173	5.90	mg/L	0.173	2.94%
Na 589.592†	478339.5	35.9	mg/L	0.09	35.9	mg/L	0.09	0.25%
Sr 407.771†	611476.5	0.594	mg/L	0.0379	0.594	mg/L	0.0379	6.37%
Li 670.784†	2502.2	0.0306	mg/L	0.00044	0.0306	mg/L	0.00044	1.43%

Sequence No.: 39 **Autosampler Location: 75**
Sample ID: L1102044506 **Date Collected: 2/24/2011 7:53:01 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102044506

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102044506

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4527791.9						46276.21	1.02%
YRADIAL	290481.2						10090.35	3.47%
Ga 417.206	1250509.2						12400.80	0.99%
GaRADIAL	62791.9						1008.46	1.61%
Ag 328.068†	1304.6	0.00667	mg/L	0.000574	0.00667	mg/L	0.000574	8.61%
Al 396.153†	-39.0	-0.0298	mg/L	0.01012	-0.0298	mg/L	0.01012	33.91%
As 188.979†	10.2	0.00084	mg/L	0.002038	0.00084	mg/L	0.002038	243.69%
Ba 233.527†	514.7	0.00852	mg/L	0.000182	0.00852	mg/L	0.000182	2.14%
Be 234.861†	37.0	0.00009	mg/L	0.000032	0.00009	mg/L	0.000032	37.79%
B 249.677†	91.5	0.00560	mg/L	0.000089	0.00560	mg/L	0.000089	1.58%
Ca 227.546†	40979.6	382	mg/L	3.5	382	mg/L	3.5	0.92%
Cd 228.802†	1.1	-0.00005	mg/L	0.000165	-0.00005	mg/L	0.000165	319.17%
Co 228.616†	8.6	0.00037	mg/L	0.000179	0.00037	mg/L	0.000179	48.55%
Cr 267.716†	646.9	0.00534	mg/L	0.000157	0.00534	mg/L	0.000157	2.94%
Cu 327.393†	-1767.6	-0.0115	mg/L	0.00083	-0.0115	mg/L	0.00083	7.21%
Fe 239.562†	28.2	0.0456	mg/L	0.01760	0.0456	mg/L	0.01760	38.62%
Mg 279.077†	556162.7	697	mg/L	3.0	697	mg/L	3.0	0.43%
Mn 257.610†	22059.9	0.0391	mg/L	0.00067	0.0391	mg/L	0.00067	1.71%
Mo 202.031†	-6.0	-0.00057	mg/L	0.000331	-0.00057	mg/L	0.000331	57.90%
Ni 231.604†	185.3	0.00519	mg/L	0.000058	0.00519	mg/L	0.000058	1.11%
Pb 220.353†	-31.3	0.0129	mg/L	0.00115	0.0129	mg/L	0.00115	8.85%

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Sb 206.836†	21.3	0.0136 mg/L	0.00086	0.0136 mg/L	0.00086	6.35%
Se 196.026†	-41.0	0.0661 mg/L	0.00841	0.0661 mg/L	0.00841	12.73%
Si 251.611†	89723.6	2.54 mg/L	0.022	2.54 mg/L	0.022	0.88%
Sn 189.927†	12.9	0.00230 mg/L	0.002016	0.00230 mg/L	0.002016	87.58%
Ti 334.940†	-3264.7	-0.00056 mg/L	0.000203	-0.00056 mg/L	0.000203	36.10%
Tl 190.801†	147.8	0.0533 mg/L	0.00823	0.0533 mg/L	0.00823	15.44%
V 290.880†	-2060.8	-0.0124 mg/L	0.00219	-0.0124 mg/L	0.00219	17.64%
Zn 206.200†	345.8	0.0101 mg/L	0.00027	0.0101 mg/L	0.00027	2.66%
K 766.490†	14859.9	5.68 mg/L	0.144	5.68 mg/L	0.144	2.54%
Na 589.592†	463497.0	34.8 mg/L	0.27	34.8 mg/L	0.27	0.77%
Sr 407.771†	586087.0	0.570 mg/L	0.0405	0.570 mg/L	0.0405	7.10%
Li 670.784†	2300.2	0.0281 mg/L	0.00105	0.0281 mg/L	0.00105	3.74%

Sequence No.: 40 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/24/2011 7:59:48 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4885433.5						61444.88	1.26%
YRADIAL	295645.9						3304.08	1.12%
Ga 417.206	1250464.2						27975.86	2.24%
GaRADIAL	61212.3						1724.74	2.82%
Ag 328.068†	78974.2	0.385	mg/L	0.0137	0.385	mg/L	0.0137	3.56%
QC value within limits for Ag 328.068 Recovery = 96.17%								
Al 396.153†	50813.4	10.2	mg/L	0.09	10.2	mg/L	0.09	0.85%
QC value within limits for Al 396.153 Recovery = 102.09%								
As 188.979†	425.2	0.386	mg/L	0.0076	0.386	mg/L	0.0076	1.98%
QC value within limits for As 188.979 Recovery = 96.61%								
Ba 233.527†	57678.5	0.975	mg/L	0.0213	0.975	mg/L	0.0213	2.18%
QC value within limits for Ba 233.527 Recovery = 97.48%								
Be 234.861†	28133.3	0.0488	mg/L	0.00167	0.0488	mg/L	0.00167	3.41%
QC value within limits for Be 234.861 Recovery = 97.60%								
B 249.677†	25116.6	0.475	mg/L	0.0176	0.475	mg/L	0.0176	3.71%
QC value within limits for B 249.677 Recovery = 94.96%								
Ca 227.546†	1060.6	10.2	mg/L	0.26	10.2	mg/L	0.26	2.56%
QC value within limits for Ca 227.546 Recovery = 101.78%								
Cd 228.802†	874.9	0.0494	mg/L	0.00097	0.0494	mg/L	0.00097	1.96%
QC value within limits for Cd 228.802 Recovery = 98.76%								
Co 228.616†	3804.3	0.196	mg/L	0.0027	0.196	mg/L	0.0027	1.39%
QC value within limits for Co 228.616 Recovery = 98.00%								
Cr 267.716†	56226.3	0.484	mg/L	0.0095	0.484	mg/L	0.0095	1.97%
QC value within limits for Cr 267.716 Recovery = 96.80%								
Cu 327.393†	71049.0	0.480	mg/L	0.0165	0.480	mg/L	0.0165	3.43%
QC value within limits for Cu 327.393 Recovery = 96.06%								
Fe 239.562†	1724.5	3.93	mg/L	0.110	3.93	mg/L	0.110	2.81%
QC value within limits for Fe 239.562 Recovery = 98.18%								
Mg 279.077†	8070.4	10.1	mg/L	0.22	10.1	mg/L	0.22	2.19%
QC value within limits for Mg 279.077 Recovery = 101.16%								
Mn 257.610†	220722.6	0.490	mg/L	0.0101	0.490	mg/L	0.0101	2.07%
QC value within limits for Mn 257.610 Recovery = 97.91%								
Mo 202.031†	13512.0	0.998	mg/L	0.0126	0.998	mg/L	0.0126	1.26%
QC value within limits for Mo 202.031 Recovery = 99.79%								
Ni 231.604†	16827.9	0.490	mg/L	0.0105	0.490	mg/L	0.0105	2.15%
QC value within limits for Ni 231.604 Recovery = 98.02%								
Pb 220.353†	2902.5	0.485	mg/L	0.0072	0.485	mg/L	0.0072	1.48%
QC value within limits for Pb 220.353 Recovery = 97.05%								
Sb 206.836†	1872.9	1.17	mg/L	0.028	1.17	mg/L	0.028	2.41%
QC value within limits for Sb 206.836 Recovery = 97.57%								
Se 196.026†	565.9	0.400	mg/L	0.0174	0.400	mg/L	0.0174	4.35%
QC value within limits for Se 196.026 Recovery = 99.90%								
Si 251.611†	168484.1	4.78	mg/L	0.169	4.78	mg/L	0.169	3.54%
QC value within limits for Si 251.611 Recovery = 95.55%								

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Sn 189.927†	5727.5	0.987 mg/L	0.0149	0.987 mg/L	0.0149	1.51%
QC value within limits for Sn 189.927 Recovery = 98.71%						
Ti 334.940†	724825.2	0.980 mg/L	0.0040	0.980 mg/L	0.0040	0.41%
QC value within limits for Ti 334.940 Recovery = 98.01%						
Tl 190.801†	826.3	0.496 mg/L	0.0046	0.496 mg/L	0.0046	0.94%
QC value within limits for Tl 190.801 Recovery = 99.21%						
V 290.880†	146887.1	0.960 mg/L	0.0215	0.960 mg/L	0.0215	2.24%
QC value within limits for V 290.880 Recovery = 96.01%						
Zn 206.200†	32080.1	0.966 mg/L	0.0205	0.966 mg/L	0.0205	2.13%
QC value within limits for Zn 206.200 Recovery = 96.61%						
K 766.490†	129494.1	50.2 mg/L	0.32	50.2 mg/L	0.32	0.63%
QC value within limits for K 766.490 Recovery = 100.43%						
Na 589.592†	663529.8	50.0 mg/L	0.87	50.0 mg/L	0.87	1.73%
QC value within limits for Na 589.592 Recovery = 100.09%						
Sr 407.771†	1091210.4	1.06 mg/L	0.074	1.06 mg/L	0.074	7.01%
QC value within limits for Sr 407.771 Recovery = 106.03%						
Li 670.784†	81148.2	1.01 mg/L	0.006	1.01 mg/L	0.006	0.61%
QC value within limits for Li 670.784 Recovery = 101.13%						

All analyte(s) passed QC.

Sequence No.: 41 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/24/2011 8:06:28 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5095070.1						32440.06	0.64%
YRADIAL	299950.0						5177.34	1.73%
Ga 417.206	1298339.0						19900.32	1.53%
GaRADIAL	61924.0						1723.05	2.78%
Ag 328.068†	-125.0	-0.00013	mg/L	0.000551	-0.00013	mg/L	0.000551	440.05%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	45.7	-0.0128	mg/L	0.02264	-0.0128	mg/L	0.02264	177.24%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.4	-0.00229	mg/L	0.002218	-0.00229	mg/L	0.002218	96.81%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-2.9	-0.00017	mg/L	0.000015	-0.00017	mg/L	0.000015	8.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	15.9	0.00006	mg/L	0.000025	0.00006	mg/L	0.000025	43.44%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	-299.9	-0.00198	mg/L	0.000161	-0.00198	mg/L	0.000161	8.18%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	6.9	0.0354	mg/L	0.08387	0.0354	mg/L	0.08387	236.94%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-0.6	-0.00009	mg/L	0.000006	-0.00009	mg/L	0.000006	7.46%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	3.8	0.00012	mg/L	0.000055	0.00012	mg/L	0.000055	47.57%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	10.6	-0.00012	mg/L	0.000143	-0.00012	mg/L	0.000143	123.91%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-87.8	-0.00016	mg/L	0.000578	-0.00016	mg/L	0.000578	355.00%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-1.8	-0.00356	mg/L	0.004802	-0.00356	mg/L	0.004802	135.03%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	13.2	0.0114	mg/L	0.00130	0.0114	mg/L	0.00130	11.34%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-18.5	-0.00053	mg/L	0.000008	-0.00053	mg/L	0.000008	1.42%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-2.8	-0.00034	mg/L	0.000321	-0.00034	mg/L	0.000321	93.99%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	5.3	0.00001	mg/L	0.000219	0.00001	mg/L	0.000219	>999.9%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	7.9	0.00111	mg/L	0.000491	0.00111	mg/L	0.000491	44.16%

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QC value within limits for Pb 220.353 Recovery = Not calculated

Sb 206.836†	-3.7	-0.00194 mg/L	0.001875	-0.00194 mg/L	0.001875	96.58%
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	7.3	0.00456 mg/L	0.004183	0.00456 mg/L	0.004183	91.71%
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-12.2	-0.0242 mg/L	0.00005	-0.0242 mg/L	0.00005	0.22%
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-7.0	-0.00113 mg/L	0.000712	-0.00113 mg/L	0.000712	63.14%
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-30.7	0.00000 mg/L	0.000126	0.00000 mg/L	0.000126	>999.9%
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-14.2	-0.00724 mg/L	0.002519	-0.00724 mg/L	0.002519	34.79%
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	-116.1	0.00026 mg/L	0.000331	0.00026 mg/L	0.000331	126.80%
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-76.8	-0.00264 mg/L	0.000034	-0.00264 mg/L	0.000034	1.29%
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	-93.5	-0.0389 mg/L	0.01543	-0.0389 mg/L	0.01543	39.69%
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	164.5	0.00608 mg/L	0.005054	0.00608 mg/L	0.005054	83.07%
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	177.4	0.00013 mg/L	0.000408	0.00013 mg/L	0.000408	320.55%
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	-47.6	-0.00120 mg/L	0.001055	-0.00120 mg/L	0.001055	87.84%
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

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Sequence No.: 42 **Autosampler Location: 76**
Sample ID: PBW 2R WG357436-02 **Date Collected: 2/24/2011 8:13:10 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 2R WG357436-02

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: PBW 2R WG357436-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5161287.4						29386.43	0.57%
YRADIAL	318048.1						8068.17	2.54%
Ga 417.206	1344993.6						18172.44	1.35%
GaRADIAL	65208.0						761.24	1.17%
Ag 328.068†	-122.8	-0.00011	mg/L	0.000493	-0.00011	mg/L	0.000493	429.23%
Al 396.153†	47.6	-0.0124	mg/L	0.01083	-0.0124	mg/L	0.01083	87.49%
As 188.979†	1.7	0.00054	mg/L	0.004933	0.00054	mg/L	0.004933	914.99%
Ba 233.527†	1.1	-0.00011	mg/L	0.000087	-0.00011	mg/L	0.000087	82.74%
Be 234.861†	34.8	0.00009	mg/L	0.000023	0.00009	mg/L	0.000023	26.18%
B 249.677†	-393.8	-0.00371	mg/L	0.000163	-0.00371	mg/L	0.000163	4.38%
Ca 227.546†	14.7	0.108	mg/L	0.0321	0.108	mg/L	0.0321	29.72%
Cd 228.802†	-0.9	-0.00012	mg/L	0.000069	-0.00012	mg/L	0.000069	55.67%
Co 228.616†	-2.7	-0.00022	mg/L	0.000342	-0.00022	mg/L	0.000342	154.08%
Cr 267.716†	15.2	-0.00008	mg/L	0.000119	-0.00008	mg/L	0.000119	157.43%
Cu 327.393†	-45.7	0.00012	mg/L	0.000799	0.00012	mg/L	0.000799	654.38%
Fe 239.562†	-1.9	-0.00370	mg/L	0.004724	-0.00370	mg/L	0.004724	127.77%
Mg 279.077†	13.9	0.0123	mg/L	0.00587	0.0123	mg/L	0.00587	47.60%
Mn 257.610†	-9.2	-0.00051	mg/L	0.000013	-0.00051	mg/L	0.000013	2.44%
Mo 202.031†	-2.0	-0.00028	mg/L	0.000408	-0.00028	mg/L	0.000408	144.69%
Ni 231.604†	0.5	-0.00014	mg/L	0.000432	-0.00014	mg/L	0.000432	316.46%
Pb 220.353†	-9.1	-0.00170	mg/L	0.001014	-0.00170	mg/L	0.001014	59.74%
Sb 206.836†	-1.3	-0.00046	mg/L	0.001323	-0.00046	mg/L	0.001323	289.95%
Se 196.026†	3.7	0.00208	mg/L	0.000971	0.00208	mg/L	0.000971	46.63%
Si 251.611†	26.2	-0.0231	mg/L	0.00018	-0.0231	mg/L	0.00018	0.79%
Sn 189.927†	-11.0	-0.00180	mg/L	0.000566	-0.00180	mg/L	0.000566	31.38%
Ti 334.940†	110.7	0.00019	mg/L	0.000179	0.00019	mg/L	0.000179	95.52%
Tl 190.801†	-9.1	-0.00425	mg/L	0.003488	-0.00425	mg/L	0.003488	82.03%
V 290.880†	-124.4	0.00021	mg/L	0.001910	0.00021	mg/L	0.001910	926.66%
Zn 206.200†	-37.3	-0.00146	mg/L	0.000126	-0.00146	mg/L	0.000126	8.65%
K 766.490†	-92.1	-0.0383	mg/L	0.00671	-0.0383	mg/L	0.00671	17.51%

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Na 589.592†	-3.0	-0.00633	mg/L	0.002523	-0.00633	mg/L	0.002523 39.86%
Sr 407.771†	541.6	0.00048	mg/L	0.000162	0.00048	mg/L	0.000162 33.65%
Li 670.784†	-34.9	-0.00104	mg/L	0.001225	-0.00104	mg/L	0.001225 117.50%

Sequence No.: 43 **Autosampler Location: 77**
Sample ID: LCSW 2R WG357436-03 **Date Collected: 2/24/2011 8:19:51 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 2R WG357436-03

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: LCSW 2R WG357436-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5021366.9						15247.60	0.30%
YRADIAL	301000.7						5606.18	1.86%
Ga 417.206	1314105.7						21719.50	1.65%
GaRADIAL	62285.7						146.51	0.24%
Ag 328.068†	38484.3	0.188	mg/L	0.0019	0.188	mg/L	0.0019	1.01%
Al 396.153†	25069.5	5.03	mg/L	0.026	5.03	mg/L	0.026	0.52%
As 188.979†	201.4	0.183	mg/L	0.0035	0.183	mg/L	0.0035	1.91%
Ba 233.527†	28468.7	0.481	mg/L	0.0036	0.481	mg/L	0.0036	0.74%
Be 234.861†	13552.4	0.0235	mg/L	0.00030	0.0235	mg/L	0.00030	1.28%
B 249.677†	49527.3	0.924	mg/L	0.0099	0.924	mg/L	0.0099	1.07%
Ca 227.546†	509.0	4.87	mg/L	0.092	4.87	mg/L	0.092	1.90%
Cd 228.802†	416.9	0.0235	mg/L	0.00045	0.0235	mg/L	0.00045	1.91%
Co 228.616†	1864.9	0.0960	mg/L	0.00029	0.0960	mg/L	0.00029	0.30%
Cr 267.716†	27566.9	0.237	mg/L	0.0018	0.237	mg/L	0.0018	0.76%
Cu 327.393†	34934.7	0.236	mg/L	0.0025	0.236	mg/L	0.0025	1.06%
Fe 239.562†	860.1	1.96	mg/L	0.007	1.96	mg/L	0.007	0.34%
Mg 279.077†	4053.5	5.08	mg/L	0.035	5.08	mg/L	0.035	0.68%
Mn 257.610†	110519.0	0.245	mg/L	0.0025	0.245	mg/L	0.0025	1.00%
Mo 202.031†	6440.2	0.476	mg/L	0.0043	0.476	mg/L	0.0043	0.90%
Ni 231.604†	8282.2	0.241	mg/L	0.0031	0.241	mg/L	0.0031	1.29%
Pb 220.353†	1415.4	0.236	mg/L	0.0012	0.236	mg/L	0.0012	0.52%
Sb 206.836†	896.4	0.560	mg/L	0.0082	0.560	mg/L	0.0082	1.45%
Se 196.026†	271.5	0.191	mg/L	0.0033	0.191	mg/L	0.0033	1.72%
Si 251.611†	84231.7	2.38	mg/L	0.026	2.38	mg/L	0.026	1.11%
Sn 189.927†	2936.8	0.506	mg/L	0.0019	0.506	mg/L	0.0019	0.37%
Ti 334.940†	353238.3	0.478	mg/L	0.0023	0.478	mg/L	0.0023	0.48%
Tl 190.801†	400.7	0.241	mg/L	0.0025	0.241	mg/L	0.0025	1.04%
V 290.880†	72280.1	0.473	mg/L	0.0043	0.473	mg/L	0.0043	0.92%
Zn 206.200†	15468.1	0.466	mg/L	0.0048	0.466	mg/L	0.0048	1.02%
K 766.490†	63032.1	24.3	mg/L	0.14	24.3	mg/L	0.14	0.58%
Na 589.592†	327037.2	24.4	mg/L	0.29	24.4	mg/L	0.29	1.20%
Sr 407.771†	538595.4	0.523	mg/L	0.0424	0.523	mg/L	0.0424	8.11%
Li 670.784†	39989.0	0.498	mg/L	0.0054	0.498	mg/L	0.0054	1.09%

Sequence No.: 44 **Autosampler Location: 78**
Sample ID: L1102059001 WG357436-01 **Date Collected: 2/24/2011 8:26:30 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102059001 WG357436-01

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102059001 WG357436-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5155979.9						62640.43	1.21%
YRADIAL	311247.2						2770.12	0.89%
Ga 417.206	1346609.3						3829.67	0.28%

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GaRADIAL	65223.9				1633.59	2.50%
Ag 328.068†	-202.2	-0.00051 mg/L	0.000470	-0.00051 mg/L	0.000470	92.32%
Al 396.153†	718.8	0.123 mg/L	0.0087	0.123 mg/L	0.0087	7.12%
As 188.979†	1.2	0.00005 mg/L	0.002034	0.00005 mg/L	0.002034	>999.9%
Ba 233.527†	1059.5	0.0177 mg/L	0.00022	0.0177 mg/L	0.00022	1.24%
Be 234.861†	53.6	0.00010 mg/L	0.000032	0.00010 mg/L	0.000032	30.71%
B 249.677†	-63.7	0.00267 mg/L	0.000395	0.00267 mg/L	0.000395	14.77%
Ca 227.546†	369.1	3.41 mg/L	0.067	3.41 mg/L	0.067	1.96%
Cd 228.802†	0.5	-0.00004 mg/L	0.000133	-0.00004 mg/L	0.000133	366.47%
Co 228.616†	3.1	0.00006 mg/L	0.000146	0.00006 mg/L	0.000146	227.19%
Cr 267.716†	16.7	-0.00006 mg/L	0.000047	-0.00006 mg/L	0.000047	72.55%
Cu 327.393†	167.0	0.00157 mg/L	0.000415	0.00157 mg/L	0.000415	26.46%
Fe 239.562†	38.2	0.0876 mg/L	0.00662	0.0876 mg/L	0.00662	7.56%
Mg 279.077†	792.4	0.988 mg/L	0.0161	0.988 mg/L	0.0161	1.63%
Mn 257.610†	1137.5	0.00213 mg/L	0.000057	0.00213 mg/L	0.000057	2.69%
Mo 202.031†	1.7	-0.00001 mg/L	0.000296	-0.00001 mg/L	0.000296	>999.9%
Ni 231.604†	4.5	-0.00002 mg/L	0.000130	-0.00002 mg/L	0.000130	628.05%
Pb 220.353†	4.8	0.00076 mg/L	0.001285	0.00076 mg/L	0.001285	170.22%
Sb 206.836†	2.0	0.00165 mg/L	0.000892	0.00165 mg/L	0.000892	54.08%
Se 196.026†	-7.6	-0.00507 mg/L	0.001820	-0.00507 mg/L	0.001820	35.92%
Si 251.611†	18910.3	0.517 mg/L	0.0062	0.517 mg/L	0.0062	1.20%
Sn 189.927†	-7.4	-0.00119 mg/L	0.000403	-0.00119 mg/L	0.000403	33.89%
Ti 334.940†	2009.2	0.00279 mg/L	0.000103	0.00279 mg/L	0.000103	3.71%
Tl 190.801†	-7.4	-0.00353 mg/L	0.001735	-0.00353 mg/L	0.001735	49.18%
V 290.880†	-68.9	0.00057 mg/L	0.000879	0.00057 mg/L	0.000879	152.90%
Zn 206.200†	1642.6	0.0490 mg/L	0.00095	0.0490 mg/L	0.00095	1.94%
K 766.490†	512.3	0.193 mg/L	0.0425	0.193 mg/L	0.0425	22.03%
Na 589.592†	14878.3	1.10 mg/L	0.013	1.10 mg/L	0.013	1.21%
Sr 407.771†	23524.2	0.0228 mg/L	0.00125	0.0228 mg/L	0.00125	5.50%
Li 670.784†	-10.7	-0.00074 mg/L	0.000363	-0.00074 mg/L	0.000363	49.00%

Sequence No.: 45 **Autosampler Location: 79**
Sample ID: L1102059001S WG357436-04 **Date Collected: 2/24/2011 8:33:13 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102059001S WG357436-04

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102059001S WG357436-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5056089.5						67135.58	1.33%
YRADIAL	305884.6						9455.90	3.09%
Ga 417.206	1315263.6						14275.72	1.09%
GaRADIAL	63852.5						849.42	1.33%
Ag 328.068†	3737.0	0.0187	mg/L	0.00078	0.0187	mg/L	0.00078	4.16%
Al 396.153†	3012.3	0.585	mg/L	0.0335	0.585	mg/L	0.0335	5.72%
As 188.979†	20.8	0.0179	mg/L	0.00171	0.0179	mg/L	0.00171	9.58%
Ba 233.527†	3896.0	0.0657	mg/L	0.00088	0.0657	mg/L	0.00088	1.34%
Be 234.861†	1395.5	0.00243	mg/L	0.000034	0.00243	mg/L	0.000034	1.39%
B 249.677†	4762.1	0.0924	mg/L	0.00244	0.0924	mg/L	0.00244	2.64%
Ca 227.546†	410.0	3.80	mg/L	0.047	3.80	mg/L	0.047	1.25%
Cd 228.802†	41.7	0.00230	mg/L	0.000143	0.00230	mg/L	0.000143	6.21%
Co 228.616†	186.5	0.00952	mg/L	0.000237	0.00952	mg/L	0.000237	2.49%
Cr 267.716†	2764.5	0.0236	mg/L	0.00082	0.0236	mg/L	0.00082	3.49%
Cu 327.393†	3519.9	0.0242	mg/L	0.00045	0.0242	mg/L	0.00045	1.88%
Fe 239.562†	122.2	0.279	mg/L	0.0040	0.279	mg/L	0.0040	1.43%
Mg 279.077†	1175.1	1.47	mg/L	0.031	1.47	mg/L	0.031	2.09%
Mn 257.610†	11837.0	0.0259	mg/L	0.00061	0.0259	mg/L	0.00061	2.36%
Mo 202.031†	642.0	0.0473	mg/L	0.00071	0.0473	mg/L	0.00071	1.49%
Ni 231.604†	824.9	0.0239	mg/L	0.00044	0.0239	mg/L	0.00044	1.85%
Pb 220.353†	145.1	0.0242	mg/L	0.00007	0.0242	mg/L	0.00007	0.30%
Sb 206.836†	89.5	0.0563	mg/L	0.00293	0.0563	mg/L	0.00293	5.21%
Se 196.026†	25.3	0.0182	mg/L	0.00338	0.0182	mg/L	0.00338	18.57%
Si 251.611†	27381.7	0.758	mg/L	0.0164	0.758	mg/L	0.0164	2.17%
Sn 189.927†	291.0	0.0502	mg/L	0.00152	0.0502	mg/L	0.00152	3.04%
Ti 334.940†	36231.4	0.0491	mg/L	0.00120	0.0491	mg/L	0.00120	2.44%

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Tl 190.801†	41.5	0.0256	mg/L	0.00191	0.0256	mg/L	0.00191	7.47%
V 290.880†	7050.0	0.0471	mg/L	0.00221	0.0471	mg/L	0.00221	4.70%
Zn 206.200†	3165.0	0.0949	mg/L	0.00122	0.0949	mg/L	0.00122	1.29%
K 766.490†	6623.4	2.54	mg/L	0.059	2.54	mg/L	0.059	2.33%
Na 589.592†	46462.7	3.44	mg/L	0.068	3.44	mg/L	0.068	1.99%
Sr 407.771†	74557.5	0.0724	mg/L	0.00679	0.0724	mg/L	0.00679	9.38%
Li 670.784†	3945.7	0.0486	mg/L	0.00256	0.0486	mg/L	0.00256	5.26%

Sequence No.: 46 **Autosampler Location: 80**
Sample ID: L1102059001SD WG357436-05 **Date Collected: 2/24/2011 8:39:58 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102059001SD WG357436-05

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102059001SD WG357436-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5003118.7						23041.92	0.46%
YRADIAL	304877.9						3112.04	1.02%
Ga 417.206	1301856.1						8695.24	0.67%
GaRADIAL	63340.0						1141.00	1.80%
Ag 328.068†	3731.5	0.0186	mg/L	0.00065	0.0186	mg/L	0.00065	3.49%
Al 396.153†	3234.4	0.629	mg/L	0.0021	0.629	mg/L	0.0021	0.33%
As 188.979†	23.1	0.0200	mg/L	0.00078	0.0200	mg/L	0.00078	3.90%
Ba 233.527†	4084.7	0.0689	mg/L	0.00018	0.0689	mg/L	0.00018	0.26%
Be 234.861†	1434.4	0.00250	mg/L	0.000015	0.00250	mg/L	0.000015	0.62%
B 249.677†	4939.4	0.0957	mg/L	0.00114	0.0957	mg/L	0.00114	1.19%
Ca 227.546†	443.9	4.12	mg/L	0.071	4.12	mg/L	0.071	1.71%
Cd 228.802†	40.6	0.00222	mg/L	0.000135	0.00222	mg/L	0.000135	6.07%
Co 228.616†	188.3	0.00961	mg/L	0.000463	0.00961	mg/L	0.000463	4.82%
Cr 267.716†	2934.1	0.0251	mg/L	0.00068	0.0251	mg/L	0.00068	2.73%
Cu 327.393†	3790.8	0.0260	mg/L	0.00014	0.0260	mg/L	0.00014	0.53%
Fe 239.562†	126.7	0.289	mg/L	0.0016	0.289	mg/L	0.0016	0.55%
Mg 279.077†	1232.8	1.54	mg/L	0.011	1.54	mg/L	0.011	0.71%
Mn 257.610†	12374.6	0.0271	mg/L	0.00029	0.0271	mg/L	0.00029	1.06%
Mo 202.031†	669.0	0.0493	mg/L	0.00029	0.0493	mg/L	0.00029	0.59%
Ni 231.604†	860.1	0.0249	mg/L	0.00017	0.0249	mg/L	0.00017	0.68%
Pb 220.353†	153.5	0.0256	mg/L	0.00073	0.0256	mg/L	0.00073	2.85%
Sb 206.836†	92.9	0.0584	mg/L	0.00138	0.0584	mg/L	0.00138	2.36%
Se 196.026†	21.1	0.0153	mg/L	0.00541	0.0153	mg/L	0.00541	35.34%
Si 251.611†	28816.6	0.799	mg/L	0.0079	0.799	mg/L	0.0079	0.99%
Sn 189.927†	302.5	0.0522	mg/L	0.00088	0.0522	mg/L	0.00088	1.68%
Ti 334.940†	38146.0	0.0517	mg/L	0.00050	0.0517	mg/L	0.00050	0.97%
Tl 190.801†	42.2	0.0260	mg/L	0.00181	0.0260	mg/L	0.00181	6.97%
V 290.880†	7533.8	0.0502	mg/L	0.00104	0.0502	mg/L	0.00104	2.06%
Zn 206.200†	3319.9	0.0996	mg/L	0.00048	0.0996	mg/L	0.00048	0.48%
K 766.490†	6870.1	2.64	mg/L	0.025	2.64	mg/L	0.025	0.93%
Na 589.592†	49216.0	3.65	mg/L	0.052	3.65	mg/L	0.052	1.44%
Sr 407.771†	80489.0	0.0782	mg/L	0.00417	0.0782	mg/L	0.00417	5.33%
Li 670.784†	4165.5	0.0513	mg/L	0.00100	0.0513	mg/L	0.00100	1.94%

Sequence No.: 47 **Autosampler Location: 83**
Sample ID: L1102059801 **Date Collected: 2/24/2011 8:46:37 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102059801

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102059801

Analyte	Mean Corrected	Calib.			Sample			

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Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	5109637.1						51209.99	1.00%
YRADIAL	312035.1						3791.34	1.22%
Ga 417.206	1325991.4						15739.23	1.19%
GaRADIAL	64045.1						465.12	0.73%
Ag 328.068†	-208.7	-0.00053	mg/L	0.000096	-0.00053	mg/L	0.000096	18.14%
Al 396.153†	122.6	0.00273	mg/L	0.006630	0.00273	mg/L	0.006630	243.11%
As 188.979†	1.1	0.00004	mg/L	0.002277	0.00004	mg/L	0.002277	>999.9%
Ba 233.527†	3.7	-0.00006	mg/L	0.000099	-0.00006	mg/L	0.000099	164.76%
Be 234.861†	28.4	0.00008	mg/L	0.000022	0.00008	mg/L	0.000022	28.51%
B 249.677†	143.2	0.00625	mg/L	0.000260	0.00625	mg/L	0.000260	4.15%
Ca 227.546†	13.4	0.0966	mg/L	0.07086	0.0966	mg/L	0.07086	73.38%
Cd 228.802†	-3.6	-0.00027	mg/L	0.000056	-0.00027	mg/L	0.000056	20.45%
Co 228.616†	-0.7	-0.00012	mg/L	0.000318	-0.00012	mg/L	0.000318	261.20%
Cr 267.716†	35.0	0.00010	mg/L	0.000047	0.00010	mg/L	0.000047	49.78%
Cu 327.393†	111.6	0.00118	mg/L	0.000093	0.00118	mg/L	0.000093	7.84%
Fe 239.562†	1.1	0.00306	mg/L	0.001286	0.00306	mg/L	0.001286	42.00%
Mg 279.077†	14.2	0.0128	mg/L	0.00503	0.0128	mg/L	0.00503	39.35%
Mn 257.610†	125.1	-0.00019	mg/L	0.000004	-0.00019	mg/L	0.000004	2.20%
Mo 202.031†	-5.3	-0.00052	mg/L	0.000308	-0.00052	mg/L	0.000308	58.75%
Ni 231.604†	10.8	0.00017	mg/L	0.000034	0.00017	mg/L	0.000034	20.17%
Pb 220.353†	4.0	0.00048	mg/L	0.000908	0.00048	mg/L	0.000908	191.05%
Sb 206.836†	-2.3	-0.00105	mg/L	0.000857	-0.00105	mg/L	0.000857	81.82%
Se 196.026†	1.4	0.00045	mg/L	0.002999	0.00045	mg/L	0.002999	659.11%
Si 251.611†	3230.6	0.0685	mg/L	0.00072	0.0685	mg/L	0.00072	1.06%
Sn 189.927†	-8.5	-0.00138	mg/L	0.000564	-0.00138	mg/L	0.000564	40.85%
Ti 334.940†	-54.8	-0.00004	mg/L	0.000150	-0.00004	mg/L	0.000150	412.46%
Tl 190.801†	-10.8	-0.00529	mg/L	0.000987	-0.00529	mg/L	0.000987	18.67%
V 290.880†	-18.2	0.00090	mg/L	0.000489	0.00090	mg/L	0.000489	54.28%
Zn 206.200†	213.3	0.00608	mg/L	0.000041	0.00608	mg/L	0.000041	0.67%
K 766.490†	-80.6	-0.0344	mg/L	0.01096	-0.0344	mg/L	0.01096	31.90%
Na 589.592†	6333.6	0.464	mg/L	0.0091	0.464	mg/L	0.0091	1.97%
Sr 407.771†	408.0	0.00035	mg/L	0.000144	0.00035	mg/L	0.000144	40.96%
Li 670.784†	74.5	0.00032	mg/L	0.001140	0.00032	mg/L	0.001140	354.39%

Sequence No.: 48 **Autosampler Location: 84**
Sample ID: L1102059801PS WG357496-01 **Date Collected: 2/24/2011 8:53:17 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102059801PS WG357496-01

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102059801PS WG357496-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4950582.0						21093.98	0.43%
YRADIAL	310720.7						7419.13	2.39%
Ga 417.206	1294806.8						22897.17	1.77%
GaRADIAL	64493.8						541.26	0.84%
Ag 328.068†	38718.0	0.189	mg/L	0.0079	0.189	mg/L	0.0079	4.21%
Al 396.153†	24640.3	4.94	mg/L	0.004	4.94	mg/L	0.004	0.09%
As 188.979†	200.8	0.182	mg/L	0.0015	0.182	mg/L	0.0015	0.83%
Ba 233.527†	28648.3	0.484	mg/L	0.0121	0.484	mg/L	0.0121	2.49%
Be 234.861†	13553.2	0.0235	mg/L	0.00080	0.0235	mg/L	0.00080	3.39%
B 249.677†	50374.4	0.939	mg/L	0.0396	0.939	mg/L	0.0396	4.22%
Ca 227.546†	517.5	4.96	mg/L	0.095	4.96	mg/L	0.095	1.92%
Cd 228.802†	423.4	0.0239	mg/L	0.00043	0.0239	mg/L	0.00043	1.78%
Co 228.616†	1885.0	0.0971	mg/L	0.00036	0.0971	mg/L	0.00036	0.37%
Cr 267.716†	27762.1	0.239	mg/L	0.0058	0.239	mg/L	0.0058	2.44%
Cu 327.393†	35066.5	0.237	mg/L	0.0095	0.237	mg/L	0.0095	4.00%
Fe 239.562†	820.8	1.87	mg/L	0.014	1.87	mg/L	0.014	0.77%
Mg 279.077†	3881.9	4.86	mg/L	0.065	4.86	mg/L	0.065	1.33%
Mn 257.610†	111213.6	0.246	mg/L	0.0064	0.246	mg/L	0.0064	2.60%
Mo 202.031†	6466.9	0.478	mg/L	0.0119	0.478	mg/L	0.0119	2.50%
Ni 231.604†	8409.3	0.245	mg/L	0.0069	0.245	mg/L	0.0069	2.81%
Pb 220.353†	1433.4	0.239	mg/L	0.0018	0.239	mg/L	0.0018	0.75%
Sb 206.836†	907.4	0.567	mg/L	0.0125	0.567	mg/L	0.0125	2.19%

Approved: February 25, 2011

Pierce Morris

Se 196.026†	267.5	0.189	mg/L	0.0067	0.189	mg/L	0.0067 3.57%
Si 251.611†	88844.3	2.51	mg/L	0.101	2.51	mg/L	0.101 4.03%
Sn 189.927†	-19.8	-0.00333	mg/L	0.000749	-0.00333	mg/L	0.000749 22.48%
Ti 334.940†	352987.2	0.477	mg/L	0.0023	0.477	mg/L	0.0023 0.48%
Tl 190.801†	402.5	0.242	mg/L	0.0015	0.242	mg/L	0.0015 0.61%
V 290.880†	72816.5	0.476	mg/L	0.0139	0.476	mg/L	0.0139 2.92%
Zn 206.200†	15559.3	0.468	mg/L	0.0111	0.468	mg/L	0.0111 2.36%
K 766.490†	63271.6	24.4	mg/L	0.20	24.4	mg/L	0.20 0.84%
Na 589.592†	326766.4	24.4	mg/L	0.27	24.4	mg/L	0.27 1.09%
Sr 407.771†	531644.4	0.517	mg/L	0.0480	0.517	mg/L	0.0480 9.29%
Li 670.784†	40101.7	0.499	mg/L	0.0035	0.499	mg/L	0.0035 0.71%

Sequence No.: 49 **Autosampler Location: 85**
Sample ID: L1102059801DL WG357496-02 **Date Collected: 2/24/2011 9:00:05 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102059801DL WG357496-02

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102059801DL WG357496-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5030770.7						51093.12	1.02%
YRADIAL	301504.8						3156.84	1.05%
Ga 417.206	1289899.6						5814.68	0.45%
GaRADIAL	62073.9						697.73	1.12%
Ag 328.068†	-299.9	-0.00097	mg/L	0.000885	-0.00097	mg/L	0.000885	91.17%
Al 396.153†	66.4	-0.00860	mg/L	0.007239	-0.00860	mg/L	0.007239	84.16%
As 188.979†	1.3	0.00016	mg/L	0.001768	0.00016	mg/L	0.001768	>999.9%
Ba 233.527†	5.1	-0.00003	mg/L	0.000090	-0.00003	mg/L	0.000090	259.32%
Be 234.861†	26.1	0.00008	mg/L	0.000026	0.00008	mg/L	0.000026	34.08%
B 249.677†	77.7	0.00500	mg/L	0.000484	0.00500	mg/L	0.000484	9.68%
Ca 227.546†	10.4	0.0683	mg/L	0.07328	0.0683	mg/L	0.07328	107.27%
Cd 228.802†	0.0	-0.00007	mg/L	0.000146	-0.00007	mg/L	0.000146	214.29%
Co 228.616†	-1.6	-0.00016	mg/L	0.000125	-0.00016	mg/L	0.000125	76.01%
Cr 267.716†	5.6	-0.00016	mg/L	0.000039	-0.00016	mg/L	0.000039	24.56%
Cu 327.393†	-23.0	0.00028	mg/L	0.000747	0.00028	mg/L	0.000747	271.56%
Fe 239.562†	-2.9	-0.00598	mg/L	0.000206	-0.00598	mg/L	0.000206	3.44%
Mg 279.077†	3.1	-0.00118	mg/L	0.005787	-0.00118	mg/L	0.005787	492.08%
Mn 257.610†	125.5	-0.00021	mg/L	0.000015	-0.00021	mg/L	0.000015	7.05%
Mo 202.031†	-2.2	-0.00030	mg/L	0.000119	-0.00030	mg/L	0.000119	40.28%
Ni 231.604†	1.4	-0.00011	mg/L	0.000121	-0.00011	mg/L	0.000121	109.46%
Pb 220.353†	3.0	0.00030	mg/L	0.000184	0.00030	mg/L	0.000184	60.54%
Sb 206.836†	-1.1	-0.00034	mg/L	0.002102	-0.00034	mg/L	0.002102	627.31%
Se 196.026†	0.0	-0.00055	mg/L	0.003105	-0.00055	mg/L	0.003105	568.86%
Si 251.611†	772.9	-0.00172	mg/L	0.001582	-0.00172	mg/L	0.001582	91.84%
Sn 189.927†	-5.4	-0.00085	mg/L	0.000864	-0.00085	mg/L	0.000864	101.07%
Ti 334.940†	18.5	0.00006	mg/L	0.000074	0.00006	mg/L	0.000074	118.11%
Tl 190.801†	-8.7	-0.00405	mg/L	0.003562	-0.00405	mg/L	0.003562	87.94%
V 290.880†	137.3	0.00192	mg/L	0.000801	0.00192	mg/L	0.000801	41.83%
Zn 206.200†	-13.4	-0.00074	mg/L	0.000136	-0.00074	mg/L	0.000136	18.39%
K 766.490†	-51.2	-0.0227	mg/L	0.03593	-0.0227	mg/L	0.03593	158.20%
Na 589.592†	1556.9	0.109	mg/L	0.0080	0.109	mg/L	0.0080	7.36%
Sr 407.771†	268.1	0.00022	mg/L	0.000570	0.00022	mg/L	0.000570	264.49%
Li 670.784†	31.9	-0.00021	mg/L	0.000165	-0.00021	mg/L	0.000165	79.11%

Sequence No.: 50 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/24/2011 9:06:44 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Approved: February 25, 2011

Pierre Morris

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4800985.1						46955.34	0.98%
YRADIAL	296219.9						3417.98	1.15%
Ga 417.206	1236903.6						9974.29	0.81%
GaRADIAL	61364.7						581.57	0.95%
Ag 328.068†	80774.5	0.393	mg/L	0.0013	0.393	mg/L	0.0013	0.33%
QC value within limits for Ag 328.068 Recovery = 98.37%								
Al 396.153†	50664.8	10.2	mg/L	0.01	10.2	mg/L	0.01	0.11%
QC value within limits for Al 396.153 Recovery = 101.79%								
As 188.979†	427.5	0.389	mg/L	0.0074	0.389	mg/L	0.0074	1.92%
QC value within limits for As 188.979 Recovery = 97.14%								
Ba 233.527†	59112.6	0.999	mg/L	0.0064	0.999	mg/L	0.0064	0.64%
QC value within limits for Ba 233.527 Recovery = 99.91%								
Be 234.861†	28843.0	0.0500	mg/L	0.00033	0.0500	mg/L	0.00033	0.67%
QC value within limits for Be 234.861 Recovery = 100.07%								
B 249.677†	26106.1	0.493	mg/L	0.0008	0.493	mg/L	0.0008	0.16%
QC value within limits for B 249.677 Recovery = 98.67%								
Ca 227.546†	1078.1	10.4	mg/L	0.07	10.4	mg/L	0.07	0.71%
QC value within limits for Ca 227.546 Recovery = 103.50%								
Cd 228.802†	887.9	0.0502	mg/L	0.00025	0.0502	mg/L	0.00025	0.51%
QC value within limits for Cd 228.802 Recovery = 100.30%								
Co 228.616†	3876.6	0.200	mg/L	0.0019	0.200	mg/L	0.0019	0.97%
QC value within limits for Co 228.616 Recovery = 99.87%								
Cr 267.716†	57773.0	0.497	mg/L	0.0033	0.497	mg/L	0.0033	0.66%
QC value within limits for Cr 267.716 Recovery = 99.47%								
Cu 327.393†	73107.2	0.494	mg/L	0.0020	0.494	mg/L	0.0020	0.40%
QC value within limits for Cu 327.393 Recovery = 98.84%								
Fe 239.562†	1740.4	3.96	mg/L	0.033	3.96	mg/L	0.033	0.82%
QC value within limits for Fe 239.562 Recovery = 99.08%								
Mg 279.077†	8074.7	10.1	mg/L	0.04	10.1	mg/L	0.04	0.41%
QC value within limits for Mg 279.077 Recovery = 101.22%								
Mn 257.610†	226705.7	0.503	mg/L	0.0030	0.503	mg/L	0.0030	0.60%
QC value within limits for Mn 257.610 Recovery = 100.55%								
Mo 202.031†	13787.2	1.02	mg/L	0.010	1.02	mg/L	0.010	0.95%
QC value within limits for Mo 202.031 Recovery = 101.82%								
Ni 231.604†	17272.6	0.503	mg/L	0.0052	0.503	mg/L	0.0052	1.03%
QC value within limits for Ni 231.604 Recovery = 100.61%								
Pb 220.353†	2957.4	0.494	mg/L	0.0054	0.494	mg/L	0.0054	1.09%
QC value within limits for Pb 220.353 Recovery = 98.89%								
Sb 206.836†	1901.6	1.19	mg/L	0.012	1.19	mg/L	0.012	1.00%
QC value within limits for Sb 206.836 Recovery = 99.06%								
Se 196.026†	577.2	0.408	mg/L	0.0025	0.408	mg/L	0.0025	0.62%
QC value within limits for Se 196.026 Recovery = 101.91%								
Si 251.611†	172243.6	4.88	mg/L	0.023	4.88	mg/L	0.023	0.48%
QC value within limits for Si 251.611 Recovery = 97.70%								
Sn 189.927†	5849.6	1.01	mg/L	0.009	1.01	mg/L	0.009	0.92%
QC value within limits for Sn 189.927 Recovery = 100.81%								
Ti 334.940†	733280.6	0.992	mg/L	0.0037	0.992	mg/L	0.0037	0.37%
QC value within limits for Ti 334.940 Recovery = 99.15%								
Tl 190.801†	844.1	0.507	mg/L	0.0073	0.507	mg/L	0.0073	1.44%
QC value within limits for Tl 190.801 Recovery = 101.32%								
V 290.880†	151104.6	0.988	mg/L	0.0046	0.988	mg/L	0.0046	0.46%
QC value within limits for V 290.880 Recovery = 98.76%								
Zn 206.200†	32729.9	0.986	mg/L	0.0076	0.986	mg/L	0.0076	0.78%
QC value within limits for Zn 206.200 Recovery = 98.57%								
K 766.490†	129201.0	50.1	mg/L	0.09	50.1	mg/L	0.09	0.18%
QC value within limits for K 766.490 Recovery = 100.20%								
Na 589.592†	660513.6	49.8	mg/L	0.69	49.8	mg/L	0.69	1.39%
QC value within limits for Na 589.592 Recovery = 99.63%								
Sr 407.771†	1103221.1	1.07	mg/L	0.073	1.07	mg/L	0.073	6.77%
QC value within limits for Sr 407.771 Recovery = 107.20%								
Li 670.784†	81090.8	1.01	mg/L	0.007	1.01	mg/L	0.007	0.72%
QC value within limits for Li 670.784 Recovery = 101.06%								

All analyte(s) passed QC.

Sequence No.: 51 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/24/2011 9:13:22 PM**
Analyst: **Data Type: Original**

Approved: February 25, 2011

Pierre Morris

Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5135567.3						23745.23	0.46%
YRADIAL	307655.4						5772.21	1.88%
Ga 417.206	1308398.1						6656.47	0.51%
GaRADIAL	63360.3						1058.93	1.67%
Ag 328.068†	-216.6	-0.00057	mg/L	0.000134	-0.00057	mg/L	0.000134	23.51%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	24.1	-0.0171	mg/L	0.01351	-0.0171	mg/L	0.01351	78.85%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.7	-0.00036	mg/L	0.000817	-0.00036	mg/L	0.000817	228.39%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	1.3	-0.00010	mg/L	0.000134	-0.00010	mg/L	0.000134	130.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	22.4	0.00007	mg/L	0.000014	0.00007	mg/L	0.000014	19.80%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	9.6	0.00377	mg/L	0.000159	0.00377	mg/L	0.000159	4.21%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	11.4	0.0779	mg/L	0.04613	0.0779	mg/L	0.04613	59.18%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	1.9	0.00004	mg/L	0.000057	0.00004	mg/L	0.000057	131.79%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-0.9	-0.00013	mg/L	0.000244	-0.00013	mg/L	0.000244	190.22%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	13.2	-0.00009	mg/L	0.000065	-0.00009	mg/L	0.000065	69.71%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-42.5	0.00014	mg/L	0.000567	0.00014	mg/L	0.000567	394.66%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-0.8	-0.00126	mg/L	0.002278	-0.00126	mg/L	0.002278	181.27%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	1.8	-0.00277	mg/L	0.001571	-0.00277	mg/L	0.001571	56.81%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-13.6	-0.00052	mg/L	0.000010	-0.00052	mg/L	0.000010	1.89%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	1.2	-0.00005	mg/L	0.000409	-0.00005	mg/L	0.000409	844.18%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	2.1	-0.00009	mg/L	0.000182	-0.00009	mg/L	0.000182	208.49%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	3.3	0.00036	mg/L	0.001593	0.00036	mg/L	0.001593	445.88%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-4.7	-0.00253	mg/L	0.001116	-0.00253	mg/L	0.001116	44.04%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.4	-0.00026	mg/L	0.003161	-0.00026	mg/L	0.003161	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-27.3	-0.0246	mg/L	0.00038	-0.0246	mg/L	0.00038	1.55%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-6.3	-0.00101	mg/L	0.000647	-0.00101	mg/L	0.000647	64.28%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	6.9	0.00005	mg/L	0.000091	0.00005	mg/L	0.000091	194.35%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-12.3	-0.00613	mg/L	0.002739	-0.00613	mg/L	0.002739	44.66%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-90.9	0.00043	mg/L	0.001060	0.00043	mg/L	0.001060	249.37%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-91.2	-0.00307	mg/L	0.000101	-0.00307	mg/L	0.000101	3.28%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	-33.7	-0.0159	mg/L	0.02622	-0.0159	mg/L	0.02622	165.37%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	27.7	-0.00406	mg/L	0.001271	-0.00406	mg/L	0.001271	31.36%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	740.5	0.00067	mg/L	0.001244	0.00067	mg/L	0.001244	184.49%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	-20.3	-0.00086	mg/L	0.001382	-0.00086	mg/L	0.001382	160.70%

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QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 52 **Autosampler Location: 86**
Sample ID: L1102059802 **Date Collected: 2/24/2011 9:20:11 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102059802

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102059802

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4952653.5						56431.84	1.14%
YRADIAL	307171.7						7333.54	2.39%
Ga 417.206	1287197.3						25131.84	1.95%
GaRADIAL	63134.9						1213.69	1.92%
Ag 328.068†	-196.0	-0.00047	mg/L	0.000859	-0.00047	mg/L	0.000859	183.84%
Al 396.153†	127.8	0.00379	mg/L	0.004172	0.00379	mg/L	0.004172	110.15%
As 188.979†	0.3	-0.00071	mg/L	0.001945	-0.00071	mg/L	0.001945	272.06%
Ba 233.527†	7.9	0.00001	mg/L	0.000081	0.00001	mg/L	0.000081	624.41%
Be 234.861†	12.5	0.00005	mg/L	0.000016	0.00005	mg/L	0.000016	31.72%
B 249.677†	333.2	0.00977	mg/L	0.000828	0.00977	mg/L	0.000828	8.48%
Ca 227.546†	15.0	0.111	mg/L	0.0489	0.111	mg/L	0.0489	44.13%
Cd 228.802†	-1.6	-0.00016	mg/L	0.000075	-0.00016	mg/L	0.000075	47.78%
Co 228.616†	-4.2	-0.00030	mg/L	0.000275	-0.00030	mg/L	0.000275	91.19%
Cr 267.716†	44.4	0.00018	mg/L	0.000069	0.00018	mg/L	0.000069	39.15%
Cu 327.393†	80.5	0.00097	mg/L	0.000773	0.00097	mg/L	0.000773	79.46%
Fe 239.562†	1.0	0.00282	mg/L	0.002167	0.00282	mg/L	0.002167	76.84%
Mg 279.077†	6.3	0.00289	mg/L	0.005832	0.00289	mg/L	0.005832	201.47%
Mn 257.610†	165.5	-0.00010	mg/L	0.000006	-0.00010	mg/L	0.000006	5.35%
Mo 202.031†	-1.0	-0.00021	mg/L	0.000069	-0.00021	mg/L	0.000069	33.26%
Ni 231.604†	2.3	-0.00008	mg/L	0.000108	-0.00008	mg/L	0.000108	132.17%
Pb 220.353†	5.7	0.00076	mg/L	0.000512	0.00076	mg/L	0.000512	67.51%
Sb 206.836†	-1.3	-0.00045	mg/L	0.001875	-0.00045	mg/L	0.001875	420.73%
Se 196.026†	-1.7	-0.00174	mg/L	0.003716	-0.00174	mg/L	0.003716	213.21%
Si 251.611†	3495.9	0.0761	mg/L	0.00444	0.0761	mg/L	0.00444	5.83%
Sn 189.927†	-5.9	-0.00094	mg/L	0.000085	-0.00094	mg/L	0.000085	9.05%
Ti 334.940†	113.0	0.00019	mg/L	0.000109	0.00019	mg/L	0.000109	57.34%
Tl 190.801†	-16.8	-0.00876	mg/L	0.004785	-0.00876	mg/L	0.004785	54.62%
V 290.880†	174.2	0.00216	mg/L	0.001193	0.00216	mg/L	0.001193	55.33%
Zn 206.200†	6.9	-0.00013	mg/L	0.000120	-0.00013	mg/L	0.000120	94.87%
K 766.490†	-7.0	-0.00611	mg/L	0.020078	-0.00611	mg/L	0.020078	328.50%
Na 589.592†	6999.1	0.513	mg/L	0.0147	0.513	mg/L	0.0147	2.87%
Sr 407.771†	533.5	0.00047	mg/L	0.000328	0.00047	mg/L	0.000328	69.32%
Li 670.784†	-43.9	-0.00115	mg/L	0.001453	-0.00115	mg/L	0.001453	125.92%

Sequence No.: 53 **Autosampler Location: 87**
Sample ID: L1102060001 DL0.1 **Date Collected: 2/24/2011 9:26:49 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102060001 DL0.1

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102060001 DL0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	5156019.0						48215.75	0.94%
YRADIAL	313775.6						4917.90	1.57%
Ga 417.206	1337680.4						13839.82	1.03%
GaRADIAL	64704.0						1849.59	2.86%

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Ag 328.068†	-198.0	-0.00048	mg/L	0.000158	-0.00048	mg/L	0.000158 32.68%
Al 396.153†	127.1	0.00364	mg/L	0.011601	0.00364	mg/L	0.011601 318.57%
As 188.979†	1.0	-0.00008	mg/L	0.000720	-0.00008	mg/L	0.000720 959.76%
Ba 233.527†	4372.4	0.0736	mg/L	0.00082	0.0736	mg/L	0.00082 1.12%
Be 234.861†	37.8	0.00009	mg/L	0.000034	0.00009	mg/L	0.000034 39.91%
B 249.677†	-129.8	0.00138	mg/L	0.000344	0.00138	mg/L	0.000344 25.03%
Ca 227.546†	158.7	1.45	mg/L	0.037	1.45	mg/L	0.037 2.53%
Cd 228.802†	0.0	-0.00006	mg/L	0.000098	-0.00006	mg/L	0.000098 156.41%
Co 228.616†	1.4	-0.00004	mg/L	0.000318	-0.00004	mg/L	0.000318 829.68%
Cr 267.716†	3.1	-0.00018	mg/L	0.000052	-0.00018	mg/L	0.000052 28.34%
Cu 327.393†	-5.7	0.00040	mg/L	0.000455	0.00040	mg/L	0.000455 114.63%
Fe 239.562†	18.9	0.0435	mg/L	0.00469	0.0435	mg/L	0.00469 10.78%
Mg 279.077†	104.5	0.126	mg/L	0.0087	0.126	mg/L	0.0087 6.87%
Mn 257.610†	2419.2	0.00487	mg/L	0.000093	0.00487	mg/L	0.000093 1.91%
Mo 202.031†	-2.9	-0.00034	mg/L	0.000418	-0.00034	mg/L	0.000418 121.33%
Ni 231.604†	-0.5	-0.00017	mg/L	0.000150	-0.00017	mg/L	0.000150 91.10%
Pb 220.353†	4.1	0.00054	mg/L	0.000450	0.00054	mg/L	0.000450 82.84%
Sb 206.836†	-4.3	-0.00230	mg/L	0.001915	-0.00230	mg/L	0.001915 83.34%
Se 196.026†	1.6	0.00091	mg/L	0.004821	0.00091	mg/L	0.004821 532.15%
Si 251.611†	2703.1	0.0535	mg/L	0.00079	0.0535	mg/L	0.00079 1.48%
Sn 189.927†	-12.1	-0.00201	mg/L	0.000261	-0.00201	mg/L	0.000261 13.00%
Ti 334.940†	167.9	0.00028	mg/L	0.000191	0.00028	mg/L	0.000191 68.70%
Tl 190.801†	-8.9	-0.00428	mg/L	0.000490	-0.00428	mg/L	0.000490 11.45%
V 290.880†	29.1	0.00121	mg/L	0.000683	0.00121	mg/L	0.000683 56.47%
Zn 206.200†	4.8	-0.00019	mg/L	0.000129	-0.00019	mg/L	0.000129 67.18%
K 766.490†	23.9	0.00584	mg/L	0.029661	0.00584	mg/L	0.029661 507.91%
Na 589.592†	6298.0	0.461	mg/L	0.0083	0.461	mg/L	0.0083 1.81%
Sr 407.771†	16696.8	0.0162	mg/L	0.00163	0.0162	mg/L	0.00163 10.07%
Li 670.784†	124.8	0.00095	mg/L	0.001407	0.00095	mg/L	0.001407 148.15%

Sequence No.: 54 **Autosampler Location: 88**
Sample ID: L1102060101 DL0.01 **Date Collected: 2/24/2011 9:33:32 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102060101 DL0.01

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102060101 DL0.01

	Mean Corrected		Calib.			Sample		
Analyte	**Intensity**	**Conc.**	**Units**	**Std.Dev.**	**Conc.**	**Units**	**Std.Dev.**	**RSD**
Y 371.029	4755368.1						46825.82	0.98%
YRADIAL	291775.2						8673.96	2.97%
Ga 417.206	1211564.5						17287.48	1.43%
GaRADIAL	60875.6						1569.69	2.58%
Ag 328.068†	71.0	0.00029	mg/L	0.000556	0.00029	mg/L	0.000556	189.99%
Al 396.153†	41.3	-0.0135	mg/L	0.00502	-0.0135	mg/L	0.00502	37.20%
As 188.979†	9.3	0.00629	mg/L	0.001482	0.00629	mg/L	0.001482	23.57%
Ba 233.527†	131796.9	2.22	mg/L	0.021	2.22	mg/L	0.021	0.97%
Be 234.861†	128.4	-0.00007	mg/L	0.000163	-0.00007	mg/L	0.000163	236.69%
B 249.677†	135.5	0.0139	mg/L	0.00012	0.0139	mg/L	0.00012	0.85%
Ca 227.546†	8181.5	76.2	mg/L	0.92	76.2	mg/L	0.92	1.20%
Cd 228.802†	-0.2	-0.00016	mg/L	0.000193	-0.00016	mg/L	0.000193	117.86%
Co 228.616†	-53.9	-0.00369	mg/L	0.000335	-0.00369	mg/L	0.000335	9.08%
Cr 267.716†	60.2	0.00025	mg/L	0.000219	0.00025	mg/L	0.000219	87.24%
Cu 327.393†	-542.9	-0.00305	mg/L	0.000463	-0.00305	mg/L	0.000463	15.19%
Fe 239.562†	732.6	1.67	mg/L	0.057	1.67	mg/L	0.057	3.39%
Mg 279.077†	6641.0	8.32	mg/L	0.264	8.32	mg/L	0.264	3.17%
Mn 257.610†	64171.4	0.144	mg/L	0.0016	0.144	mg/L	0.0016	1.12%
Mo 202.031†	-15.2	-0.00115	mg/L	0.000226	-0.00115	mg/L	0.000226	19.68%
Ni 231.604†	1.3	-0.00015	mg/L	0.000190	-0.00015	mg/L	0.000190	127.66%
Pb 220.353†	-15.7	0.00077	mg/L	0.001457	0.00077	mg/L	0.001457	190.07%
Sb 206.836†	13.5	0.00879	mg/L	0.002404	0.00879	mg/L	0.002404	27.36%
Se 196.026†	-32.0	-0.00344	mg/L	0.005786	-0.00344	mg/L	0.005786	168.41%
Si 251.611†	977.3	0.00413	mg/L	0.000377	0.00413	mg/L	0.000377	9.11%
Sn 189.927†	-10.3	-0.00169	mg/L	0.000320	-0.00169	mg/L	0.000320	18.89%
Ti 334.940†	-766.7	-0.00024	mg/L	0.000220	-0.00024	mg/L	0.000220	92.18%
Tl 190.801†	85.3	0.0443	mg/L	0.00214	0.0443	mg/L	0.00214	4.82%

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V 290.880†	-249.2	-0.00057	mg/L	0.001845	-0.00057	mg/L	0.001845 323.36%
Zn 206.200†	56.1	0.00132	mg/L	0.000277	0.00132	mg/L	0.000277 21.04%
K 766.490†	2263.8	0.677	mg/L	0.0461	0.677	mg/L	0.0461 6.81%
Na 589.592†	2405563.5	191	mg/L	2.6	191	mg/L	2.6 1.34%
Sr 407.771†	2215943.8	2.15	mg/L	0.197	2.15	mg/L	0.197 9.13%
Li 670.784†	11061.1	0.137	mg/L	0.0016	0.137	mg/L	0.0016 1.14%

Sequence No.: 55 **Autosampler Location: 89**
Sample ID: L1102060501 **Date Collected: 2/24/2011 9:40:17 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102060501

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102060501

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5217674.6						31370.66	0.60%
YRADIAL	314834.6						14110.28	4.48%
Ga 417.206	1368247.5						24632.94	1.80%
GaRADIAL	64648.6						1453.90	2.25%
Ag 328.068†	-361.7	-0.00127	mg/L	0.000233	-0.00127	mg/L	0.000233	18.30%
Al 396.153†	84.3	-0.00498	mg/L	0.019971	-0.00498	mg/L	0.019971	401.36%
As 188.979†	-0.4	-0.00140	mg/L	0.001320	-0.00140	mg/L	0.001320	94.05%
Ba 233.527†	4.6	-0.00005	mg/L	0.000096	-0.00005	mg/L	0.000096	212.16%
Be 234.861†	41.1	0.00010	mg/L	0.000032	0.00010	mg/L	0.000032	32.45%
B 249.677†	1458.5	0.0306	mg/L	0.00189	0.0306	mg/L	0.00189	6.16%
Ca 227.546†	14.2	0.103	mg/L	0.0246	0.103	mg/L	0.0246	23.87%
Cd 228.802†	-2.2	-0.00018	mg/L	0.000079	-0.00018	mg/L	0.000079	43.33%
Co 228.616†	1.5	0.00000	mg/L	0.000202	0.00000	mg/L	0.000202	>999.9%
Cr 267.716†	65.9	0.00036	mg/L	0.000052	0.00036	mg/L	0.000052	14.50%
Cu 327.393†	-2.7	0.00041	mg/L	0.000404	0.00041	mg/L	0.000404	98.14%
Fe 239.562†	0.6	0.00194	mg/L	0.003289	0.00194	mg/L	0.003289	169.72%
Mg 279.077†	3.6	-0.00053	mg/L	0.007633	-0.00053	mg/L	0.007633	>999.9%
Mn 257.610†	36.8	-0.00040	mg/L	0.000038	-0.00040	mg/L	0.000038	9.61%
Mo 202.031†	-6.6	-0.00062	mg/L	0.000102	-0.00062	mg/L	0.000102	16.44%
Ni 231.604†	0.2	-0.00014	mg/L	0.000206	-0.00014	mg/L	0.000206	144.37%
Pb 220.353†	2.9	0.00029	mg/L	0.000738	0.00029	mg/L	0.000738	251.73%
Sb 206.836†	-0.4	0.00011	mg/L	0.000662	0.00011	mg/L	0.000662	609.94%
Se 196.026†	2.9	0.00150	mg/L	0.001455	0.00150	mg/L	0.001455	97.21%
Si 251.611†	1306.2	0.0135	mg/L	0.00090	0.0135	mg/L	0.00090	6.68%
Sn 189.927†	-11.0	-0.00180	mg/L	0.001106	-0.00180	mg/L	0.001106	61.26%
Ti 334.940†	18.6	0.00006	mg/L	0.000174	0.00006	mg/L	0.000174	276.33%
Tl 190.801†	-12.6	-0.00632	mg/L	0.001625	-0.00632	mg/L	0.001625	25.70%
V 290.880†	-9.2	0.00096	mg/L	0.000743	0.00096	mg/L	0.000743	77.47%
Zn 206.200†	-26.6	-0.00113	mg/L	0.000164	-0.00113	mg/L	0.000164	14.49%
K 766.490†	-5.6	-0.00556	mg/L	0.063351	-0.00556	mg/L	0.063351	>999.9%
Na 589.592†	7040.7	0.516	mg/L	0.0331	0.516	mg/L	0.0331	6.41%
Sr 407.771†	589.2	0.00053	mg/L	0.000708	0.00053	mg/L	0.000708	134.33%
Li 670.784†	57.0	0.00010	mg/L	0.001344	0.00010	mg/L	0.001344	>999.9%

Sequence No.: 56 **Autosampler Location: 90**
Sample ID: L1102060502 **Date Collected: 2/24/2011 9:46:56 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102060502

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102060502

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

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Y 371.029	5155455.4				50039.03	0.97%
YRADIAL	309808.5				4110.54	1.33%
Ga 417.206	1356158.3				14265.72	1.05%
GaRADIAL	64052.3				906.70	1.42%
Ag 328.068†	-259.0	-0.00078 mg/L	0.000072	-0.00078 mg/L	0.000072	9.27%
Al 396.153†	136.4	0.00552 mg/L	0.011672	0.00552 mg/L	0.011672	211.62%
As 188.979†	0.7	-0.00036 mg/L	0.002651	-0.00036 mg/L	0.002651	737.29%
Ba 233.527†	12.9	0.00009 mg/L	0.000049	0.00009 mg/L	0.000049	53.04%
Be 234.861†	46.9	0.00011 mg/L	0.000029	0.00011 mg/L	0.000029	26.41%
B 249.677†	1985.6	0.0404 mg/L	0.00092	0.0404 mg/L	0.00092	2.27%
Ca 227.546†	23.7	0.193 mg/L	0.0493	0.193 mg/L	0.0493	25.57%
Cd 228.802†	0.0	-0.00006 mg/L	0.000282	-0.00006 mg/L	0.000282	440.56%
Co 228.616†	-1.7	-0.00017 mg/L	0.000121	-0.00017 mg/L	0.000121	69.80%
Cr 267.716†	51.8	0.00024 mg/L	0.000070	0.00024 mg/L	0.000070	29.13%
Cu 327.393†	435.5	0.00336 mg/L	0.000504	0.00336 mg/L	0.000504	15.01%
Fe 239.562†	2.1	0.00531 mg/L	0.000887	0.00531 mg/L	0.000887	16.71%
Mg 279.077†	12.2	0.0103 mg/L	0.00678	0.0103 mg/L	0.00678	65.95%
Mn 257.610†	368.3	0.00034 mg/L	0.000014	0.00034 mg/L	0.000014	4.03%
Mo 202.031†	-5.7	-0.00055 mg/L	0.000133	-0.00055 mg/L	0.000133	24.05%
Ni 231.604†	8.8	0.00011 mg/L	0.000231	0.00011 mg/L	0.000231	211.42%
Pb 220.353†	-0.1	-0.00020 mg/L	0.001043	-0.00020 mg/L	0.001043	513.96%
Sb 206.836†	-1.5	-0.00054 mg/L	0.000800	-0.00054 mg/L	0.000800	147.40%
Se 196.026†	6.3	0.00393 mg/L	0.001817	0.00393 mg/L	0.001817	46.28%
Si 251.611†	2394.2	0.0446 mg/L	0.00113	0.0446 mg/L	0.00113	2.54%
Sn 189.927†	-7.3	-0.00117 mg/L	0.001143	-0.00117 mg/L	0.001143	97.71%
Ti 334.940†	237.4	0.00036 mg/L	0.000065	0.00036 mg/L	0.000065	17.97%
Tl 190.801†	-13.9	-0.00711 mg/L	0.005777	-0.00711 mg/L	0.005777	81.30%
V 290.880†	-47.8	0.00071 mg/L	0.000531	0.00071 mg/L	0.000531	75.14%
Zn 206.200†	50.3	0.00118 mg/L	0.000145	0.00118 mg/L	0.000145	12.32%
K 766.490†	125.7	0.0447 mg/L	0.03415	0.0447 mg/L	0.03415	76.35%
Na 589.592†	9602.3	0.706 mg/L	0.0161	0.706 mg/L	0.0161	2.28%
Sr 407.771†	57.6	0.00001 mg/L	0.000210	0.00001 mg/L	0.000210	>999.9%
Li 670.784†	71.2	0.00028 mg/L	0.001402	0.00028 mg/L	0.001402	499.13%

Sequence No.: 57 **Autosampler Location: 91**
Sample ID: L1102060503 **Date Collected: 2/24/2011 9:53:40 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102060503

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102060503

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5155069.6						29308.96	0.57%
YRADIAL	310447.3						11418.15	3.68%
Ga 417.206	1332639.7						25814.42	1.94%
GaRADIAL	63792.6						979.25	1.54%
Ag 328.068†	-236.4	-0.00067	mg/L	0.000430	-0.00067	mg/L	0.000430	64.23%
Al 396.153†	563.0	0.0915	mg/L	0.01048	0.0915	mg/L	0.01048	11.45%
As 188.979†	0.6	-0.00042	mg/L	0.003265	-0.00042	mg/L	0.003265	786.65%
Ba 233.527†	45.7	0.00065	mg/L	0.000045	0.00065	mg/L	0.000045	6.91%
Be 234.861†	45.6	0.00009	mg/L	0.000009	0.00009	mg/L	0.000009	9.17%
B 249.677†	2210.3	0.0447	mg/L	0.00091	0.0447	mg/L	0.00091	2.02%
Ca 227.546†	84.4	0.758	mg/L	0.0300	0.758	mg/L	0.0300	3.95%
Cd 228.802†	-1.3	-0.00013	mg/L	0.000094	-0.00013	mg/L	0.000094	69.92%
Co 228.616†	1.2	-0.00003	mg/L	0.000119	-0.00003	mg/L	0.000119	457.34%
Cr 267.716†	52.9	0.00024	mg/L	0.000063	0.00024	mg/L	0.000063	25.92%
Cu 327.393†	870.4	0.00630	mg/L	0.000480	0.00630	mg/L	0.000480	7.62%
Fe 239.562†	29.4	0.0675	mg/L	0.00093	0.0675	mg/L	0.00093	1.38%
Mg 279.077†	50.6	0.0584	mg/L	0.00360	0.0584	mg/L	0.00360	6.16%
Mn 257.610†	2379.5	0.00479	mg/L	0.000047	0.00479	mg/L	0.000047	0.99%
Mo 202.031†	-6.2	-0.00059	mg/L	0.000299	-0.00059	mg/L	0.000299	50.99%
Ni 231.604†	42.4	0.00109	mg/L	0.000102	0.00109	mg/L	0.000102	9.37%
Pb 220.353†	5.0	0.00067	mg/L	0.000664	0.00067	mg/L	0.000664	99.26%
Sb 206.836†	0.5	0.00071	mg/L	0.000766	0.00071	mg/L	0.000766	108.05%
Se 196.026†	-0.2	-0.00054	mg/L	0.001303	-0.00054	mg/L	0.001303	240.52%

Approved: February 25, 2011

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Si 251.611†	7591.4	0.193 mg/L	0.0046	0.193 mg/L	0.0046	2.39%
Sn 189.927†	-13.5	-0.00225 mg/L	0.000209	-0.00225 mg/L	0.000209	9.30%
Ti 334.940†	1580.4	0.00218 mg/L	0.000111	0.00218 mg/L	0.000111	5.10%
Tl 190.801†	-16.0	-0.00832 mg/L	0.001251	-0.00832 mg/L	0.001251	15.04%
V 290.880†	-12.9	0.00094 mg/L	0.000725	0.00094 mg/L	0.000725	77.16%
Zn 206.200†	28.2	0.00052 mg/L	0.000188	0.00052 mg/L	0.000188	36.48%
K 766.490†	39.1	0.0113 mg/L	0.04395	0.0113 mg/L	0.04395	387.82%
Na 589.592†	10605.6	0.780 mg/L	0.0118	0.780 mg/L	0.0118	1.52%
Sr 407.771†	253.6	0.00019 mg/L	0.000183	0.00019 mg/L	0.000183	94.84%
Li 670.784†	11.5	-0.00046 mg/L	0.001927	-0.00046 mg/L	0.001927	415.50%

Sequence No.: 58 **Autosampler Location: 92**
Sample ID: L1102060504 **Date Collected: 2/24/2011 10:00:21 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102060504

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102060504

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5099097.7						16576.73	0.33%
YRADIAL	303589.5						5179.96	1.71%
Ga 417.206	1319045.6						20336.47	1.54%
GaRADIAL	62981.6						531.96	0.84%
Ag 328.068†	-376.5	-0.00135	mg/L	0.000749	-0.00135	mg/L	0.000749	55.60%
Al 396.153†	469.4	0.0727	mg/L	0.01267	0.0727	mg/L	0.01267	17.44%
As 188.979†	0.2	-0.00079	mg/L	0.001844	-0.00079	mg/L	0.001844	234.77%
Ba 233.527†	27.5	0.00034	mg/L	0.000045	0.00034	mg/L	0.000045	13.27%
Be 234.861†	36.8	0.00008	mg/L	0.000035	0.00008	mg/L	0.000035	42.25%
B 249.677†	1953.5	0.0399	mg/L	0.00100	0.0399	mg/L	0.00100	2.49%
Ca 227.546†	47.6	0.415	mg/L	0.0703	0.415	mg/L	0.0703	16.96%
Cd 228.802†	-1.0	-0.00012	mg/L	0.000094	-0.00012	mg/L	0.000094	78.96%
Co 228.616†	-3.4	-0.00027	mg/L	0.000159	-0.00027	mg/L	0.000159	59.61%
Cr 267.716†	49.1	0.00021	mg/L	0.000016	0.00021	mg/L	0.000016	7.37%
Cu 327.393†	139.4	0.00138	mg/L	0.000640	0.00138	mg/L	0.000640	46.56%
Fe 239.562†	21.2	0.0489	mg/L	0.00285	0.0489	mg/L	0.00285	5.83%
Mg 279.077†	33.6	0.0371	mg/L	0.00658	0.0371	mg/L	0.00658	17.74%
Mn 257.610†	1337.2	0.00249	mg/L	0.000032	0.00249	mg/L	0.000032	1.29%
Mo 202.031†	-3.2	-0.00037	mg/L	0.000245	-0.00037	mg/L	0.000245	66.15%
Ni 231.604†	6.1	0.00003	mg/L	0.000018	0.00003	mg/L	0.000018	57.89%
Pb 220.353†	7.6	0.00108	mg/L	0.000685	0.00108	mg/L	0.000685	63.71%
Sb 206.836†	-1.4	-0.00053	mg/L	0.001552	-0.00053	mg/L	0.001552	292.20%
Se 196.026†	3.6	0.00209	mg/L	0.004317	0.00209	mg/L	0.004317	206.92%
Si 251.611†	6532.4	0.163	mg/L	0.0049	0.163	mg/L	0.0049	2.99%
Sn 189.927†	-11.0	-0.00181	mg/L	0.000498	-0.00181	mg/L	0.000498	27.45%
Ti 334.940†	1174.9	0.00163	mg/L	0.000398	0.00163	mg/L	0.000398	24.44%
Tl 190.801†	-17.1	-0.00897	mg/L	0.003112	-0.00897	mg/L	0.003112	34.69%
V 290.880†	16.8	0.00113	mg/L	0.000447	0.00113	mg/L	0.000447	39.43%
Zn 206.200†	8.5	-0.00008	mg/L	0.000072	-0.00008	mg/L	0.000072	90.35%
K 766.490†	-4.0	-0.00474	mg/L	0.033325	-0.00474	mg/L	0.033325	703.17%
Na 589.592†	4161.8	0.302	mg/L	0.0076	0.302	mg/L	0.0076	2.50%
Sr 407.771†	119.1	0.00006	mg/L	0.000027	0.00006	mg/L	0.000027	41.74%
Li 670.784†	48.0	-0.00001	mg/L	0.000818	-0.00001	mg/L	0.000818	>999.9%

Sequence No.: 59 **Autosampler Location: 93**
Sample ID: L1102060505 **Date Collected: 2/24/2011 10:07:00 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102060505

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Approved: February 25, 2011

Pierre Morris

Mean Data: L1102060505

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5093927.4						76544.20	1.50%
YRADIAL	314133.5						4742.83	1.51%
Ga 417.206	1339523.0						24472.96	1.83%
GaRADIAL	64638.4						673.22	1.04%
Ag 328.068†	-288.2	-0.00092	mg/L	0.000301	-0.00092	mg/L	0.000301	32.81%
Al 396.153†	302.6	0.0390	mg/L	0.00981	0.0390	mg/L	0.00981	25.13%
As 188.979†	-1.2	-0.00205	mg/L	0.002898	-0.00205	mg/L	0.002898	141.03%
Ba 233.527†	14.3	0.00012	mg/L	0.000084	0.00012	mg/L	0.000084	72.03%
Be 234.861†	32.0	0.00008	mg/L	0.000017	0.00008	mg/L	0.000017	21.78%
B 249.677†	1788.6	0.0368	mg/L	0.00128	0.0368	mg/L	0.00128	3.49%
Ca 227.546†	29.9	0.250	mg/L	0.0511	0.250	mg/L	0.0511	20.47%
Cd 228.802†	-0.9	-0.00011	mg/L	0.000159	-0.00011	mg/L	0.000159	146.23%
Co 228.616†	-3.1	-0.00025	mg/L	0.000084	-0.00025	mg/L	0.000084	33.79%
Cr 267.716†	83.3	0.00051	mg/L	0.000060	0.00051	mg/L	0.000060	11.73%
Cu 327.393†	118.7	0.00123	mg/L	0.000528	0.00123	mg/L	0.000528	42.91%
Fe 239.562†	10.8	0.0251	mg/L	0.00433	0.0251	mg/L	0.00433	17.24%
Mg 279.077†	23.9	0.0249	mg/L	0.00291	0.0249	mg/L	0.00291	11.69%
Mn 257.610†	985.6	0.00171	mg/L	0.000022	0.00171	mg/L	0.000022	1.27%
Mo 202.031†	-6.5	-0.00062	mg/L	0.000306	-0.00062	mg/L	0.000306	49.69%
Ni 231.604†	9.7	0.00013	mg/L	0.000387	0.00013	mg/L	0.000387	290.73%
Pb 220.353†	10.4	0.00154	mg/L	0.000373	0.00154	mg/L	0.000373	24.18%
Sb 206.836†	-2.6	-0.00124	mg/L	0.001331	-0.00124	mg/L	0.001331	107.39%
Se 196.026†	6.1	0.00379	mg/L	0.002423	0.00379	mg/L	0.002423	63.90%
Si 251.611†	4468.9	0.104	mg/L	0.0035	0.104	mg/L	0.0035	3.33%
Sn 189.927†	-8.8	-0.00144	mg/L	0.000051	-0.00144	mg/L	0.000051	3.51%
Ti 334.940†	648.1	0.00092	mg/L	0.000277	0.00092	mg/L	0.000277	30.26%
Tl 190.801†	-12.5	-0.00625	mg/L	0.004120	-0.00625	mg/L	0.004120	65.96%
V 290.880†	11.5	0.00110	mg/L	0.000515	0.00110	mg/L	0.000515	46.93%
Zn 206.200†	-10.7	-0.00065	mg/L	0.000184	-0.00065	mg/L	0.000184	28.13%
K 766.490†	-37.9	-0.0179	mg/L	0.02902	-0.0179	mg/L	0.02902	162.48%
Na 589.592†	5109.3	0.373	mg/L	0.0044	0.373	mg/L	0.0044	1.19%
Sr 407.771†	180.4	0.00013	mg/L	0.000272	0.00013	mg/L	0.000272	214.76%
Li 670.784†	22.1	-0.00033	mg/L	0.000589	-0.00033	mg/L	0.000589	177.83%

Sequence No.: 60 **Autosampler Location: 94**
Sample ID: L1102060506 **Date Collected: 2/24/2011 10:13:41 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102060506

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102060506

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5162253.3						87242.89	1.69%
YRADIAL	316648.6						2963.04	0.94%
Ga 417.206	1329921.9						31224.19	2.35%
GaRADIAL	65140.5						466.81	0.72%
Ag 328.068†	-250.2	-0.00073	mg/L	0.000598	-0.00073	mg/L	0.000598	81.65%
Al 396.153†	113.0	0.00080	mg/L	0.007198	0.00080	mg/L	0.007198	894.53%
As 188.979†	0.2	-0.00081	mg/L	0.001823	-0.00081	mg/L	0.001823	225.68%
Ba 233.527†	-4.6	-0.00020	mg/L	0.000031	-0.00020	mg/L	0.000031	15.55%
Be 234.861†	34.7	0.00009	mg/L	0.000016	0.00009	mg/L	0.000016	18.14%
B 249.677†	2104.2	0.0425	mg/L	0.00188	0.0425	mg/L	0.00188	4.43%
Ca 227.546†	9.3	0.0584	mg/L	0.08373	0.0584	mg/L	0.08373	143.47%
Cd 228.802†	-0.8	-0.00011	mg/L	0.000117	-0.00011	mg/L	0.000117	109.20%
Co 228.616†	-0.4	-0.00010	mg/L	0.000167	-0.00010	mg/L	0.000167	162.99%
Cr 267.716†	36.2	0.00011	mg/L	0.000045	0.00011	mg/L	0.000045	42.92%
Cu 327.393†	-66.8	-0.00002	mg/L	0.001013	-0.00002	mg/L	0.001013	>999.9%
Fe 239.562†	-1.8	-0.00354	mg/L	0.005174	-0.00354	mg/L	0.005174	145.96%
Mg 279.077†	5.6	0.00201	mg/L	0.006545	0.00201	mg/L	0.006545	325.70%
Mn 257.610†	11.9	-0.00045	mg/L	0.000006	-0.00045	mg/L	0.000006	1.40%
Mo 202.031†	-3.7	-0.00041	mg/L	0.000365	-0.00041	mg/L	0.000365	89.31%

Approved: February 25, 2011

Pierre Morris

Ni 231.604†	1.6	-0.00010 mg/L	0.000056	-0.00010 mg/L	0.000056	54.58%
Pb 220.353†	0.0	-0.00019 mg/L	0.000448	-0.00019 mg/L	0.000448	241.97%
Sb 206.836†	-1.1	-0.00032 mg/L	0.000996	-0.00032 mg/L	0.000996	307.43%
Se 196.026†	1.1	0.00019 mg/L	0.001371	0.00019 mg/L	0.001371	706.61%
Si 251.611†	1864.5	0.0295 mg/L	0.00142	0.0295 mg/L	0.00142	4.82%
Sn 189.927†	-13.3	-0.00222 mg/L	0.000453	-0.00222 mg/L	0.000453	20.44%
Ti 334.940†	68.3	0.00013 mg/L	0.000111	0.00013 mg/L	0.000111	85.52%
Tl 190.801†	-13.3	-0.00671 mg/L	0.000934	-0.00671 mg/L	0.000934	13.92%
V 290.880†	-69.9	0.00056 mg/L	0.000777	0.00056 mg/L	0.000777	138.20%
Zn 206.200†	-32.8	-0.00132 mg/L	0.000121	-0.00132 mg/L	0.000121	9.18%
K 766.490†	-223.6	-0.0896 mg/L	0.03086	-0.0896 mg/L	0.03086	34.46%
Na 589.592†	8934.6	0.656 mg/L	0.0090	0.656 mg/L	0.0090	1.37%
Sr 407.771†	43.9	0.00000 mg/L	0.000369	0.00000 mg/L	0.000369	>999.9%
Li 670.784†	53.5	0.00006 mg/L	0.001269	0.00006 mg/L	0.001269	>999.9%

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Sequence No.: 61 **Autosampler Location: 95**
Sample ID: L1102060507 **Date Collected: 2/24/2011 10:20:22 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102060507

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102060507

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5127755.1						27349.48	0.53%
YRADIAL	309878.9						8211.40	2.65%
Ga 417.206	1356034.7						21015.29	1.55%
GaRADIAL	63768.3						209.14	0.33%
Ag 328.068†	-288.6	-0.00092	mg/L	0.000220	-0.00092	mg/L	0.000220	23.87%
Al 396.153†	172.0	0.0127	mg/L	0.01092	0.0127	mg/L	0.01092	85.92%
As 188.979†	0.7	-0.00033	mg/L	0.002921	-0.00033	mg/L	0.002921	874.41%
Ba 233.527†	15.9	0.00014	mg/L	0.000115	0.00014	mg/L	0.000115	80.36%
Be 234.861†	51.6	0.00012	mg/L	0.000024	0.00012	mg/L	0.000024	20.78%
B 249.677†	1296.7	0.0276	mg/L	0.00082	0.0276	mg/L	0.00082	2.97%
Ca 227.546†	22.7	0.183	mg/L	0.0541	0.183	mg/L	0.0541	29.57%
Cd 228.802†	-2.5	-0.00021	mg/L	0.000125	-0.00021	mg/L	0.000125	59.95%
Co 228.616†	-1.6	-0.00017	mg/L	0.000216	-0.00017	mg/L	0.000216	130.39%
Cr 267.716†	62.8	0.00033	mg/L	0.000109	0.00033	mg/L	0.000109	32.71%
Cu 327.393†	1268.6	0.00897	mg/L	0.000671	0.00897	mg/L	0.000671	7.48%
Fe 239.562†	3.4	0.00841	mg/L	0.003445	0.00841	mg/L	0.003445	40.95%
Mg 279.077†	13.1	0.0114	mg/L	0.00479	0.0114	mg/L	0.00479	42.19%
Mn 257.610†	454.2	0.00053	mg/L	0.000014	0.00053	mg/L	0.000014	2.57%
Mo 202.031†	-8.5	-0.00077	mg/L	0.000413	-0.00077	mg/L	0.000413	53.88%
Ni 231.604†	10.5	0.00016	mg/L	0.000110	0.00016	mg/L	0.000110	69.66%
Pb 220.353†	0.3	-0.00015	mg/L	0.001078	-0.00015	mg/L	0.001078	722.04%
Sb 206.836†	-2.8	-0.00137	mg/L	0.000317	-0.00137	mg/L	0.000317	23.12%
Se 196.026†	1.4	0.00047	mg/L	0.006434	0.00047	mg/L	0.006434	>999.9%
Si 251.611†	2423.0	0.0455	mg/L	0.00159	0.0455	mg/L	0.00159	3.50%
Sn 189.927†	-11.0	-0.00181	mg/L	0.000258	-0.00181	mg/L	0.000258	14.20%
Ti 334.940†	255.6	0.00038	mg/L	0.000105	0.00038	mg/L	0.000105	27.22%
Tl 190.801†	-12.8	-0.00642	mg/L	0.001580	-0.00642	mg/L	0.001580	24.61%
V 290.880†	-107.9	0.00031	mg/L	0.000792	0.00031	mg/L	0.000792	251.68%
Zn 206.200†	26.6	0.00047	mg/L	0.000073	0.00047	mg/L	0.000073	15.67%
K 766.490†	124.4	0.0444	mg/L	0.03249	0.0444	mg/L	0.03249	73.18%
Na 589.592†	7145.5	0.524	mg/L	0.0114	0.524	mg/L	0.0114	2.18%
Sr 407.771†	-145.9	-0.00019	mg/L	0.000115	-0.00019	mg/L	0.000115	61.22%
Li 670.784†	2.2	-0.00058	mg/L	0.000891	-0.00058	mg/L	0.000891	153.67%

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Sequence No.: 62 **Autosampler Location: 4**
Sample ID: CCV **Date Collected: 2/24/2011 10:27:01 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 25, 2011

Pierre Morris

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4882741.2						31715.70	0.65%
YRADIAL	300290.3						5398.34	1.80%
Ga 417.206	1255021.7						23162.31	1.85%
GaRADIAL	62573.5						1741.12	2.78%
Ag 328.068†	82910.0	0.404	mg/L	0.0066	0.404	mg/L	0.0066	1.63%
Al 396.153†	52433.3	10.5	mg/L	0.04	10.5	mg/L	0.04	0.41%
As 188.979†	441.6	0.402	mg/L	0.0085	0.402	mg/L	0.0085	2.12%
Ba 233.527†	60442.0	1.02	mg/L	0.009	1.02	mg/L	0.009	0.87%
Be 234.861†	29255.0	0.0507	mg/L	0.00096	0.0507	mg/L	0.00096	1.90%
B 249.677†	26346.0	0.498	mg/L	0.0081	0.498	mg/L	0.0081	1.62%
Ca 227.546†	1103.0	10.6	mg/L	0.17	10.6	mg/L	0.17	1.65%
Cd 228.802†	910.5	0.0514	mg/L	0.00084	0.0514	mg/L	0.00084	1.63%
Co 228.616†	3980.2	0.205	mg/L	0.0021	0.205	mg/L	0.0021	1.04%
Cr 267.716†	58945.7	0.507	mg/L	0.0048	0.507	mg/L	0.0048	0.95%
Cu 327.393†	74979.6	0.507	mg/L	0.0098	0.507	mg/L	0.0098	1.94%
Fe 239.562†	1774.2	4.04	mg/L	0.100	4.04	mg/L	0.100	2.48%
Mg 279.077†	8212.0	10.3	mg/L	0.21	10.3	mg/L	0.21	2.03%
Mn 257.610†	232002.9	0.515	mg/L	0.0036	0.515	mg/L	0.0036	0.71%
Mo 202.031†	13760.9	1.02	mg/L	0.006	1.02	mg/L	0.006	0.61%
Ni 231.604†	17621.0	0.513	mg/L	0.0051	0.513	mg/L	0.0051	0.99%
Pb 220.353†	3023.6	0.505	mg/L	0.0044	0.505	mg/L	0.0044	0.87%
Sb 206.836†	1940.0	1.21	mg/L	0.022	1.21	mg/L	0.022	1.78%
Se 196.026†	587.8	0.415	mg/L	0.0096	0.415	mg/L	0.0096	2.32%
Si 251.611†	176331.6	5.00	mg/L	0.086	5.00	mg/L	0.086	1.73%
Sn 189.927†	5978.5	1.03	mg/L	0.010	1.03	mg/L	0.010	0.98%
Ti 334.940†	746118.1	1.01	mg/L	0.002	1.01	mg/L	0.002	0.19%
Tl 190.801†	859.8	0.516	mg/L	0.0065	0.516	mg/L	0.0065	1.26%
V 290.880†	154745.4	1.01	mg/L	0.007	1.01	mg/L	0.007	0.65%
Zn 206.200†	33424.1	1.01	mg/L	0.012	1.01	mg/L	0.012	1.20%
K 766.490†	134213.0	52.1	mg/L	0.24	52.1	mg/L	0.24	0.45%
Na 589.592†	684197.8	51.6	mg/L	0.51	51.6	mg/L	0.51	0.99%
Sr 407.771†	1138767.8	1.11	mg/L	0.059	1.11	mg/L	0.059	5.32%
Li 670.784†	84272.1	1.05	mg/L	0.004	1.05	mg/L	0.004	0.37%

Sequence No.: 63 **Autosampler Location: 5**
Sample ID: CCB **Date Collected: 2/24/2011 10:33:41 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5064722.5						46988.82	0.93%
YRADIAL	301333.2						6041.93	2.01%
Ga 417.206	1299906.0						12115.42	0.93%
GaRADIAL	62560.1						515.25	0.82%
Ag 328.068†	-355.7	-0.00124	mg/L	0.000428	-0.00124	mg/L	0.000428	34.42%
Al 396.153†	41.1	-0.0137	mg/L	0.01006	-0.0137	mg/L	0.01006	73.37%
As 188.979†	0.5	-0.00052	mg/L	0.003083	-0.00052	mg/L	0.003083	594.15%
Ba 233.527†	-0.5	-0.00013	mg/L	0.000079	-0.00013	mg/L	0.000079	60.39%
Be 234.861†	37.8	0.00009	mg/L	0.000026	0.00009	mg/L	0.000026	27.98%
B 249.677†	-340.6	-0.00271	mg/L	0.000092	-0.00271	mg/L	0.000092	3.42%
Ca 227.546†	3.0	-0.00077	mg/L	0.037416	-0.00077	mg/L	0.037416	>999.9%
Cd 228.802†	-0.1	-0.00007	mg/L	0.000207	-0.00007	mg/L	0.000207	310.55%
Co 228.616†	1.8	0.00001	mg/L	0.000201	0.00001	mg/L	0.000201	>999.9%
Cr 267.716†	7.7	-0.00014	mg/L	0.000031	-0.00014	mg/L	0.000031	22.51%
Cu 327.393†	-151.0	-0.00059	mg/L	0.000119	-0.00059	mg/L	0.000119	20.28%

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Fe 239.562†	0.4	0.00152	mg/L	0.003903	0.00152	mg/L	0.003903 256.02%
Mg 279.077†	4.6	0.00074	mg/L	0.004812	0.00074	mg/L	0.004812 648.01%
Mn 257.610†	206.0	-0.00004	mg/L	0.000015	-0.00004	mg/L	0.000015 36.51%
Mo 202.031†	-2.4	-0.00031	mg/L	0.000044	-0.00031	mg/L	0.000044 13.98%
Ni 231.604†	-9.3	-0.00042	mg/L	0.000205	-0.00042	mg/L	0.000205 48.89%
Pb 220.353†	1.7	0.00009	mg/L	0.000348	0.00009	mg/L	0.000348 396.80%
Sb 206.836†	1.4	0.00125	mg/L	0.002064	0.00125	mg/L	0.002064 165.53%
Se 196.026†	1.8	0.00066	mg/L	0.004425	0.00066	mg/L	0.004425 665.63%
Si 251.611†	-42.6	-0.0250	mg/L	0.00031	-0.0250	mg/L	0.00031 1.22%
Sn 189.927†	-2.9	-0.00042	mg/L	0.000312	-0.00042	mg/L	0.000312 74.22%
Ti 334.940†	-52.1	-0.00003	mg/L	0.000149	-0.00003	mg/L	0.000149 444.81%
Tl 190.801†	-13.4	-0.00680	mg/L	0.002308	-0.00680	mg/L	0.002308 33.93%
V 290.880†	94.5	0.00164	mg/L	0.000366	0.00164	mg/L	0.000366 22.37%
Zn 206.200†	-87.3	-0.00296	mg/L	0.000199	-0.00296	mg/L	0.000199 6.71%
K 766.490†	-108.6	-0.0447	mg/L	0.01372	-0.0447	mg/L	0.01372 30.70%
Na 589.592†	91.4	0.00067	mg/L	0.003221	0.00067	mg/L	0.003221 481.56%
Sr 407.771†	-113.9	-0.00016	mg/L	0.000392	-0.00016	mg/L	0.000392 250.53%
Li 670.784†	39.3	-0.00012	mg/L	0.000280	-0.00012	mg/L	0.000280 238.81%

Sequence No.: 64 **Autosampler Location: 96**
Sample ID: L1102061202 **Date Collected: 2/24/2011 10:40:22 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102061202

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102061202

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4452678.4						49572.96	1.11%
YRADIAL	287541.1						3901.74	1.36%
Ga 417.206	1203706.7						19016.77	1.58%
GaRADIAL	61497.7						867.40	1.41%
Ag 328.068†	330.6	0.00165	mg/L	0.000152	0.00165	mg/L	0.000152	9.21%
Al 396.153†	2415.2	0.465	mg/L	0.0079	0.465	mg/L	0.0079	1.71%
As 188.979†	46.0	0.0381	mg/L	0.00233	0.0381	mg/L	0.00233	6.10%
Ba 233.527†	10043.0	0.169	mg/L	0.0023	0.169	mg/L	0.0023	1.36%
Be 234.861†	168.3	0.00020	mg/L	0.000032	0.00020	mg/L	0.000032	16.10%
B 249.677†	8418.8	0.164	mg/L	0.0024	0.164	mg/L	0.0024	1.45%
Ca 227.546†	18550.2	173	mg/L	2.9	173	mg/L	2.9	1.68%
Cd 228.802†	4.5	0.00025	mg/L	0.000092	0.00025	mg/L	0.000092	37.49%
Co 228.616†	538.5	0.0279	mg/L	0.00061	0.0279	mg/L	0.00061	2.20%
Cr 267.716†	3156.6	0.0267	mg/L	0.00036	0.0267	mg/L	0.00036	1.33%
Cu 327.393†	2141.2	0.0150	mg/L	0.00132	0.0150	mg/L	0.00132	8.81%
Fe 239.562†	446.7	1.02	mg/L	0.015	1.02	mg/L	0.015	1.47%
Mg 279.077†	19438.8	24.4	mg/L	0.07	24.4	mg/L	0.07	0.30%
Mn 257.610†	299352.6	0.661	mg/L	0.0095	0.661	mg/L	0.0095	1.43%
Mo 202.031†	-4.5	-0.00028	mg/L	0.000499	-0.00028	mg/L	0.000499	176.97%
Ni 231.604†	2870.6	0.0835	mg/L	0.00102	0.0835	mg/L	0.00102	1.22%
Pb 220.353†	4.4	0.00870	mg/L	0.002492	0.00870	mg/L	0.002492	28.63%
Sb 206.836†	21.4	0.0135	mg/L	0.00111	0.0135	mg/L	0.00111	8.22%
Se 196.026†	-41.7	0.0134	mg/L	0.00229	0.0134	mg/L	0.00229	17.08%
Si 251.611†	537367.8	15.3	mg/L	0.10	15.3	mg/L	0.10	0.67%
Sn 189.927†	-10.5	-0.00172	mg/L	0.000809	-0.00172	mg/L	0.000809	46.94%
Ti 334.940†	24638.9	0.0351	mg/L	0.00076	0.0351	mg/L	0.00076	2.18%
Tl 190.801†	121.6	0.0581	mg/L	0.00267	0.0581	mg/L	0.00267	4.59%
V 290.880†	2536.1	0.0176	mg/L	0.00142	0.0176	mg/L	0.00142	8.02%
Zn 206.200†	3997.5	0.120	mg/L	0.0019	0.120	mg/L	0.0019	1.57%
K 766.490†	11645.7	4.48	mg/L	0.133	4.48	mg/L	0.133	2.96%
Na 589.592†	Saturated2							
Sr 407.771†	1704026.7	1.66	mg/L	0.144	1.66	mg/L	0.144	8.70%
Li 670.784†	1876.5	0.0228	mg/L	0.00146	0.0228	mg/L	0.00146	6.43%

Sequence No.: 65 **Autosampler Location: 97**
Sample ID: L1102061203 **Date Collected: 2/24/2011 10:47:05 PM**
Analyst: PDM **Data Type: Original**

Approved: February 25, 2011

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Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102061203

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102061203

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4494671.5						88528.43	1.97%
YRADIAL	290412.4						1827.23	0.63%
Ga 417.206	1214979.3						25013.13	2.06%
GaRADIAL	61317.4						1344.87	2.19%
Ag 328.068†	466.0	0.00230	mg/L	0.000318	0.00230	mg/L	0.000318	13.83%
Al 396.153†	2140.9	0.410	mg/L	0.0167	0.410	mg/L	0.0167	4.08%
As 188.979†	45.9	0.0381	mg/L	0.00513	0.0381	mg/L	0.00513	13.48%
Ba 233.527†	10118.5	0.170	mg/L	0.0044	0.170	mg/L	0.0044	2.59%
Be 234.861†	182.2	0.00025	mg/L	0.000005	0.00025	mg/L	0.000005	1.80%
B 249.677†	9052.1	0.175	mg/L	0.0060	0.175	mg/L	0.0060	3.43%
Ca 227.546†	18400.4	171	mg/L	4.7	171	mg/L	4.7	2.77%
Cd 228.802†	-1.9	-0.00010	mg/L	0.000247	-0.00010	mg/L	0.000247	243.37%
Co 228.616†	562.2	0.0291	mg/L	0.00105	0.0291	mg/L	0.00105	3.62%
Cr 267.716†	3265.7	0.0276	mg/L	0.00066	0.0276	mg/L	0.00066	2.39%
Cu 327.393†	1439.1	0.0102	mg/L	0.00054	0.0102	mg/L	0.00054	5.29%
Fe 239.562†	401.9	0.915	mg/L	0.0054	0.915	mg/L	0.0054	0.60%
Mg 279.077†	19987.3	25.1	mg/L	0.53	25.1	mg/L	0.53	2.11%
Mn 257.610†	317522.5	0.701	mg/L	0.0212	0.701	mg/L	0.0212	3.03%
Mo 202.031†	-7.0	-0.00047	mg/L	0.000309	-0.00047	mg/L	0.000309	65.99%
Ni 231.604†	2992.7	0.0870	mg/L	0.00204	0.0870	mg/L	0.00204	2.34%
Pb 220.353†	2.7	0.00836	mg/L	0.001108	0.00836	mg/L	0.001108	13.25%
Sb 206.836†	20.9	0.0132	mg/L	0.00105	0.0132	mg/L	0.00105	7.91%
Se 196.026†	-31.8	0.0200	mg/L	0.00151	0.0200	mg/L	0.00151	7.57%
Si 251.611†	528664.4	15.1	mg/L	0.38	15.1	mg/L	0.38	2.54%
Sn 189.927†	-9.0	-0.00147	mg/L	0.001101	-0.00147	mg/L	0.001101	75.10%
Ti 334.940†	24795.4	0.0353	mg/L	0.00083	0.0353	mg/L	0.00083	2.34%
Tl 190.801†	128.8	0.0625	mg/L	0.00175	0.0625	mg/L	0.00175	2.81%
V 290.880†	2504.6	0.0174	mg/L	0.00108	0.0174	mg/L	0.00108	6.19%
Zn 206.200†	3973.7	0.119	mg/L	0.0037	0.119	mg/L	0.0037	3.13%
K 766.490†	12043.4	4.63	mg/L	0.051	4.63	mg/L	0.051	1.11%
Na 589.592†	Saturated2							
Sr 407.771†	1732837.4	1.68	mg/L	0.113	1.68	mg/L	0.113	6.71%
Saturated within auto integration window (code 4)								
Li 670.784†	2224.4	0.0271	mg/L	0.00207	0.0271	mg/L	0.00207	7.63%

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Sequence No.: 66 WG359448-02 **Autosampler Location: 98**
Sample ID: PBW 73 ~~WG357945-02~~ **Date Collected: 2/24/2011 10:53:49 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

---WG359448-02---

Nebulizer Parameters: PBW 73 ~~WG357945-02~~

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

---WG359448-02---

Mean Data: PBW 73 ~~WG357945-02~~

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5102990.6						75711.00	1.48%
YRADIAL	312697.9						4503.19	1.44%
Ga 417.206	1269339.0						26361.16	2.08%
GaRADIAL	65058.7						681.71	1.05%
Ag 328.068†	-386.3	-0.00139	mg/L	0.001028	-0.00139	mg/L	0.001028	73.83%
Al 396.153†	70.2	-0.00782	mg/L	0.013209	-0.00782	mg/L	0.013209	168.93%
As 188.979†	-0.8	-0.00169	mg/L	0.001018	-0.00169	mg/L	0.001018	60.27%
Ba 233.527†	-3.3	-0.00018	mg/L	0.000075	-0.00018	mg/L	0.000075	41.93%
Be 234.861†	-61.8	-0.00008	mg/L	0.000037	-0.00008	mg/L	0.000037	47.70%
B 249.677†	-316.4	-0.00225	mg/L	0.000373	-0.00225	mg/L	0.000373	16.57%

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Ca 227.546†	5.8	0.0261 mg/L	0.03021	0.0261 mg/L	0.03021	115.55%
Cd 228.802†	-0.2	-0.00007 mg/L	0.000143	-0.00007 mg/L	0.000143	197.71%
Co 228.616†	-5.3	-0.00036 mg/L	0.000156	-0.00036 mg/L	0.000156	43.57%
Cr 267.716†	48.2	0.00021 mg/L	0.000032	0.00021 mg/L	0.000032	15.15%
Cu 327.393†	-138.8	-0.00050 mg/L	0.000544	-0.00050 mg/L	0.000544	107.93%
Fe 239.562†	1.6	0.00424 mg/L	0.003733	0.00424 mg/L	0.003733	87.97%
Mg 279.077†	37.6	0.0421 mg/L	0.01160	0.0421 mg/L	0.01160	27.52%
Mn 257.610†	60.2	-0.00035 mg/L	0.000017	-0.00035 mg/L	0.000017	4.73%
Mo 202.031†	-10.9	-0.00094 mg/L	0.000240	-0.00094 mg/L	0.000240	25.59%
Ni 231.604†	16.5	0.00033 mg/L	0.000338	0.00033 mg/L	0.000338	102.24%
Pb 220.353†	6.2	0.00083 mg/L	0.000719	0.00083 mg/L	0.000719	86.20%
Sb 206.836†	1.3	0.00118 mg/L	0.000535	0.00118 mg/L	0.000535	45.40%
Se 196.026†	2.8	0.00137 mg/L	0.001491	0.00137 mg/L	0.001491	108.81%
Si 251.611†	186.5	-0.0185 mg/L	0.00101	-0.0185 mg/L	0.00101	5.47%
Sn 189.927†	7.7	0.00141 mg/L	0.000569	0.00141 mg/L	0.000569	40.25%
Ti 334.940†	-126.2	-0.00013 mg/L	0.000089	-0.00013 mg/L	0.000089	66.25%
Tl 190.801†	-7.9	-0.00354 mg/L	0.001354	-0.00354 mg/L	0.001354	38.22%
V 290.880†	24.8	0.00118 mg/L	0.000906	0.00118 mg/L	0.000906	76.64%
Zn 206.200†	-14.1	-0.00076 mg/L	0.000059	-0.00076 mg/L	0.000059	7.73%
K 766.490†	75.9	0.0257 mg/L	0.02334	0.0257 mg/L	0.02334	90.68%
Na 589.592†	7395.6	0.542 mg/L	0.0260	0.542 mg/L	0.0260	4.79%
Sr 407.771†	364.4	0.00031 mg/L	0.000055	0.00031 mg/L	0.000055	17.82%
Li 670.784†	41.6	-0.00009 mg/L	0.000657	-0.00009 mg/L	0.000657	747.35%

Sequence No.: 67 **Autosampler Location: 99**
Sample ID: LCSW 73 WG357448-03 **Date Collected: 2/24/2011 11:00:35 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 73 WG357448-03

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: LCSW 73 WG357448-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5001657.4						22809.40	0.46%
YRADIAL	301305.2						4292.32	1.42%
Ga 417.206	1281578.0						11570.49	0.90%
GaRADIAL	62827.7						301.60	0.48%
Ag 328.068†	37555.5	0.183	mg/L	0.0023	0.183	mg/L	0.0023	1.23%
Al 396.153†	24527.9	4.92	mg/L	0.021	4.92	mg/L	0.021	0.42%
As 188.979†	192.7	0.175	mg/L	0.0006	0.175	mg/L	0.0006	0.35%
Ba 233.527†	27844.3	0.471	mg/L	0.0054	0.471	mg/L	0.0054	1.15%
Be 234.861†	12781.9	0.0222	mg/L	0.00037	0.0222	mg/L	0.00037	1.68%
B 249.677†	47392.9	0.884	mg/L	0.0126	0.884	mg/L	0.0126	1.42%
Ca 227.546†	481.4	4.61	mg/L	0.072	4.61	mg/L	0.072	1.56%
Cd 228.802†	404.4	0.0229	mg/L	0.00016	0.0229	mg/L	0.00016	0.69%
Co 228.616†	1821.5	0.0938	mg/L	0.00021	0.0938	mg/L	0.00021	0.22%
Cr 267.716†	27414.8	0.236	mg/L	0.0027	0.236	mg/L	0.0027	1.13%
Cu 327.393†	34452.7	0.233	mg/L	0.0014	0.233	mg/L	0.0014	0.58%
Fe 239.562†	830.9	1.89	mg/L	0.008	1.89	mg/L	0.008	0.45%
Mg 279.077†	3914.5	4.90	mg/L	0.030	4.90	mg/L	0.030	0.61%
Mn 257.610†	107436.6	0.238	mg/L	0.0028	0.238	mg/L	0.0028	1.19%
Mo 202.031†	6369.7	0.470	mg/L	0.0028	0.470	mg/L	0.0028	0.60%
Ni 231.604†	8028.6	0.234	mg/L	0.0027	0.234	mg/L	0.0027	1.14%
Pb 220.353†	1380.2	0.231	mg/L	0.0013	0.231	mg/L	0.0013	0.55%
Sb 206.836†	872.5	0.546	mg/L	0.0064	0.546	mg/L	0.0064	1.17%
Se 196.026†	260.9	0.184	mg/L	0.0030	0.184	mg/L	0.0030	1.61%
Si 251.611†	81709.1	2.30	mg/L	0.020	2.30	mg/L	0.020	0.88%
Sn 189.927†	7.9	0.00144	mg/L	0.000387	0.00144	mg/L	0.000387	26.86%
Ti 334.940†	350285.9	0.474	mg/L	0.0057	0.474	mg/L	0.0057	1.20%
Tl 190.801†	382.0	0.230	mg/L	0.0010	0.230	mg/L	0.0010	0.43%
V 290.880†	71612.5	0.469	mg/L	0.0045	0.469	mg/L	0.0045	0.96%
Zn 206.200†	15043.2	0.453	mg/L	0.0054	0.453	mg/L	0.0054	1.19%
K 766.490†	61476.8	23.7	mg/L	0.14	23.7	mg/L	0.14	0.59%
Na 589.592†	319892.0	23.9	mg/L	0.35	23.9	mg/L	0.35	1.45%
Sr 407.771†	538522.3	0.523	mg/L	0.0328	0.523	mg/L	0.0328	6.27%
Li 670.784†	38912.1	0.485	mg/L	0.0077	0.485	mg/L	0.0077	1.60%

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Pierre Morris

Sequence No.: 68 **Autosampler Location: 100**
Sample ID: FBLK WG357390-01 **Date Collected: 2/24/2011 11:07:18 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG357390-01

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: FBLK WG357390-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4919700.6						39613.73	0.81%
YRADIAL	301265.4						2568.38	0.85%
Ga 417.206	1255438.2						14534.98	1.16%
GaRADIAL	62694.5						1015.15	1.62%
Ag 328.068†	-387.1	-0.00153	mg/L	0.000344	-0.00153	mg/L	0.000344	22.45%
Al 396.153†	11237.1	2.24	mg/L	0.023	2.24	mg/L	0.023	1.04%
As 188.979†	-0.7	-0.00139	mg/L	0.003103	-0.00139	mg/L	0.003103	222.68%
Ba 233.527†	779.9	0.0130	mg/L	0.00008	0.0130	mg/L	0.00008	0.64%
Be 234.861†	277.9	-0.00005	mg/L	0.000028	-0.00005	mg/L	0.000028	58.09%
B 249.677†	-349.4	0.00750	mg/L	0.000215	0.00750	mg/L	0.000215	2.86%
Ca 227.546†	88.6	0.811	mg/L	0.0984	0.811	mg/L	0.0984	12.14%
Cd 228.802†	2.6	0.00010	mg/L	0.000088	0.00010	mg/L	0.000088	89.29%
Co 228.616†	12.4	0.00041	mg/L	0.000185	0.00041	mg/L	0.000185	45.21%
Cr 267.716†	506.3	0.00409	mg/L	0.000042	0.00409	mg/L	0.000042	1.02%
Cu 327.393†	521.0	0.00429	mg/L	0.000753	0.00429	mg/L	0.000753	17.54%
Fe 239.562†	1217.2	2.77	mg/L	0.033	2.77	mg/L	0.033	1.19%
Mg 279.077†	876.8	1.09	mg/L	0.008	1.09	mg/L	0.008	0.75%
Mn 257.610†	13104.9	0.0298	mg/L	0.00025	0.0298	mg/L	0.00025	0.82%
Mo 202.031†	-13.1	-0.00096	mg/L	0.000302	-0.00096	mg/L	0.000302	31.54%
Ni 231.604†	93.4	0.00257	mg/L	0.000183	0.00257	mg/L	0.000183	7.11%
Pb 220.353†	16.9	0.00258	mg/L	0.000793	0.00258	mg/L	0.000793	30.69%
Sb 206.836†	1.2	0.00111	mg/L	0.000498	0.00111	mg/L	0.000498	44.97%
Se 196.026†	-2.7	-0.00150	mg/L	0.002271	-0.00150	mg/L	0.002271	151.87%
Si 251.611†	9570.9	0.250	mg/L	0.0027	0.250	mg/L	0.0027	1.08%
Sn 189.927†	4.8	0.00091	mg/L	0.000327	0.00091	mg/L	0.000327	35.75%
Ti 334.940†	25781.7	0.0349	mg/L	0.00033	0.0349	mg/L	0.00033	0.95%
Tl 190.801†	-9.5	-0.00410	mg/L	0.002260	-0.00410	mg/L	0.002260	55.18%
V 290.880†	639.5	0.00541	mg/L	0.000338	0.00541	mg/L	0.000338	6.25%
Zn 206.200†	287.1	0.00825	mg/L	0.000121	0.00825	mg/L	0.000121	1.47%
K 766.490†	1390.9	0.389	mg/L	0.0301	0.389	mg/L	0.0301	7.74%
Na 589.592†	1830634.6	143	mg/L	3.3	143	mg/L	3.3	2.28%
Sr 407.771†	5974.5	0.00543	mg/L	0.000553	0.00543	mg/L	0.000553	10.19%
Li 670.784†	210.8	0.00202	mg/L	0.000463	0.00202	mg/L	0.000463	22.89%

Sequence No.: 69 **Autosampler Location: 101**
Sample ID: L1102052101 **Date Collected: 2/24/2011 11:14:01 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102052101

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102052101

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5050803.9						23202.31	0.46%
YRADIAL	306036.3						4267.95	1.39%
Ga 417.206	1276334.6						14689.20	1.15%
GaRADIAL	62900.6						521.31	0.83%
Ag 328.068†	-347.8	-0.00131	mg/L	0.000321	-0.00131	mg/L	0.000321	24.51%
Al 396.153†	814.9	0.142	mg/L	0.0125	0.142	mg/L	0.0125	8.80%

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Pierre Morris

As 188.979†	1.3	0.00015 mg/L	0.002501	0.00015 mg/L	0.002501	>999.9%
Ba 233.527†	3769.7	0.0634 mg/L	0.00036	0.0634 mg/L	0.00036	0.56%
Be 234.861†	40.2	0.00017 mg/L	0.000037	0.00017 mg/L	0.000037	21.58%
B 249.677†	227.9	0.00797 mg/L	0.001103	0.00797 mg/L	0.001103	13.84%
Ca 227.546†	283.0	2.61 mg/L	0.106	2.61 mg/L	0.106	4.06%
Cd 228.802†	3.1	0.00048 mg/L	0.000133	0.00048 mg/L	0.000133	27.82%
Co 228.616†	649.7	0.0338 mg/L	0.00054	0.0338 mg/L	0.00054	1.60%
Cr 267.716†	271.3	0.00180 mg/L	0.000118	0.00180 mg/L	0.000118	6.55%
Cu 327.393†	271.3	0.00226 mg/L	0.000460	0.00226 mg/L	0.000460	20.38%
Fe 239.562†	49.8	0.114 mg/L	0.0025	0.114 mg/L	0.0025	2.17%
Mg 279.077†	1304.3	1.63 mg/L	0.016	1.63 mg/L	0.016	0.98%
Mn 257.610†	339687.5	0.748 mg/L	0.0025	0.748 mg/L	0.0025	0.34%
Mo 202.031†	-13.0	-0.00094 mg/L	0.000247	-0.00094 mg/L	0.000247	26.41%
Ni 231.604†	557.0	0.0161 mg/L	0.00025	0.0161 mg/L	0.00025	1.54%
Pb 220.353†	7.1	0.00102 mg/L	0.000876	0.00102 mg/L	0.000876	85.76%
Sb 206.836†	2.9	0.00219 mg/L	0.000409	0.00219 mg/L	0.000409	18.70%
Se 196.026†	-0.8	-0.00074 mg/L	0.003099	-0.00074 mg/L	0.003099	417.69%
Si 251.611†	14493.2	0.391 mg/L	0.0061	0.391 mg/L	0.0061	1.56%
Sn 189.927†	3.7	0.00072 mg/L	0.000354	0.00072 mg/L	0.000354	49.10%
Ti 334.940†	1498.5	0.00209 mg/L	0.000037	0.00209 mg/L	0.000037	1.78%
Tl 190.801†	-7.2	-0.00235 mg/L	0.003596	-0.00235 mg/L	0.003596	153.11%
V 290.880†	33.1	0.00124 mg/L	0.000525	0.00124 mg/L	0.000525	42.23%
Zn 206.200†	284.5	0.00823 mg/L	0.000341	0.00823 mg/L	0.000341	4.14%
K 766.490†	835.2	0.190 mg/L	0.0265	0.190 mg/L	0.0265	13.95%
Na 589.592†	1655389.6	128 mg/L	1.3	128 mg/L	1.3	0.98%
Sr 407.771†	13704.0	0.0133 mg/L	0.00104	0.0133 mg/L	0.00104	7.82%
Li 670.784†	219.1	0.00213 mg/L	0.000833	0.00213 mg/L	0.000833	39.19%

Sequence No.: 70 **Autosampler Location: 102**
Sample ID: L1102057201 **Date Collected: 2/24/2011 11:20:48 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057201

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102057201

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4919783.9						41207.20	0.84%
YRADIAL	306829.6						6066.52	1.98%
Ga 417.206	1255414.8						19567.79	1.56%
GaRADIAL	62599.2						467.88	0.75%
Ag 328.068†	-428.5	-0.00161	mg/L	0.000723	-0.00161	mg/L	0.000723	44.96%
Al 396.153†	361.3	0.0509	mg/L	0.01005	0.0509	mg/L	0.01005	19.75%
As 188.979†	0.5	-0.00061	mg/L	0.003076	-0.00061	mg/L	0.003076	504.22%
Ba 233.527†	1128.8	0.0189	mg/L	0.00016	0.0189	mg/L	0.00016	0.87%
Be 234.861†	-55.0	-0.00008	mg/L	0.000028	-0.00008	mg/L	0.000028	35.65%
B 249.677†	2578.7	0.0516	mg/L	0.00079	0.0516	mg/L	0.00079	1.53%
Ca 227.546†	394.3	3.64	mg/L	0.147	3.64	mg/L	0.147	4.03%
Cd 228.802†	71.3	0.00399	mg/L	0.000113	0.00399	mg/L	0.000113	2.83%
Co 228.616†	-4.0	-0.00030	mg/L	0.000254	-0.00030	mg/L	0.000254	83.91%
Cr 267.716†	103.2	0.00068	mg/L	0.000116	0.00068	mg/L	0.000116	17.13%
Cu 327.393†	32.2	0.00066	mg/L	0.000361	0.00066	mg/L	0.000361	54.53%
Fe 239.562†	35.4	0.0811	mg/L	0.00710	0.0811	mg/L	0.00710	8.75%
Mg 279.077†	780.9	0.974	mg/L	0.0134	0.974	mg/L	0.0134	1.38%
Mn 257.610†	6798.1	0.0158	mg/L	0.00034	0.0158	mg/L	0.00034	2.13%
Mo 202.031†	-14.2	-0.00118	mg/L	0.000160	-0.00118	mg/L	0.000160	13.60%
Ni 231.604†	42.6	0.00109	mg/L	0.000238	0.00109	mg/L	0.000238	21.80%
Pb 220.353†	15.0	0.00246	mg/L	0.001887	0.00246	mg/L	0.001887	76.81%
Sb 206.836†	4.0	0.00286	mg/L	0.001023	0.00286	mg/L	0.001023	35.73%
Se 196.026†	-0.3	0.00016	mg/L	0.004815	0.00016	mg/L	0.004815	>999.9%
Si 251.611†	11923.7	0.317	mg/L	0.0057	0.317	mg/L	0.0057	1.80%
Sn 189.927†	9.7	0.00176	mg/L	0.000803	0.00176	mg/L	0.000803	45.70%
Ti 334.940†	1301.4	0.00183	mg/L	0.000079	0.00183	mg/L	0.000079	4.32%
Tl 190.801†	-4.3	-0.00171	mg/L	0.000146	-0.00171	mg/L	0.000146	8.54%
V 290.880†	102.6	0.00170	mg/L	0.000853	0.00170	mg/L	0.000853	50.30%
Zn 206.200†	2224.4	0.0665	mg/L	0.00062	0.0665	mg/L	0.00062	0.93%

Approved: February 25, 2011

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K 766.490†	1250.7	0.341 mg/L	0.0028	0.341 mg/L	0.0028	0.83%
Na 589.592†	1761543.7	137 mg/L	1.0	137 mg/L	1.0	0.70%
Sr 407.771†	33095.5	0.0321 mg/L	0.00237	0.0321 mg/L	0.00237	7.38%
Li 670.784†	227.0	0.00222 mg/L	0.000234	0.00222 mg/L	0.000234	10.53%

Sequence No.: 71 **Autosampler Location: 103**
Sample ID: L1102057201PS WG357495-01 **Date Collected: 2/24/2011 11:27:34 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057201PS WG357495-01

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102057201PS WG357495-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4873568.6						9806.36	0.20%
YRADIAL	304774.4						9402.16	3.08%
Ga 417.206	1231204.9						10681.47	0.87%
GaRADIAL	63829.0						626.50	0.98%
Ag 328.068†	38663.8	0.189	mg/L	0.0011	0.189	mg/L	0.0011	0.60%
Al 396.153†	24341.1	4.88	mg/L	0.030	4.88	mg/L	0.030	0.62%
As 188.979†	205.6	0.186	mg/L	0.0030	0.186	mg/L	0.0030	1.62%
Ba 233.527†	29089.9	0.492	mg/L	0.0017	0.492	mg/L	0.0017	0.34%
Be 234.861†	13261.2	0.0230	mg/L	0.00018	0.0230	mg/L	0.00018	0.76%
B 249.677†	52244.0	0.974	mg/L	0.0071	0.974	mg/L	0.0071	0.73%
Ca 227.546†	873.9	8.27	mg/L	0.058	8.27	mg/L	0.058	0.70%
Cd 228.802†	489.1	0.0276	mg/L	0.00030	0.0276	mg/L	0.00030	1.08%
Co 228.616†	1837.1	0.0946	mg/L	0.00039	0.0946	mg/L	0.00039	0.41%
Cr 267.716†	27668.6	0.238	mg/L	0.0013	0.238	mg/L	0.0013	0.56%
Cu 327.393†	35609.5	0.241	mg/L	0.0008	0.241	mg/L	0.0008	0.34%
Fe 239.562†	847.5	1.93	mg/L	0.029	1.93	mg/L	0.029	1.49%
Mg 279.077†	4525.9	5.67	mg/L	0.106	5.67	mg/L	0.106	1.87%
Mn 257.610†	114914.5	0.256	mg/L	0.0016	0.256	mg/L	0.0016	0.61%
Mo 202.031†	6464.3	0.477	mg/L	0.0036	0.477	mg/L	0.0036	0.76%
Ni 231.604†	8262.7	0.241	mg/L	0.0011	0.241	mg/L	0.0011	0.44%
Pb 220.353†	1404.7	0.235	mg/L	0.0007	0.235	mg/L	0.0007	0.30%
Sb 206.836†	911.4	0.570	mg/L	0.0035	0.570	mg/L	0.0035	0.61%
Se 196.026†	273.8	0.194	mg/L	0.0049	0.194	mg/L	0.0049	2.55%
Si 251.611†	96310.5	2.72	mg/L	0.017	2.72	mg/L	0.017	0.63%
Sn 189.927†	-2.9	-0.00041	mg/L	0.001133	-0.00041	mg/L	0.001133	276.54%
Ti 334.940†	350700.2	0.474	mg/L	0.0010	0.474	mg/L	0.0010	0.21%
Tl 190.801†	389.0	0.234	mg/L	0.0014	0.234	mg/L	0.0014	0.61%
V 290.880†	72996.2	0.478	mg/L	0.0026	0.478	mg/L	0.0026	0.55%
Zn 206.200†	17507.3	0.527	mg/L	0.0003	0.527	mg/L	0.0003	0.06%
K 766.490†	62911.4	24.2	mg/L	0.17	24.2	mg/L	0.17	0.71%
Na 589.592†	1834593.6	143	mg/L	1.1	143	mg/L	1.1	0.79%
Sr 407.771†	566130.7	0.550	mg/L	0.0513	0.550	mg/L	0.0513	9.33%
Li 670.784†	38551.8	0.480	mg/L	0.0037	0.480	mg/L	0.0037	0.77%

Sequence No.: 72 **Autosampler Location: 104**
Sample ID: L1102057201DL WG357495-02 **Date Collected: 2/24/2011 11:34:17 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057201DL WG357495-02

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102057201DL WG357495-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4952371.9						44090.38	0.89%
YRADIAL	303892.9						6107.71	2.01%

Approved: February 25, 2011

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Ga 417.206	1287928.9					8774.71	0.68%
GaRADIAL	62691.8					210.30	0.34%
Ag 328.068†	-575.8	-0.00231	mg/L	0.000078	-0.00231 mg/L	0.000078	3.39%
Al 396.153†	124.0	0.00303	mg/L	0.002358	0.00303 mg/L	0.002358	77.90%
As 188.979†	0.3	-0.00075	mg/L	0.000564	-0.00075 mg/L	0.000564	74.89%
Ba 233.527†	235.0	0.00384	mg/L	0.000034	0.00384 mg/L	0.000034	0.88%
Be 234.861†	33.2	0.00008	mg/L	0.000024	0.00008 mg/L	0.000024	29.10%
B 249.677†	549.9	0.0138	mg/L	0.00008	0.0138 mg/L	0.00008	0.55%
Ca 227.546†	79.6	0.713	mg/L	0.0765	0.713 mg/L	0.0765	10.72%
Cd 228.802†	15.8	0.00084	mg/L	0.000185	0.00084 mg/L	0.000185	22.12%
Co 228.616†	-2.1	-0.00020	mg/L	0.000202	-0.00020 mg/L	0.000202	102.40%
Cr 267.716†	34.3	0.00009	mg/L	0.000038	0.00009 mg/L	0.000038	43.51%
Cu 327.393†	-148.9	-0.00057	mg/L	0.000286	-0.00057 mg/L	0.000286	50.21%
Fe 239.562†	5.6	0.0133	mg/L	0.00376	0.0133 mg/L	0.00376	28.23%
Mg 279.077†	164.7	0.201	mg/L	0.0089	0.201 mg/L	0.0089	4.42%
Mn 257.610†	1423.8	0.00291	mg/L	0.000060	0.00291 mg/L	0.000060	2.08%
Mo 202.031†	-9.7	-0.00085	mg/L	0.000201	-0.00085 mg/L	0.000201	23.70%
Ni 231.604†	25.4	0.00059	mg/L	0.000250	0.00059 mg/L	0.000250	42.16%
Pb 220.353†	2.5	0.00026	mg/L	0.000427	0.00026 mg/L	0.000427	166.59%
Sb 206.836†	3.3	0.00242	mg/L	0.000282	0.00242 mg/L	0.000282	11.66%
Se 196.026†	-1.4	-0.00139	mg/L	0.003315	-0.00139 mg/L	0.003315	237.75%
Si 251.611†	2410.4	0.0451	mg/L	0.00044	0.0451 mg/L	0.00044	0.99%
Sn 189.927†	-5.5	-0.00086	mg/L	0.000797	-0.00086 mg/L	0.000797	93.01%
Ti 334.940†	292.4	0.00044	mg/L	0.000272	0.00044 mg/L	0.000272	61.82%
Tl 190.801†	-13.1	-0.00669	mg/L	0.001318	-0.00669 mg/L	0.001318	19.72%
V 290.880†	5.2	0.00105	mg/L	0.001630	0.00105 mg/L	0.001630	154.57%
Zn 206.200†	419.0	0.0123	mg/L	0.00008	0.0123 mg/L	0.00008	0.68%
K 766.490†	205.4	0.0492	mg/L	0.05073	0.0492 mg/L	0.05073	103.12%
Na 589.592†	359250.4	26.9	mg/L	0.37	26.9 mg/L	0.37	1.38%
Sr 407.771†	6538.0	0.00631	mg/L	0.000463	0.00631 mg/L	0.000463	7.35%
Li 670.784†	252.9	0.00255	mg/L	0.000881	0.00255 mg/L	0.000881	34.59%

Sequence No.: 73 **Autosampler Location: 105**
Sample ID: L1102057202 **Date Collected: 2/24/2011 11:41:02 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057202

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102057202

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4964034.8						45873.38	0.92%
YRADIAL	305087.9						8308.88	2.72%
Ga 417.206	1290025.5						24257.17	1.88%
GaRADIAL	63697.9						833.15	1.31%
Ag 328.068†	-481.1	-0.00198	mg/L	0.000758	-0.00198	mg/L	0.000758	38.24%
Al 396.153†	8387.1	1.67	mg/L	0.010	1.67	mg/L	0.010	0.58%
As 188.979†	0.4	-0.00043	mg/L	0.001631	-0.00043	mg/L	0.001631	383.57%
Ba 233.527†	2514.7	0.0423	mg/L	0.00037	0.0423	mg/L	0.00037	0.88%
Be 234.861†	347.3	0.00011	mg/L	0.000050	0.00011	mg/L	0.000050	45.80%
B 249.677†	2649.8	0.0628	mg/L	0.00200	0.0628	mg/L	0.00200	3.18%
Ca 227.546†	530.2	4.92	mg/L	0.042	4.92	mg/L	0.042	0.85%
Cd 228.802†	9.0	0.00045	mg/L	0.000060	0.00045	mg/L	0.000060	13.30%
Co 228.616†	6.8	0.00016	mg/L	0.000203	0.00016	mg/L	0.000203	129.82%
Cr 267.716†	435.1	0.00349	mg/L	0.000089	0.00349	mg/L	0.000089	2.56%
Cu 327.393†	1903.8	0.0136	mg/L	0.00036	0.0136	mg/L	0.00036	2.66%
Fe 239.562†	1132.1	2.58	mg/L	0.066	2.58	mg/L	0.066	2.55%
Mg 279.077†	1891.5	2.37	mg/L	0.067	2.37	mg/L	0.067	2.83%
Mn 257.610†	19053.4	0.0428	mg/L	0.00090	0.0428	mg/L	0.00090	2.11%
Mo 202.031†	-12.9	-0.00095	mg/L	0.000246	-0.00095	mg/L	0.000246	25.83%
Ni 231.604†	73.4	0.00199	mg/L	0.000281	0.00199	mg/L	0.000281	14.13%
Pb 220.353†	39.7	0.00653	mg/L	0.000817	0.00653	mg/L	0.000817	12.52%
Sb 206.836†	4.2	0.00298	mg/L	0.001178	0.00298	mg/L	0.001178	39.56%
Se 196.026†	4.7	0.00472	mg/L	0.004804	0.00472	mg/L	0.004804	101.86%
Si 251.611†	14740.6	0.398	mg/L	0.0127	0.398	mg/L	0.0127	3.20%
Sn 189.927†	5.3	0.00100	mg/L	0.000211	0.00100	mg/L	0.000211	21.08%

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Ti 334.940†	11380.8	0.0155 mg/L	0.00025	0.0155 mg/L	0.00025	1.60%
Tl 190.801†	-9.0	-0.00441 mg/L	0.003063	-0.00441 mg/L	0.003063	69.41%
V 290.880†	733.7	0.00601 mg/L	0.001517	0.00601 mg/L	0.001517	25.24%
Zn 206.200†	570.0	0.0168 mg/L	0.00042	0.0168 mg/L	0.00042	2.53%
K 766.490†	1324.2	0.371 mg/L	0.0213	0.371 mg/L	0.0213	5.73%
Na 589.592†	1739682.7	135 mg/L	4.4	135 mg/L	4.4	3.25%
Sr 407.771†	18311.5	0.0174 mg/L	0.00117	0.0174 mg/L	0.00117	6.69%
Li 670.784†	146.4	0.00122 mg/L	0.000970	0.00122 mg/L	0.000970	79.52%

Sequence No.: 74 **Autosampler Location: 4**
Sample ID: CCV **Date Collected: 2/24/2011 11:47:48 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4761625.3						54932.53	1.15%
YRADIAL	295610.7						7298.48	2.47%
Ga 417.206	1229098.7						17624.08	1.43%
GaRADIAL	62063.5						648.01	1.04%
Ag 328.068†	85134.1	0.415	mg/L	0.0067	0.415	mg/L	0.0067	1.62%
Al 396.153†	53786.6	10.8	mg/L	0.03	10.8	mg/L	0.03	0.28%
As 188.979†	445.9	0.405	mg/L	0.0030	0.405	mg/L	0.0030	0.74%
Ba 233.527†	62040.9	1.05	mg/L	0.016	1.05	mg/L	0.016	1.48%
Be 234.861†	29649.3	0.0514	mg/L	0.00083	0.0514	mg/L	0.00083	1.61%
B 249.677†	27558.4	0.520	mg/L	0.0078	0.520	mg/L	0.0078	1.49%
Ca 227.546†	1135.3	10.9	mg/L	0.14	10.9	mg/L	0.14	1.32%
Cd 228.802†	932.9	0.0527	mg/L	0.00069	0.0527	mg/L	0.00069	1.32%
Co 228.616†	4097.9	0.211	mg/L	0.0025	0.211	mg/L	0.0025	1.18%
Cr 267.716†	60854.8	0.524	mg/L	0.0085	0.524	mg/L	0.0085	1.61%
Cu 327.393†	77522.0	0.524	mg/L	0.0084	0.524	mg/L	0.0084	1.60%
Fe 239.562†	1828.9	4.16	mg/L	0.065	4.16	mg/L	0.065	1.56%
Mg 279.077†	8475.3	10.6	mg/L	0.16	10.6	mg/L	0.16	1.46%
Mn 257.610†	238607.8	0.529	mg/L	0.0084	0.529	mg/L	0.0084	1.59%
Mo 202.031†	14124.1	1.04	mg/L	0.021	1.04	mg/L	0.021	1.99%
Ni 231.604†	18137.7	0.528	mg/L	0.0096	0.528	mg/L	0.0096	1.81%
Pb 220.353†	3100.4	0.518	mg/L	0.0065	0.518	mg/L	0.0065	1.25%
Sb 206.836†	1984.4	1.24	mg/L	0.018	1.24	mg/L	0.018	1.43%
Se 196.026†	606.3	0.428	mg/L	0.0074	0.428	mg/L	0.0074	1.73%
Si 251.611†	181183.6	5.14	mg/L	0.087	5.14	mg/L	0.087	1.69%
Sn 189.927†	6175.6	1.06	mg/L	0.014	1.06	mg/L	0.014	1.31%
Ti 334.940†	763503.6	1.03	mg/L	0.002	1.03	mg/L	0.002	0.21%
Tl 190.801†	879.8	0.528	mg/L	0.0051	0.528	mg/L	0.0051	0.97%
V 290.880†	159851.9	1.04	mg/L	0.017	1.04	mg/L	0.017	1.66%
Zn 206.200†	34017.8	1.02	mg/L	0.018	1.02	mg/L	0.018	1.80%
K 766.490†	137121.3	53.2	mg/L	0.29	53.2	mg/L	0.29	0.54%
Na 589.592†	695086.2	52.5	mg/L	0.64	52.5	mg/L	0.64	1.22%
Sr 407.771†	1218039.8	1.18	mg/L	0.083	1.18	mg/L	0.083	7.00%
Li 670.784†	86036.2	1.07	mg/L	0.014	1.07	mg/L	0.014	1.35%

Sequence No.: 75 **Autosampler Location: 5**
Sample ID: CCB **Date Collected: 2/24/2011 11:54:28 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCB

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Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5030429.3						35203.82	0.70%
YRADIAL	300194.0						5589.07	1.86%
Ga 417.206	1284398.2						16472.09	1.28%
GaRADIAL	62853.8						1519.35	2.42%
Ag 328.068†	-583.8	-0.00235	mg/L	0.000801	-0.00235	mg/L	0.000801	34.06%
Al 396.153†	84.1	-0.00503	mg/L	0.009631	-0.00503	mg/L	0.009631	191.38%
As 188.979†	3.2	0.00192	mg/L	0.001549	0.00192	mg/L	0.001549	80.64%
Ba 233.527†	-2.7	-0.00017	mg/L	0.000011	-0.00017	mg/L	0.000011	6.38%
Be 234.861†	44.0	0.00010	mg/L	0.000025	0.00010	mg/L	0.000025	24.29%
B 249.677†	-54.6	0.00259	mg/L	0.000247	0.00259	mg/L	0.000247	9.55%
Ca 227.546†	5.2	0.0198	mg/L	0.02833	0.0198	mg/L	0.02833	142.86%
Cd 228.802†	-0.5	-0.00011	mg/L	0.000083	-0.00011	mg/L	0.000083	73.26%
Co 228.616†	-6.4	-0.00042	mg/L	0.000556	-0.00042	mg/L	0.000556	133.11%
Cr 267.716†	24.7	0.00001	mg/L	0.000041	0.00001	mg/L	0.000041	713.10%
Cu 327.393†	-107.6	-0.00029	mg/L	0.000230	-0.00029	mg/L	0.000230	78.42%
Fe 239.562†	0.5	0.00181	mg/L	0.002005	0.00181	mg/L	0.002005	110.74%
Mg 279.077†	-0.7	-0.00596	mg/L	0.006944	-0.00596	mg/L	0.006944	116.54%
Mn 257.610†	216.4	-0.00002	mg/L	0.000028	-0.00002	mg/L	0.000028	181.61%
Mo 202.031†	-3.2	-0.00037	mg/L	0.000101	-0.00037	mg/L	0.000101	26.86%
Ni 231.604†	4.8	-0.00001	mg/L	0.000398	-0.00001	mg/L	0.000398	>999.9%
Pb 220.353†	-0.5	-0.00027	mg/L	0.000276	-0.00027	mg/L	0.000276	100.89%
Sb 206.836†	0.3	0.00057	mg/L	0.002466	0.00057	mg/L	0.002466	430.23%
Se 196.026†	-4.0	-0.00336	mg/L	0.006420	-0.00336	mg/L	0.006420	191.20%
Si 251.611†	-22.6	-0.0245	mg/L	0.00032	-0.0245	mg/L	0.00032	1.31%
Sn 189.927†	-1.2	-0.00012	mg/L	0.000822	-0.00012	mg/L	0.000822	710.05%
Ti 334.940†	22.3	0.00007	mg/L	0.000205	0.00007	mg/L	0.000205	304.89%
Tl 190.801†	-15.4	-0.00794	mg/L	0.003149	-0.00794	mg/L	0.003149	39.68%
V 290.880†	-42.4	0.00074	mg/L	0.000900	0.00074	mg/L	0.000900	121.42%
Zn 206.200†	-77.1	-0.00265	mg/L	0.000111	-0.00265	mg/L	0.000111	4.19%
K 766.490†	2.2	-0.00213	mg/L	0.077836	-0.00213	mg/L	0.077836	>999.9%
Na 589.592†	1197.3	0.0827	mg/L	0.00958	0.0827	mg/L	0.00958	11.59%
Sr 407.771†	-4.6	-0.00005	mg/L	0.000174	-0.00005	mg/L	0.000174	345.64%
Li 670.784†	-12.8	-0.00077	mg/L	0.001480	-0.00077	mg/L	0.001480	193.27%

Sequence No.: 76 **Autosampler Location: 106**
Sample ID: L1102057203 **Date Collected: 2/25/2011 12:01:09 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057203

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102057203

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4944324.8						81368.14	1.65%
YRADIAL	298754.8						7931.02	2.65%
Ga 417.206	1280187.0						29852.91	2.33%
GaRADIAL	62122.0						2351.64	3.79%
Ag 328.068†	-603.8	-0.00245	mg/L	0.000048	-0.00245	mg/L	0.000048	1.94%
Al 396.153†	432.8	0.0653	mg/L	0.00878	0.0653	mg/L	0.00878	13.44%
As 188.979†	0.3	-0.00080	mg/L	0.000704	-0.00080	mg/L	0.000704	88.31%
Ba 233.527†	520.7	0.00866	mg/L	0.000243	0.00866	mg/L	0.000243	2.81%
Be 234.861†	-30.7	-0.00003	mg/L	0.000023	-0.00003	mg/L	0.000023	84.30%
B 249.677†	2898.2	0.0572	mg/L	0.00005	0.0572	mg/L	0.00005	0.10%
Ca 227.546†	388.4	3.59	mg/L	0.095	3.59	mg/L	0.095	2.65%
Cd 228.802†	65.7	0.00367	mg/L	0.000136	0.00367	mg/L	0.000136	3.70%
Co 228.616†	-14.4	-0.00086	mg/L	0.000278	-0.00086	mg/L	0.000278	32.23%
Cr 267.716†	110.0	0.00074	mg/L	0.000147	0.00074	mg/L	0.000147	19.76%
Cu 327.393†	6.6	0.00050	mg/L	0.000646	0.00050	mg/L	0.000646	129.05%
Fe 239.562†	10.1	0.0235	mg/L	0.00112	0.0235	mg/L	0.00112	4.77%
Mg 279.077†	914.8	1.14	mg/L	0.043	1.14	mg/L	0.043	3.81%
Mn 257.610†	4860.1	0.0115	mg/L	0.00014	0.0115	mg/L	0.00014	1.18%
Mo 202.031†	-16.2	-0.00133	mg/L	0.000447	-0.00133	mg/L	0.000447	33.58%
Ni 231.604†	18.8	0.00040	mg/L	0.000076	0.00040	mg/L	0.000076	19.08%
Pb 220.353†	10.0	0.00163	mg/L	0.001434	0.00163	mg/L	0.001434	87.94%

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Sb 206.836†	5.2	0.00356	mg/L	0.001184	0.00356	mg/L	0.001184 33.21%
Se 196.026†	3.3	0.00262	mg/L	0.002285	0.00262	mg/L	0.002285 87.34%
Si 251.611†	12917.8	0.345	mg/L	0.0246	0.345	mg/L	0.0246 7.12%
Sn 189.927†	13.0	0.00233	mg/L	0.001064	0.00233	mg/L	0.001064 45.67%
Ti 334.940†	8071.2	0.0110	mg/L	0.00035	0.0110	mg/L	0.00035 3.22%
Tl 190.801†	-4.4	-0.00169	mg/L	0.005114	-0.00169	mg/L	0.005114 302.34%
V 290.880†	731.2	0.00580	mg/L	0.000651	0.00580	mg/L	0.000651 11.22%
Zn 206.200†	4750.3	0.142	mg/L	0.0030	0.142	mg/L	0.0030 2.12%
K 766.490†	894.4	0.204	mg/L	0.0317	0.204	mg/L	0.0317 15.56%
Na 589.592†	1763840.3	137	mg/L	0.7	137	mg/L	0.7 0.51%
Sr 407.771†	21802.3	0.0211	mg/L	0.00094	0.0211	mg/L	0.00094 4.46%
Li 670.784†	193.3	0.00180	mg/L	0.000239	0.00180	mg/L	0.000239 13.22%

Sequence No.: 77 **Autosampler Location: 107**
Sample ID: L1102057204 **Date Collected: 2/25/2011 12:07:55 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057204

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102057204

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4865737.9						25493.74	0.52%
YRADIAL	300921.3						4105.40	1.36%
Ga 417.206	1252188.1						15861.39	1.27%
GaRADIAL	62694.8						1750.92	2.79%
Ag 328.068†	-483.9	-0.00189	mg/L	0.000687	-0.00189	mg/L	0.000687	36.34%
Al 396.153†	1319.3	0.244	mg/L	0.0036	0.244	mg/L	0.0036	1.47%
As 188.979†	2.5	0.00119	mg/L	0.001847	0.00119	mg/L	0.001847	155.81%
Ba 233.527†	1552.0	0.0260	mg/L	0.00009	0.0260	mg/L	0.00009	0.34%
Be 234.861†	47.8	0.00004	mg/L	0.000028	0.00004	mg/L	0.000028	74.31%
B 249.677†	3060.1	0.0617	mg/L	0.00099	0.0617	mg/L	0.00099	1.60%
Ca 227.546†	695.8	6.45	mg/L	0.085	6.45	mg/L	0.085	1.32%
Cd 228.802†	24.0	0.00129	mg/L	0.000293	0.00129	mg/L	0.000293	22.78%
Co 228.616†	-6.6	-0.00047	mg/L	0.000259	-0.00047	mg/L	0.000259	54.58%
Cr 267.716†	207.5	0.00157	mg/L	0.000066	0.00157	mg/L	0.000066	4.23%
Cu 327.393†	147.4	0.00148	mg/L	0.000628	0.00148	mg/L	0.000628	42.46%
Fe 239.562†	162.8	0.371	mg/L	0.0120	0.371	mg/L	0.0120	3.23%
Mg 279.077†	1685.5	2.11	mg/L	0.039	2.11	mg/L	0.039	1.86%
Mn 257.610†	5242.8	0.0124	mg/L	0.00009	0.0124	mg/L	0.00009	0.70%
Mo 202.031†	-10.1	-0.00086	mg/L	0.000572	-0.00086	mg/L	0.000572	66.55%
Ni 231.604†	11.3	0.00018	mg/L	0.000303	0.00018	mg/L	0.000303	169.96%
Pb 220.353†	22.2	0.00377	mg/L	0.001116	0.00377	mg/L	0.001116	29.61%
Sb 206.836†	2.0	0.00159	mg/L	0.001272	0.00159	mg/L	0.001272	80.12%
Se 196.026†	0.9	0.00182	mg/L	0.007387	0.00182	mg/L	0.007387	406.69%
Si 251.611†	18781.7	0.513	mg/L	0.0077	0.513	mg/L	0.0077	1.49%
Sn 189.927†	8.6	0.00156	mg/L	0.000363	0.00156	mg/L	0.000363	23.30%
Ti 334.940†	10042.7	0.0137	mg/L	0.00036	0.0137	mg/L	0.00036	2.66%
Tl 190.801†	-5.3	-0.00242	mg/L	0.002321	-0.00242	mg/L	0.002321	95.98%
V 290.880†	274.4	0.00284	mg/L	0.001136	0.00284	mg/L	0.001136	40.03%
Zn 206.200†	327.8	0.00952	mg/L	0.000100	0.00952	mg/L	0.000100	1.05%
K 766.490†	1375.3	0.387	mg/L	0.0028	0.387	mg/L	0.0028	0.74%
Na 589.592†	1788388.3	139	mg/L	1.1	139	mg/L	1.1	0.78%
Sr 407.771†	38953.6	0.0378	mg/L	0.00110	0.0378	mg/L	0.00110	2.90%
Li 670.784†	189.4	0.00176	mg/L	0.000868	0.00176	mg/L	0.000868	49.43%

Sequence No.: 78 **Autosampler Location: 108**
Sample ID: L1102057205 **Date Collected: 2/25/2011 12:14:40 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057205

Analyte	Back Pressure	Flow

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All 170.0 kPa 0.50 L/min

Mean Data: L1102057205

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4963795.1						51575.62	1.04%
YRADIAL	305943.9						3913.57	1.28%
Ga 417.206	1277308.1						38843.04	3.04%
GaRADIAL	64192.6						768.89	1.20%
Ag 328.068†	-549.3	-0.00232	mg/L	0.000514	-0.00232	mg/L	0.000514	22.19%
Al 396.153†	6232.9	1.23	mg/L	0.011	1.23	mg/L	0.011	0.86%
As 188.979†	1.1	0.00010	mg/L	0.002832	0.00010	mg/L	0.002832	>999.9%
Ba 233.527†	1095.5	0.0183	mg/L	0.00017	0.0183	mg/L	0.00017	0.92%
Be 234.861†	387.7	0.00024	mg/L	0.000053	0.00024	mg/L	0.000053	22.13%
B 249.677†	2657.3	0.0614	mg/L	0.00264	0.0614	mg/L	0.00264	4.30%
Ca 227.546†	930.5	8.65	mg/L	0.153	8.65	mg/L	0.153	1.77%
Cd 228.802†	494.7	0.0281	mg/L	0.00076	0.0281	mg/L	0.00076	2.71%
Co 228.616†	1.0	-0.00016	mg/L	0.000413	-0.00016	mg/L	0.000413	257.76%
Cr 267.716†	460.3	0.00375	mg/L	0.000142	0.00375	mg/L	0.000142	3.79%
Cu 327.393†	3033.5	0.0212	mg/L	0.00071	0.0212	mg/L	0.00071	3.33%
Fe 239.562†	1004.9	2.29	mg/L	0.037	2.29	mg/L	0.037	1.63%
Mg 279.077†	2069.4	2.59	mg/L	0.040	2.59	mg/L	0.040	1.56%
Mn 257.610†	20538.6	0.0462	mg/L	0.00072	0.0462	mg/L	0.00072	1.57%
Mo 202.031†	-7.8	-0.00059	mg/L	0.000471	-0.00059	mg/L	0.000471	79.52%
Ni 231.604†	84.1	0.00230	mg/L	0.000177	0.00230	mg/L	0.000177	7.72%
Pb 220.353†	27.1	0.00462	mg/L	0.001126	0.00462	mg/L	0.001126	24.39%
Sb 206.836†	26.6	0.0169	mg/L	0.00264	0.0169	mg/L	0.00264	15.67%
Se 196.026†	-4.3	-0.00075	mg/L	0.004334	-0.00075	mg/L	0.004334	581.49%
Si 251.611†	13522.0	0.363	mg/L	0.0155	0.363	mg/L	0.0155	4.26%
Sn 189.927†	5.6	0.00105	mg/L	0.001123	0.00105	mg/L	0.001123	107.35%
Ti 334.940†	21375.0	0.0290	mg/L	0.00052	0.0290	mg/L	0.00052	1.78%
Tl 190.801†	0.7	0.00114	mg/L	0.001370	0.00114	mg/L	0.001370	120.66%
V 290.880†	420.7	0.00394	mg/L	0.001041	0.00394	mg/L	0.001041	26.42%
Zn 206.200†	30060.3	0.903	mg/L	0.0144	0.903	mg/L	0.0144	1.60%
K 766.490†	3095.6	1.06	mg/L	0.013	1.06	mg/L	0.013	1.25%
Na 589.592†	1698595.1	132	mg/L	2.1	132	mg/L	2.1	1.59%
Sr 407.771†	89849.9	0.0870	mg/L	0.00505	0.0870	mg/L	0.00505	5.80%
Li 670.784†	168.1	0.00149	mg/L	0.001624	0.00149	mg/L	0.001624	109.03%

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Sequence No.: 79 **Autosampler Location: 109**
Sample ID: L1102057206 **Date Collected: 2/25/2011 12:21:23 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057206

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102057206

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4862182.1						22881.28	0.47%
YRADIAL	303699.4						11077.20	3.65%
Ga 417.206	1250379.0						1862.16	0.15%
GaRADIAL	62709.6						1336.63	2.13%
Ag 328.068†	-475.5	-0.00183	mg/L	0.000719	-0.00183	mg/L	0.000719	39.21%
Al 396.153†	292.2	0.0369	mg/L	0.00204	0.0369	mg/L	0.00204	5.51%
As 188.979†	0.6	-0.00051	mg/L	0.001027	-0.00051	mg/L	0.001027	202.85%
Ba 233.527†	1168.2	0.0196	mg/L	0.00010	0.0196	mg/L	0.00010	0.51%
Be 234.861†	-42.7	-0.00005	mg/L	0.000012	-0.00005	mg/L	0.000012	25.82%
B 249.677†	2356.1	0.0472	mg/L	0.00092	0.0472	mg/L	0.00092	1.94%
Ca 227.546†	483.1	4.47	mg/L	0.035	4.47	mg/L	0.035	0.78%
Cd 228.802†	39.0	0.00215	mg/L	0.000118	0.00215	mg/L	0.000118	5.47%
Co 228.616†	-14.0	-0.00083	mg/L	0.000105	-0.00083	mg/L	0.000105	12.65%
Cr 267.716†	122.2	0.00085	mg/L	0.000072	0.00085	mg/L	0.000072	8.53%
Cu 327.393†	9.8	0.00051	mg/L	0.000177	0.00051	mg/L	0.000177	35.02%
Fe 239.562†	7.8	0.0182	mg/L	0.00296	0.0182	mg/L	0.00296	16.23%
Mg 279.077†	728.1	0.908	mg/L	0.0289	0.908	mg/L	0.0289	3.18%

Approved: February 25, 2011

Pierce Morris

Mn 257.610†	2981.2	0.00745 mg/L	0.000034	0.00745 mg/L	0.000034	0.46%
Mo 202.031†	-15.5	-0.00128 mg/L	0.000257	-0.00128 mg/L	0.000257	20.18%
Ni 231.604†	14.6	0.00027 mg/L	0.000086	0.00027 mg/L	0.000086	31.73%
Pb 220.353†	6.7	0.00112 mg/L	0.001167	0.00112 mg/L	0.001167	104.59%
Sb 206.836†	2.3	0.00179 mg/L	0.002289	0.00179 mg/L	0.002289	127.92%
Se 196.026†	0.7	0.00105 mg/L	0.005697	0.00105 mg/L	0.005697	541.94%
Si 251.611†	16874.7	0.459 mg/L	0.0040	0.459 mg/L	0.0040	0.88%
Sn 189.927†	4.8	0.00091 mg/L	0.001318	0.00091 mg/L	0.001318	144.20%
Ti 334.940†	3184.4	0.00439 mg/L	0.000086	0.00439 mg/L	0.000086	1.96%
Tl 190.801†	-3.6	-0.00140 mg/L	0.001862	-0.00140 mg/L	0.001862	133.43%
V 290.880†	289.3	0.00291 mg/L	0.000181	0.00291 mg/L	0.000181	6.21%
Zn 206.200†	1523.8	0.0455 mg/L	0.00056	0.0455 mg/L	0.00056	1.23%
K 766.490†	1633.6	0.488 mg/L	0.0423	0.488 mg/L	0.0423	8.67%
Na 589.592†	1770165.7	138 mg/L	1.5	138 mg/L	1.5	1.12%
Sr 407.771†	45218.9	0.0439 mg/L	0.00282	0.0439 mg/L	0.00282	6.43%
Li 670.784†	139.9	0.00114 mg/L	0.000274	0.00114 mg/L	0.000274	24.12%

Sequence No.: 80 **Autosampler Location: 110**
Sample ID: L1102057207 **Date Collected: 2/25/2011 12:28:10 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057207

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102057207

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4959505.9						45053.50	0.91%
YRADIAL	308889.9						14631.38	4.74%
Ga 417.206	1266326.6						6940.00	0.55%
GaRADIAL	63720.8						2045.86	3.21%
Ag 328.068†	-646.0	-0.00265	mg/L	0.000605	-0.00265	mg/L	0.000605	22.79%
Al 396.153†	142.6	0.00678	mg/L	0.005117	0.00678	mg/L	0.005117	75.43%
As 188.979†	-0.5	-0.00149	mg/L	0.001238	-0.00149	mg/L	0.001238	83.35%
Ba 233.527†	709.4	0.0118	mg/L	0.00006	0.0118	mg/L	0.00006	0.47%
Be 234.861†	-34.4	-0.00003	mg/L	0.000009	-0.00003	mg/L	0.000009	28.49%
B 249.677†	2750.1	0.0546	mg/L	0.00058	0.0546	mg/L	0.00058	1.05%
Ca 227.546†	454.5	4.20	mg/L	0.032	4.20	mg/L	0.032	0.77%
Cd 228.802†	1.1	0.00000	mg/L	0.000140	0.00000	mg/L	0.000140	>999.9%
Co 228.616†	-11.8	-0.00071	mg/L	0.000061	-0.00071	mg/L	0.000061	8.50%
Cr 267.716†	89.5	0.00056	mg/L	0.000085	0.00056	mg/L	0.000085	15.10%
Cu 327.393†	-42.4	0.00015	mg/L	0.000554	0.00015	mg/L	0.000554	365.54%
Fe 239.562†	5.7	0.0135	mg/L	0.00078	0.0135	mg/L	0.00078	5.77%
Mg 279.077†	1091.1	1.36	mg/L	0.057	1.36	mg/L	0.057	4.15%
Mn 257.610†	2393.8	0.00605	mg/L	0.000070	0.00605	mg/L	0.000070	1.15%
Mo 202.031†	-15.0	-0.00124	mg/L	0.000297	-0.00124	mg/L	0.000297	23.90%
Ni 231.604†	11.3	0.00018	mg/L	0.000019	0.00018	mg/L	0.000019	10.93%
Pb 220.353†	6.6	0.00109	mg/L	0.001269	0.00109	mg/L	0.001269	116.49%
Sb 206.836†	3.9	0.00276	mg/L	0.001994	0.00276	mg/L	0.001994	72.25%
Se 196.026†	-1.8	-0.00078	mg/L	0.003888	-0.00078	mg/L	0.003888	496.90%
Si 251.611†	13311.8	0.357	mg/L	0.0041	0.357	mg/L	0.0041	1.14%
Sn 189.927†	5.8	0.00108	mg/L	0.000755	0.00108	mg/L	0.000755	70.18%
Ti 334.940†	3394.6	0.00467	mg/L	0.000130	0.00467	mg/L	0.000130	2.79%
Tl 190.801†	-8.7	-0.00433	mg/L	0.001468	-0.00433	mg/L	0.001468	33.87%
V 290.880†	30.3	0.00122	mg/L	0.000549	0.00122	mg/L	0.000549	45.07%
Zn 206.200†	86.1	0.00226	mg/L	0.000502	0.00226	mg/L	0.000502	22.26%
K 766.490†	803.6	0.175	mg/L	0.0397	0.175	mg/L	0.0397	22.74%
Na 589.592†	1694201.6	132	mg/L	1.6	132	mg/L	1.6	1.20%
Sr 407.771†	8939.7	0.00864	mg/L	0.000745	0.00864	mg/L	0.000745	8.62%
Li 670.784†	142.2	0.00117	mg/L	0.001020	0.00117	mg/L	0.001020	87.43%

Sequence No.: 81 **Autosampler Location: 111**
Sample ID: L1102058701 **Date Collected: 2/25/2011 12:34:53 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 25, 2011

Pierre Morris

Nebulizer Parameters: L1102058701

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102058701

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4793227.2						53443.54	1.11%
YRADIAL	299218.1						4986.58	1.67%
Ga 417.206	1264296.3						20618.86	1.63%
GaRADIAL	63537.9						209.70	0.33%
Ag 328.068†	-469.5	-0.00180	mg/L	0.000279	-0.00180	mg/L	0.000279	15.49%
Al 396.153†	242.0	0.0267	mg/L	0.00917	0.0267	mg/L	0.00917	34.31%
As 188.979†	3.8	0.00224	mg/L	0.000367	0.00224	mg/L	0.000367	16.38%
Ba 233.527†	333.9	0.00551	mg/L	0.000088	0.00551	mg/L	0.000088	1.60%
Be 234.861†	-16.7	-0.00001	mg/L	0.000024	-0.00001	mg/L	0.000024	433.34%
B 249.677†	3865.4	0.0755	mg/L	0.00265	0.0755	mg/L	0.00265	3.51%
Ca 227.546†	1280.3	11.9	mg/L	0.16	11.9	mg/L	0.16	1.38%
Cd 228.802†	1.3	-0.00002	mg/L	0.000086	-0.00002	mg/L	0.000086	558.04%
Co 228.616†	-12.1	-0.00072	mg/L	0.000071	-0.00072	mg/L	0.000071	9.83%
Cr 267.716†	124.0	0.00098	mg/L	0.000020	0.00098	mg/L	0.000020	2.04%
Cu 327.393†	-98.2	-0.00003	mg/L	0.000349	-0.00003	mg/L	0.000349	>999.9%
Fe 239.562†	35.0	0.0804	mg/L	0.00416	0.0804	mg/L	0.00416	5.18%
Mg 279.077†	138.7	0.169	mg/L	0.0075	0.169	mg/L	0.0075	4.43%
Mn 257.610†	1023.3	0.00327	mg/L	0.000053	0.00327	mg/L	0.000053	1.63%
Mo 202.031†	81.4	0.00588	mg/L	0.000046	0.00588	mg/L	0.000046	0.79%
Ni 231.604†	18.5	0.00039	mg/L	0.000122	0.00039	mg/L	0.000122	31.55%
Pb 220.353†	9.6	0.00200	mg/L	0.000307	0.00200	mg/L	0.000307	15.35%
Sb 206.836†	6.9	0.00469	mg/L	0.001253	0.00469	mg/L	0.001253	26.72%
Se 196.026†	-4.0	-0.00041	mg/L	0.001595	-0.00041	mg/L	0.001595	387.32%
Si 251.611†	3228.1	0.0684	mg/L	0.00218	0.0684	mg/L	0.00218	3.19%
Sn 189.927†	8.8	0.00161	mg/L	0.000246	0.00161	mg/L	0.000246	15.28%
Ti 334.940†	919.7	0.00140	mg/L	0.000109	0.00140	mg/L	0.000109	7.82%
Tl 190.801†	0.7	0.00040	mg/L	0.002186	0.00040	mg/L	0.002186	548.56%
V 290.880†	301.4	0.00299	mg/L	0.000311	0.00299	mg/L	0.000311	10.42%
Zn 206.200†	100582.2	3.02	mg/L	0.047	3.02	mg/L	0.047	1.55%
K 766.490†	1785.2	0.543	mg/L	0.0288	0.543	mg/L	0.0288	5.30%
Na 589.592†	1803437.4	140	mg/L	0.7	140	mg/L	0.7	0.47%
Sr 407.771†	5174.8	0.00498	mg/L	0.000443	0.00498	mg/L	0.000443	8.90%
Li 670.784†	1286.4	0.0154	mg/L	0.00136	0.0154	mg/L	0.00136	8.83%

Sequence No.: 82 **Autosampler Location: 112**
Sample ID: L1102058801 WG357448-01 **Date Collected: 2/25/2011 12:41:39 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102058801 WG357448-01

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102058801 WG357448-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4888950.6						20604.41	0.42%
YRADIAL	301175.3						8314.91	2.76%
Ga 417.206	1252621.5						16426.81	1.31%
GaRADIAL	62766.9						1062.12	1.69%
Ag 328.068†	-662.1	-0.00294	mg/L	0.000308	-0.00294	mg/L	0.000308	10.48%
Al 396.153†	19229.7	3.86	mg/L	0.031	3.86	mg/L	0.031	0.79%
As 188.979†	-0.3	-0.00101	mg/L	0.003248	-0.00101	mg/L	0.003248	320.33%
Ba 233.527†	1877.2	0.0315	mg/L	0.00014	0.0315	mg/L	0.00014	0.44%
Be 234.861†	597.1	0.00021	mg/L	0.000031	0.00021	mg/L	0.000031	14.88%
B 249.677†	2226.8	0.0601	mg/L	0.00145	0.0601	mg/L	0.00145	2.42%
Ca 227.546†	303.5	2.82	mg/L	0.043	2.82	mg/L	0.043	1.51%
Cd 228.802†	1.5	0.00003	mg/L	0.000098	0.00003	mg/L	0.000098	283.25%
Co 228.616†	22.1	0.00089	mg/L	0.000131	0.00089	mg/L	0.000131	14.67%

Approved: February 25, 2011

Pierre Morris

Cr 267.716†	670.3	0.00547	mg/L	0.000272	0.00547	mg/L	0.000272	4.98%
Cu 327.393†	913.7	0.00711	mg/L	0.000425	0.00711	mg/L	0.000425	5.98%
Fe 239.562†	1849.7	4.21	mg/L	0.047	4.21	mg/L	0.047	1.12%
Mg 279.077†	1360.4	1.70	mg/L	0.030	1.70	mg/L	0.030	1.77%
Mn 257.610†	19362.6	0.0437	mg/L	0.00054	0.0437	mg/L	0.00054	1.23%
Mo 202.031†	-16.1	-0.00111	mg/L	0.000118	-0.00111	mg/L	0.000118	10.69%
Ni 231.604†	192.9	0.00547	mg/L	0.000136	0.00547	mg/L	0.000136	2.48%
Pb 220.353†	36.9	0.00597	mg/L	0.000901	0.00597	mg/L	0.000901	15.10%
Sb 206.836†	1.8	0.00144	mg/L	0.001068	0.00144	mg/L	0.001068	74.19%
Se 196.026†	0.8	0.00184	mg/L	0.002827	0.00184	mg/L	0.002827	153.87%
Si 251.611†	26079.0	0.722	mg/L	0.0166	0.722	mg/L	0.0166	2.30%
Sn 189.927†	3.9	0.00075	mg/L	0.000358	0.00075	mg/L	0.000358	47.47%
Ti 334.940†	20217.1	0.0274	mg/L	0.00023	0.0274	mg/L	0.00023	0.83%
Tl 190.801†	-15.9	-0.00811	mg/L	0.001179	-0.00811	mg/L	0.001179	14.54%
V 290.880†	647.6	0.00557	mg/L	0.000484	0.00557	mg/L	0.000484	8.69%
Zn 206.200†	9221.1	0.277	mg/L	0.0024	0.277	mg/L	0.0024	0.88%
K 766.490†	2161.6	0.691	mg/L	0.0014	0.691	mg/L	0.0014	0.20%
Na 589.592†	1770150.7	138	mg/L	2.1	138	mg/L	2.1	1.53%
Sr 407.771†	11673.2	0.0108	mg/L	0.00071	0.0108	mg/L	0.00071	6.61%
Li 670.784†	533.9	0.00605	mg/L	0.000980	0.00605	mg/L	0.000980	16.20%

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Sequence No.: 83 **Autosampler Location: 113**
Sample ID: L1102058801S WG357448-04 **Date Collected: 2/25/2011 12:48:23 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102058801S WG357448-04

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102058801S WG357448-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4869297.9						27433.49	0.56%
YRADIAL	300122.2						494.81	0.16%
Ga 417.206	1255648.1						12655.90	1.01%
GaRADIAL	63537.5						1152.89	1.81%
Ag 328.068†	37616.6	0.183	mg/L	0.0004	0.183	mg/L	0.0004	0.19%
Al 396.153†	24322.2	4.88	mg/L	0.031	4.88	mg/L	0.031	0.63%
As 188.979†	194.2	0.176	mg/L	0.0024	0.176	mg/L	0.0024	1.34%
Ba 233.527†	28343.6	0.479	mg/L	0.0008	0.479	mg/L	0.0008	0.17%
Be 234.861†	12971.6	0.0224	mg/L	0.00014	0.0224	mg/L	0.00014	0.61%
B 249.677†	51191.7	0.957	mg/L	0.0033	0.957	mg/L	0.0033	0.34%
Ca 227.546†	603.4	5.75	mg/L	0.025	5.75	mg/L	0.025	0.44%
Cd 228.802†	416.3	0.0235	mg/L	0.00019	0.0235	mg/L	0.00019	0.83%
Co 228.616†	1828.7	0.0941	mg/L	0.00042	0.0941	mg/L	0.00042	0.45%
Cr 267.716†	27304.7	0.235	mg/L	0.0007	0.235	mg/L	0.0007	0.30%
Cu 327.393†	35044.2	0.237	mg/L	0.0001	0.237	mg/L	0.0001	0.06%
Fe 239.562†	1079.3	2.46	mg/L	0.037	2.46	mg/L	0.037	1.51%
Mg 279.077†	3947.8	4.95	mg/L	0.051	4.95	mg/L	0.051	1.02%
Mn 257.610†	106875.3	0.238	mg/L	0.0001	0.238	mg/L	0.0001	0.05%
Mo 202.031†	6388.6	0.472	mg/L	0.0046	0.472	mg/L	0.0046	0.97%
Ni 231.604†	8122.8	0.236	mg/L	0.0013	0.236	mg/L	0.0013	0.55%
Pb 220.353†	1372.5	0.229	mg/L	0.0022	0.229	mg/L	0.0022	0.95%
Sb 206.836†	878.0	0.549	mg/L	0.0052	0.549	mg/L	0.0052	0.94%
Se 196.026†	265.7	0.188	mg/L	0.0045	0.188	mg/L	0.0045	2.41%
Si 251.611†	97207.1	2.75	mg/L	0.033	2.75	mg/L	0.033	1.20%
Sn 189.927†	7.7	0.00142	mg/L	0.000648	0.00142	mg/L	0.000648	45.69%
Ti 334.940†	352604.3	0.477	mg/L	0.0009	0.477	mg/L	0.0009	0.18%
Tl 190.801†	372.1	0.224	mg/L	0.0025	0.224	mg/L	0.0025	1.12%
V 290.880†	72316.2	0.473	mg/L	0.0014	0.473	mg/L	0.0014	0.30%
Zn 206.200†	23643.5	0.711	mg/L	0.0014	0.711	mg/L	0.0014	0.19%
K 766.490†	61479.2	23.6	mg/L	0.18	23.6	mg/L	0.18	0.77%
Na 589.592†	2008874.0	157	mg/L	3.0	157	mg/L	3.0	1.89%
Sr 407.771†	564745.4	0.549	mg/L	0.0468	0.549	mg/L	0.0468	8.53%
Li 670.784†	38144.7	0.475	mg/L	0.0011	0.475	mg/L	0.0011	0.22%

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Sequence No.: 84 **Autosampler Location: 114**

Approved: February 25, 2011

Pierre Morris

Sample ID: L1102058801SD WG357448-05 **Date Collected: 2/25/2011 12:55:07 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102058801SD WG357448-05

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102058801SD WG357448-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4846981.7						72369.36	1.49%
YRADIAL	300558.6						3493.57	1.16%
Ga 417.206	1254195.8						18403.08	1.47%
GaRADIAL	63674.2						552.76	0.87%
Ag 328.068†	37447.3	0.183	mg/L	0.0006	0.183	mg/L	0.0006	0.30%
Al 396.153†	26755.0	5.37	mg/L	0.039	5.37	mg/L	0.039	0.72%
As 188.979†	196.7	0.178	mg/L	0.0064	0.178	mg/L	0.0064	3.58%
Ba 233.527†	28555.3	0.483	mg/L	0.0022	0.483	mg/L	0.0022	0.45%
Be 234.861†	12975.6	0.0223	mg/L	0.00019	0.0223	mg/L	0.00019	0.83%
B 249.677†	51239.6	0.961	mg/L	0.0060	0.961	mg/L	0.0060	0.63%
Ca 227.546†	640.0	6.10	mg/L	0.066	6.10	mg/L	0.066	1.08%
Cd 228.802†	413.5	0.0234	mg/L	0.00029	0.0234	mg/L	0.00029	1.23%
Co 228.616†	1842.3	0.0948	mg/L	0.00136	0.0948	mg/L	0.00136	1.43%
Cr 267.716†	27527.2	0.237	mg/L	0.0018	0.237	mg/L	0.0018	0.75%
Cu 327.393†	35407.6	0.240	mg/L	0.0005	0.240	mg/L	0.0005	0.20%
Fe 239.562†	1399.7	3.19	mg/L	0.019	3.19	mg/L	0.019	0.58%
Mg 279.077†	4140.1	5.19	mg/L	0.018	5.19	mg/L	0.018	0.35%
Mn 257.610†	111058.6	0.248	mg/L	0.0014	0.248	mg/L	0.0014	0.55%
Mo 202.031†	6367.0	0.470	mg/L	0.0030	0.470	mg/L	0.0030	0.63%
Ni 231.604†	8215.9	0.239	mg/L	0.0016	0.239	mg/L	0.0016	0.69%
Pb 220.353†	1388.3	0.232	mg/L	0.0046	0.232	mg/L	0.0046	1.98%
Sb 206.836†	875.4	0.547	mg/L	0.0097	0.547	mg/L	0.0097	1.78%
Se 196.026†	268.2	0.190	mg/L	0.0013	0.190	mg/L	0.0013	0.67%
Si 251.611†	103965.1	2.94	mg/L	0.008	2.94	mg/L	0.008	0.27%
Sn 189.927†	7.8	0.00143	mg/L	0.000745	0.00143	mg/L	0.000745	51.99%
Ti 334.940†	358081.9	0.484	mg/L	0.0012	0.484	mg/L	0.0012	0.25%
Tl 190.801†	376.9	0.227	mg/L	0.0064	0.227	mg/L	0.0064	2.81%
V 290.880†	72797.7	0.476	mg/L	0.0035	0.476	mg/L	0.0035	0.74%
Zn 206.200†	24168.8	0.727	mg/L	0.0028	0.727	mg/L	0.0028	0.39%
K 766.490†	63015.1	24.2	mg/L	0.16	24.2	mg/L	0.16	0.67%
Na 589.592†	2086680.6	164	mg/L	2.4	164	mg/L	2.4	1.46%
Sr 407.771†	573087.5	0.557	mg/L	0.0514	0.557	mg/L	0.0514	9.23%
Li 670.784†	39248.4	0.489	mg/L	0.0039	0.489	mg/L	0.0039	0.79%

Sequence No.: 85 **Autosampler Location: 4**
Sample ID: CCV **Date Collected: 2/25/2011 1:01:54 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4757589.6						32687.96	0.69%
YRADIAL	291371.4						3515.82	1.21%
Ga 417.206	1225097.2						12863.78	1.05%
GaRADIAL	61628.9						654.51	1.06%
Ag 328.068†	84496.7	0.412	mg/L	0.0058	0.412	mg/L	0.0058	1.41%
Al 396.153†	54452.6	10.9	mg/L	0.06	10.9	mg/L	0.06	0.57%
As 188.979†	442.2	0.402	mg/L	0.0042	0.402	mg/L	0.0042	1.05%
Ba 233.527†	61592.4	1.04	mg/L	0.013	1.04	mg/L	0.013	1.27%
Be 234.861†	29381.4	0.0509	mg/L	0.00099	0.0509	mg/L	0.00099	1.95%

Approved: February 25, 2011

Pierre Morris

B 249.677†	27553.3	0.520	mg/L	0.0090	0.520	mg/L	0.0090 1.74%
Ca 227.546†	1145.0	11.0	mg/L	0.14	11.0	mg/L	0.14 1.31%
Cd 228.802†	940.7	0.0532	mg/L	0.00056	0.0532	mg/L	0.00056 1.06%
Co 228.616†	4089.1	0.211	mg/L	0.0015	0.211	mg/L	0.0015 0.70%
Cr 267.716†	60484.3	0.521	mg/L	0.0080	0.521	mg/L	0.0080 1.54%
Cu 327.393†	76631.8	0.518	mg/L	0.0090	0.518	mg/L	0.0090 1.74%
Fe 239.562†	1831.5	4.17	mg/L	0.030	4.17	mg/L	0.030 0.71%
Mg 279.077†	8485.1	10.6	mg/L	0.01	10.6	mg/L	0.01 0.07%
Mn 257.610†	236222.7	0.524	mg/L	0.0063	0.524	mg/L	0.0063 1.20%
Mo 202.031†	14025.1	1.04	mg/L	0.009	1.04	mg/L	0.009 0.83%
Ni 231.604†	18032.8	0.525	mg/L	0.0058	0.525	mg/L	0.0058 1.10%
Pb 220.353†	3072.2	0.514	mg/L	0.0035	0.514	mg/L	0.0035 0.68%
Sb 206.836†	1978.7	1.24	mg/L	0.008	1.24	mg/L	0.008 0.68%
Se 196.026†	607.0	0.429	mg/L	0.0065	0.429	mg/L	0.0065 1.52%
Si 251.611†	179625.9	5.10	mg/L	0.070	5.10	mg/L	0.070 1.38%
Sn 189.927†	6177.3	1.06	mg/L	0.005	1.06	mg/L	0.005 0.51%
Ti 334.940†	764333.1	1.03	mg/L	0.006	1.03	mg/L	0.006 0.55%
Tl 190.801†	876.9	0.526	mg/L	0.0027	0.526	mg/L	0.0027 0.51%
V 290.880†	158676.0	1.04	mg/L	0.011	1.04	mg/L	0.011 1.10%
Zn 206.200†	33863.6	1.02	mg/L	0.013	1.02	mg/L	0.013 1.29%
K 766.490†	138735.2	53.8	mg/L	0.26	53.8	mg/L	0.26 0.49%
Na 589.592†	705025.2	53.2	mg/L	0.56	53.2	mg/L	0.56 1.05%
Sr 407.771†	1266396.9	1.23	mg/L	0.088	1.23	mg/L	0.088 7.19%
Li 670.784†	87554.3	1.09	mg/L	0.006	1.09	mg/L	0.006 0.56%

Sequence No.: 86 **Autosampler Location: 5**
Sample ID: CCB **Date Collected: 2/25/2011 1:08:37 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5037669.9						58509.51	1.16%
YRADIAL	302179.2						5552.44	1.84%
Ga 417.206	1306435.4						26579.25	2.03%
GaRADIAL	63584.3						2459.75	3.87%
Ag 328.068†	-734.5	-0.00308	mg/L	0.000227	-0.00308	mg/L	0.000227	7.38%
Al 396.153†	29.2	-0.0161	mg/L	0.00807	-0.0161	mg/L	0.00807	50.17%
As 188.979†	-1.0	-0.00189	mg/L	0.004751	-0.00189	mg/L	0.004751	250.74%
Ba 233.527†	-3.4	-0.00018	mg/L	0.000083	-0.00018	mg/L	0.000083	45.78%
Be 234.861†	74.9	0.00016	mg/L	0.000039	0.00016	mg/L	0.000039	24.91%
B 249.677†	117.1	0.00578	mg/L	0.000619	0.00578	mg/L	0.000619	10.70%
Ca 227.546†	3.9	0.00795	mg/L	0.036829	0.00795	mg/L	0.036829	463.18%
Cd 228.802†	-1.3	-0.00013	mg/L	0.000145	-0.00013	mg/L	0.000145	110.43%
Co 228.616†	-3.9	-0.00029	mg/L	0.000349	-0.00029	mg/L	0.000349	121.14%
Cr 267.716†	43.5	0.00017	mg/L	0.000112	0.00017	mg/L	0.000112	66.61%
Cu 327.393†	-263.4	-0.00134	mg/L	0.000282	-0.00134	mg/L	0.000282	21.00%
Fe 239.562†	0.8	0.00248	mg/L	0.004630	0.00248	mg/L	0.004630	186.95%
Mg 279.077†	1.0	-0.00382	mg/L	0.004810	-0.00382	mg/L	0.004810	125.90%
Mn 257.610†	220.2	-0.00001	mg/L	0.000011	-0.00001	mg/L	0.000011	149.85%
Mo 202.031†	-7.4	-0.00068	mg/L	0.000254	-0.00068	mg/L	0.000254	37.33%
Ni 231.604†	5.5	0.00001	mg/L	0.000172	0.00001	mg/L	0.000172	>999.9%
Pb 220.353†	9.5	0.00137	mg/L	0.000472	0.00137	mg/L	0.000472	34.36%
Sb 206.836†	-3.2	-0.00165	mg/L	0.002529	-0.00165	mg/L	0.002529	153.08%
Se 196.026†	4.3	0.00247	mg/L	0.002264	0.00247	mg/L	0.002264	91.61%
Si 251.611†	-40.7	-0.0250	mg/L	0.00033	-0.0250	mg/L	0.00033	1.31%
Sn 189.927†	-5.7	-0.00089	mg/L	0.000968	-0.00089	mg/L	0.000968	108.35%
Ti 334.940†	-47.6	-0.00003	mg/L	0.000076	-0.00003	mg/L	0.000076	276.87%
Tl 190.801†	-20.2	-0.0108	mg/L	0.00235	-0.0108	mg/L	0.00235	21.83%
V 290.880†	14.1	0.00111	mg/L	0.000537	0.00111	mg/L	0.000537	48.27%
Zn 206.200†	-76.0	-0.00262	mg/L	0.000052	-0.00262	mg/L	0.000052	1.97%
K 766.490†	-25.4	-0.0128	mg/L	0.04005	-0.0128	mg/L	0.04005	313.92%
Na 589.592†	1324.1	0.0921	mg/L	0.00849	0.0921	mg/L	0.00849	9.22%
Sr 407.771†	-334.1	-0.00037	mg/L	0.000125	-0.00037	mg/L	0.000125	33.84%

Approved: February 25, 2011

Pierre Morris

Li 670.784†	72.3	0.00029 mg/L	0.000921	0.00029 mg/L	0.000921	313.06%	

Sequence No.: 87 **Autosampler Location: 81**
Sample ID: L1102059601 **Date Collected: 2/25/2011 1:15:22 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102059601

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102059601

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4868129.5						25975.17	0.53%
YRADIAL	293701.4						12917.08	4.40%
Ga 417.206	1313465.4						11661.75	0.89%
GaRADIAL	61989.3						1237.90	2.00%
Ag 328.068†	-615.0	-0.00271	mg/L	0.000318	-0.00271	mg/L	0.000318	11.73%
Al 396.153†	22080.9	4.43	mg/L	0.007	4.43	mg/L	0.007	0.16%
As 188.979†	3.3	0.00225	mg/L	0.001464	0.00225	mg/L	0.001464	64.99%
Ba 233.527†	1892.3	0.0318	mg/L	0.00033	0.0318	mg/L	0.00033	1.04%
Be 234.861†	620.2	0.00033	mg/L	0.000042	0.00033	mg/L	0.000042	12.87%
B 249.677†	-303.8	0.0112	mg/L	0.00149	0.0112	mg/L	0.00149	13.28%
Ca 227.546†	305.6	2.82	mg/L	0.074	2.82	mg/L	0.074	2.64%
Cd 228.802†	1.7	0.00004	mg/L	0.000173	0.00004	mg/L	0.000173	473.90%
Co 228.616†	43.4	0.00195	mg/L	0.000160	0.00195	mg/L	0.000160	8.17%
Cr 267.716†	659.9	0.00530	mg/L	0.000286	0.00530	mg/L	0.000286	5.39%
Cu 327.393†	291.2	0.00290	mg/L	0.000837	0.00290	mg/L	0.000837	28.83%
Fe 239.562†	1718.6	3.91	mg/L	0.097	3.91	mg/L	0.097	2.49%
Mg 279.077†	408.5	0.505	mg/L	0.0234	0.505	mg/L	0.0234	4.64%
Mn 257.610†	75181.1	0.166	mg/L	0.0029	0.166	mg/L	0.0029	1.77%
Mo 202.031†	-1.5	-0.00002	mg/L	0.000139	-0.00002	mg/L	0.000139	862.05%
Ni 231.604†	142.3	0.00400	mg/L	0.000104	0.00400	mg/L	0.000104	2.61%
Pb 220.353†	67.2	0.0110	mg/L	0.00077	0.0110	mg/L	0.00077	7.00%
Sb 206.836†	-0.3	0.00014	mg/L	0.000890	0.00014	mg/L	0.000890	656.44%
Se 196.026†	-1.0	0.00035	mg/L	0.000465	0.00035	mg/L	0.000465	133.58%
Si 251.611†	214203.7	6.10	mg/L	0.056	6.10	mg/L	0.056	0.91%
Sn 189.927†	-7.8	-0.00127	mg/L	0.000855	-0.00127	mg/L	0.000855	67.62%
Ti 334.940†	38603.2	0.0523	mg/L	0.00291	0.0523	mg/L	0.00291	5.56%
Tl 190.801†	-13.6	-0.00627	mg/L	0.006029	-0.00627	mg/L	0.006029	96.19%
V 290.880†	1201.6	0.00917	mg/L	0.001374	0.00917	mg/L	0.001374	14.99%
Zn 206.200†	3371.7	0.101	mg/L	0.0008	0.101	mg/L	0.0008	0.78%
K 766.490†	13020.8	5.00	mg/L	0.015	5.00	mg/L	0.015	0.31%
Na 589.592†	145846.9	10.8	mg/L	0.10	10.8	mg/L	0.10	0.94%
Sr 407.771†	16559.2	0.0156	mg/L	0.00120	0.0156	mg/L	0.00120	7.68%
Li 670.784†	230.3	0.00226	mg/L	0.000603	0.00226	mg/L	0.000603	26.61%

Sequence No.: 88 **Autosampler Location: 82**
Sample ID: L1102059602 **Date Collected: 2/25/2011 1:22:01 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102059602

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: L1102059602

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4834866.5						30468.55	0.63%
YRADIAL	301204.4						3804.17	1.26%
Ga 417.206	1320892.7						20756.23	1.57%
GaRADIAL	63871.8						858.11	1.34%
Ag 328.068†	-597.4	-0.00249	mg/L	0.000591	-0.00249	mg/L	0.000591	23.73%

Approved: February 25, 2011

Pierre Morris

Al 396.153†	7595.0	1.51 mg/L	0.010	1.51 mg/L	0.010	0.65%
As 188.979†	-0.2	-0.00111 mg/L	0.001607	-0.00111 mg/L	0.001607	145.07%
Ba 233.527†	568.5	0.00946 mg/L	0.000099	0.00946 mg/L	0.000099	1.05%
Be 234.861†	287.6	0.00023 mg/L	0.000094	0.00023 mg/L	0.000094	39.90%
B 249.677†	-201.0	0.00500 mg/L	0.001294	0.00500 mg/L	0.001294	25.91%
Ca 227.546†	128.5	1.17 mg/L	0.011	1.17 mg/L	0.011	0.96%
Cd 228.802†	-2.2	-0.00018 mg/L	0.000081	-0.00018 mg/L	0.000081	44.76%
Co 228.616†	14.8	0.00061 mg/L	0.000029	0.00061 mg/L	0.000029	4.66%
Cr 267.716†	300.8	0.00232 mg/L	0.000146	0.00232 mg/L	0.000146	6.27%
Cu 327.393†	-114.1	-0.00015 mg/L	0.000841	-0.00015 mg/L	0.000841	566.16%
Fe 239.562†	643.6	1.47 mg/L	0.015	1.47 mg/L	0.015	1.01%
Mg 279.077†	154.5	0.188 mg/L	0.0024	0.188 mg/L	0.0024	1.30%
Mn 257.610†	31296.7	0.0689 mg/L	0.00107	0.0689 mg/L	0.00107	1.55%
Mo 202.031†	-10.2	-0.00080 mg/L	0.000324	-0.00080 mg/L	0.000324	40.37%
Ni 231.604†	60.7	0.00162 mg/L	0.000248	0.00162 mg/L	0.000248	15.28%
Pb 220.353†	31.3	0.00501 mg/L	0.001354	0.00501 mg/L	0.001354	27.05%
Sb 206.836†	-2.4	-0.00113 mg/L	0.002297	-0.00113 mg/L	0.002297	202.52%
Se 196.026†	1.2	0.00093 mg/L	0.002308	0.00093 mg/L	0.002308	247.17%
Si 251.611†	70350.2	1.99 mg/L	0.051	1.99 mg/L	0.051	2.57%
Sn 189.927†	-11.6	-0.00192 mg/L	0.001001	-0.00192 mg/L	0.001001	52.15%
Ti 334.940†	11778.5	0.0160 mg/L	0.00028	0.0160 mg/L	0.00028	1.74%
Tl 190.801†	-17.9	-0.00924 mg/L	0.000753	-0.00924 mg/L	0.000753	8.15%
V 290.880†	641.3	0.00532 mg/L	0.001143	0.00532 mg/L	0.001143	21.48%
Zn 206.200†	1551.7	0.0463 mg/L	0.00034	0.0463 mg/L	0.00034	0.74%
K 766.490†	7781.5	2.98 mg/L	0.007	2.98 mg/L	0.007	0.23%
Na 589.592†	95386.8	7.08 mg/L	0.069	7.08 mg/L	0.069	0.97%
Sr 407.771†	5216.6	0.00485 mg/L	0.000219	0.00485 mg/L	0.000219	4.52%
Li 670.784†	37.5	-0.00014 mg/L	0.000781	-0.00014 mg/L	0.000781	561.09%

Sequence No.: 89 **Autosampler Location: 115**
Sample ID: FBLK WG357088-01 **Date Collected: 2/25/2011 1:28:42 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG357088-01

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: FBLK WG357088-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5075085.1						46437.69	0.92%
YRADIAL	306975.4						5937.91	1.93%
Ga 417.206	1357901.1						17506.94	1.29%
GaRADIAL	65046.8						1448.34	2.23%
Ag 328.068†	-543.8	-0.00216	mg/L	0.000223	-0.00216	mg/L	0.000223	10.33%
Al 396.153†	229.7	0.0243	mg/L	0.01359	0.0243	mg/L	0.01359	55.85%
As 188.979†	0.7	-0.00033	mg/L	0.001799	-0.00033	mg/L	0.001799	549.94%
Ba 233.527†	12.7	0.00009	mg/L	0.000011	0.00009	mg/L	0.000011	12.39%
Be 234.861†	107.8	0.00021	mg/L	0.000007	0.00021	mg/L	0.000007	3.40%
B 249.677†	90.7	0.00536	mg/L	0.000470	0.00536	mg/L	0.000470	8.77%
Ca 227.546†	7.6	0.0425	mg/L	0.01274	0.0425	mg/L	0.01274	29.97%
Cd 228.802†	-1.7	-0.00017	mg/L	0.000148	-0.00017	mg/L	0.000148	88.52%
Co 228.616†	-6.5	-0.00042	mg/L	0.000281	-0.00042	mg/L	0.000281	66.67%
Cr 267.716†	31.3	0.00006	mg/L	0.000127	0.00006	mg/L	0.000127	205.53%
Cu 327.393†	-186.7	-0.00082	mg/L	0.001072	-0.00082	mg/L	0.001072	130.17%
Fe 239.562†	11.3	0.0263	mg/L	0.00213	0.0263	mg/L	0.00213	8.09%
Mg 279.077†	5.4	0.00172	mg/L	0.006725	0.00172	mg/L	0.006725	390.58%
Mn 257.610†	285.7	0.00021	mg/L	0.000038	0.00021	mg/L	0.000038	18.14%
Mo 202.031†	-13.1	-0.00110	mg/L	0.000109	-0.00110	mg/L	0.000109	9.89%
Ni 231.604†	8.6	0.00010	mg/L	0.000194	0.00010	mg/L	0.000194	192.50%
Pb 220.353†	6.4	0.00087	mg/L	0.000439	0.00087	mg/L	0.000439	50.47%
Sb 206.836†	3.5	0.00255	mg/L	0.000091	0.00255	mg/L	0.000091	3.57%
Se 196.026†	5.0	0.00297	mg/L	0.006681	0.00297	mg/L	0.006681	224.69%
Si 251.611†	14.7	-0.0234	mg/L	0.00014	-0.0234	mg/L	0.00014	0.58%
Sn 189.927†	-8.2	-0.00134	mg/L	0.000648	-0.00134	mg/L	0.000648	48.49%
Ti 334.940†	83.3	0.00015	mg/L	0.000061	0.00015	mg/L	0.000061	40.41%
Tl 190.801†	-11.8	-0.00584	mg/L	0.002711	-0.00584	mg/L	0.002711	46.40%
V 290.880†	-2.3	0.00101	mg/L	0.000813	0.00101	mg/L	0.000813	80.83%

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Zn 206.200†	-32.7	-0.00132 mg/L	0.000067	-0.00132 mg/L	0.000067	5.13%
K 766.490†	-144.6	-0.0664 mg/L	0.03136	-0.0664 mg/L	0.03136	47.27%
Na 589.592†	105661.8	7.85 mg/L	0.088	7.85 mg/L	0.088	1.12%
Sr 407.771†	-187.4	-0.00023 mg/L	0.000073	-0.00023 mg/L	0.000073	31.43%
Li 670.784†	24.0	-0.00031 mg/L	0.000827	-0.00031 mg/L	0.000827	268.71%

Sequence No.: 90 **Autosampler Location: 116**
Sample ID: L1102050217 DL0.01 **Date Collected: 2/25/2011 1:35:25 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102050217 DL0.01

Analyte	Back Pressure	Flow
All	171.0 kPa	0.50 L/min

Mean Data: L1102050217 DL0.01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5003166.0						127018.11	2.54%
YRADIAL	307969.4						4673.31	1.52%
Ga 417.206	1331842.8						43088.03	3.24%
GaRADIAL	65167.9						1007.75	1.55%
Ag 328.068†	-628.9	-0.00257	mg/L	0.000638	-0.00257	mg/L	0.000638	24.81%
Al 396.153†	215.8	0.0215	mg/L	0.00797	0.0215	mg/L	0.00797	36.99%
As 188.979†	2.2	0.00105	mg/L	0.001128	0.00105	mg/L	0.001128	107.71%
Ba 233.527†	78.9	0.00121	mg/L	0.000092	0.00121	mg/L	0.000092	7.60%
Be 234.861†	97.5	0.00019	mg/L	0.000036	0.00019	mg/L	0.000036	18.82%
B 249.677†	-229.2	-0.00057	mg/L	0.000463	-0.00057	mg/L	0.000463	81.03%
Ca 227.546†	9.9	0.0640	mg/L	0.05565	0.0640	mg/L	0.05565	86.96%
Cd 228.802†	-1.6	-0.00017	mg/L	0.000133	-0.00017	mg/L	0.000133	78.66%
Co 228.616†	-2.9	-0.00023	mg/L	0.000182	-0.00023	mg/L	0.000182	77.75%
Cr 267.716†	31.6	0.00006	mg/L	0.000095	0.00006	mg/L	0.000095	155.62%
Cu 327.393†	-216.4	-0.00102	mg/L	0.000119	-0.00102	mg/L	0.000119	11.65%
Fe 239.562†	10.7	0.0249	mg/L	0.00363	0.0249	mg/L	0.00363	14.60%
Mg 279.077†	2.7	-0.00163	mg/L	0.002728	-0.00163	mg/L	0.002728	167.26%
Mn 257.610†	4252.7	0.00893	mg/L	0.000298	0.00893	mg/L	0.000298	3.34%
Mo 202.031†	-10.5	-0.00091	mg/L	0.000543	-0.00091	mg/L	0.000543	59.62%
Ni 231.604†	5.7	0.00002	mg/L	0.000050	0.00002	mg/L	0.000050	252.67%
Pb 220.353†	11.5	0.00170	mg/L	0.000468	0.00170	mg/L	0.000468	27.43%
Sb 206.836†	-0.5	0.00006	mg/L	0.001354	0.00006	mg/L	0.001354	>999.9%
Se 196.026†	1.6	0.00056	mg/L	0.001406	0.00056	mg/L	0.001406	249.80%
Si 251.611†	382.4	-0.0129	mg/L	0.00059	-0.0129	mg/L	0.00059	4.62%
Sn 189.927†	-11.4	-0.00188	mg/L	0.000504	-0.00188	mg/L	0.000504	26.74%
Ti 334.940†	257.6	0.00039	mg/L	0.000178	0.00039	mg/L	0.000178	46.16%
Tl 190.801†	-18.5	-0.00973	mg/L	0.003985	-0.00973	mg/L	0.003985	40.94%
V 290.880†	41.5	0.00129	mg/L	0.001639	0.00129	mg/L	0.001639	126.85%
Zn 206.200†	-45.0	-0.00169	mg/L	0.000285	-0.00169	mg/L	0.000285	16.92%
K 766.490†	-98.6	-0.0487	mg/L	0.02869	-0.0487	mg/L	0.02869	58.95%
Na 589.592†	105483.3	7.84	mg/L	0.094	7.84	mg/L	0.094	1.20%
Sr 407.771†	296.6	0.00024	mg/L	0.000067	0.00024	mg/L	0.000067	27.77%
Li 670.784†	89.5	0.00051	mg/L	0.001153	0.00051	mg/L	0.001153	226.34%

Sequence No.: 91 **Autosampler Location: 117**
Sample ID: L1102050610 DL0.01 **Date Collected: 2/25/2011 1:42:04 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102050610 DL0.01

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102050610 DL0.01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5003873.9						64945.45	1.30%

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YRADIAL	301145.1				7780.02	2.58%
Ga 417.206	1332890.9				11859.02	0.89%
GaRADIAL	64116.0				2306.47	3.60%
Ag 328.068†	-606.0	-0.00246 mg/L	0.000267	-0.00246 mg/L	0.000267	10.83%
Al 396.153†	304.6	0.0394 mg/L	0.01230	0.0394 mg/L	0.01230	31.19%
As 188.979†	0.4	-0.00060 mg/L	0.001295	-0.00060 mg/L	0.001295	217.55%
Ba 233.527†	143.2	0.00229 mg/L	0.000040	0.00229 mg/L	0.000040	1.76%
Be 234.861†	103.5	0.00020 mg/L	0.000027	0.00020 mg/L	0.000027	13.77%
B 249.677†	-295.8	-0.00170 mg/L	0.000523	-0.00170 mg/L	0.000523	30.72%
Ca 227.546†	22.1	0.178 mg/L	0.0657	0.178 mg/L	0.0657	36.89%
Cd 228.802†	-3.4	-0.00026 mg/L	0.000069	-0.00026 mg/L	0.000069	26.56%
Co 228.616†	-5.8	-0.00039 mg/L	0.000332	-0.00039 mg/L	0.000332	84.54%
Cr 267.716†	31.5	0.00006 mg/L	0.000064	0.00006 mg/L	0.000064	106.72%
Cu 327.393†	-248.7	-0.00124 mg/L	0.000943	-0.00124 mg/L	0.000943	76.35%
Fe 239.562†	22.1	0.0508 mg/L	0.00595	0.0508 mg/L	0.00595	11.70%
Mg 279.077†	18.0	0.0175 mg/L	0.00604	0.0175 mg/L	0.00604	34.49%
Mn 257.610†	3488.5	0.00726 mg/L	0.000100	0.00726 mg/L	0.000100	1.37%
Mo 202.031†	-11.2	-0.00096 mg/L	0.000342	-0.00096 mg/L	0.000342	35.58%
Ni 231.604†	18.4	0.00039 mg/L	0.000172	0.00039 mg/L	0.000172	44.07%
Pb 220.353†	9.8	0.00143 mg/L	0.000309	0.00143 mg/L	0.000309	21.56%
Sb 206.836†	-2.0	-0.00091 mg/L	0.000638	-0.00091 mg/L	0.000638	70.39%
Se 196.026†	4.2	0.00241 mg/L	0.002045	0.00241 mg/L	0.002045	84.75%
Si 251.611†	2203.0	0.0392 mg/L	0.00106	0.0392 mg/L	0.00106	2.71%
Sn 189.927†	-12.8	-0.00212 mg/L	0.000343	-0.00212 mg/L	0.000343	16.17%
Ti 334.940†	1445.5	0.00199 mg/L	0.000236	0.00199 mg/L	0.000236	11.86%
Tl 190.801†	-16.9	-0.00881 mg/L	0.002083	-0.00881 mg/L	0.002083	23.63%
V 290.880†	41.3	0.00129 mg/L	0.000299	0.00129 mg/L	0.000299	23.10%
Zn 206.200†	-17.4	-0.00086 mg/L	0.000081	-0.00086 mg/L	0.000081	9.45%
K 766.490†	-5.1	-0.0126 mg/L	0.02136	-0.0126 mg/L	0.02136	169.18%
Na 589.592†	104304.7	7.75 mg/L	0.073	7.75 mg/L	0.073	0.94%
Sr 407.771†	1494.2	0.00140 mg/L	0.000438	0.00140 mg/L	0.000438	31.25%
Li 670.784†	49.5	0.00001 mg/L	0.002022	0.00001 mg/L	0.002022	>999.9%

Sequence No.: 92 **Autosampler Location: 118**
Sample ID: L1102050611 DL0.01 **Date Collected: 2/25/2011 1:48:48 AM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102050611 DL0.01

Analyte	Back Pressure	Flow
All	169.0 kPa	0.50 L/min

Mean Data: L1102050611 DL0.01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4924094.3						24323.14	0.49%
YRADIAL	302239.4						12521.90	4.14%
Ga 417.206	1306690.5						4204.21	0.32%
GaRADIAL	64136.3						1961.40	3.06%
Ag 328.068†	-700.2	-0.00292	mg/L	0.000393	-0.00292	mg/L	0.000393	13.45%
Al 396.153†	146.4	0.00755	mg/L	0.007332	0.00755	mg/L	0.007332	97.10%
As 188.979†	-0.4	-0.00136	mg/L	0.002843	-0.00136	mg/L	0.002843	209.03%
Ba 233.527†	146.3	0.00234	mg/L	0.000065	0.00234	mg/L	0.000065	2.75%
Be 234.861†	106.9	0.00021	mg/L	0.000014	0.00021	mg/L	0.000014	6.89%
B 249.677†	-327.8	-0.00235	mg/L	0.000184	-0.00235	mg/L	0.000184	7.85%
Ca 227.546†	19.9	0.157	mg/L	0.0294	0.157	mg/L	0.0294	18.73%
Cd 228.802†	-4.1	-0.00029	mg/L	0.000181	-0.00029	mg/L	0.000181	62.18%
Co 228.616†	-1.2	-0.00015	mg/L	0.000227	-0.00015	mg/L	0.000227	155.31%
Cr 267.716†	25.1	0.00001	mg/L	0.000104	0.00001	mg/L	0.000104	>999.9%
Cu 327.393†	-115.5	-0.00034	mg/L	0.000257	-0.00034	mg/L	0.000257	75.00%
Fe 239.562†	13.3	0.0308	mg/L	0.00258	0.0308	mg/L	0.00258	8.38%
Mg 279.077†	18.2	0.0177	mg/L	0.00242	0.0177	mg/L	0.00242	13.68%
Mn 257.610†	3487.6	0.00725	mg/L	0.000045	0.00725	mg/L	0.000045	0.62%
Mo 202.031†	-9.2	-0.00081	mg/L	0.000351	-0.00081	mg/L	0.000351	43.42%
Ni 231.604†	9.1	0.00012	mg/L	0.000137	0.00012	mg/L	0.000137	116.79%
Pb 220.353†	7.1	0.00098	mg/L	0.001284	0.00098	mg/L	0.001284	131.62%
Sb 206.836†	2.7	0.00207	mg/L	0.001417	0.00207	mg/L	0.001417	68.57%
Se 196.026†	2.0	0.00088	mg/L	0.004100	0.00088	mg/L	0.004100	465.28%
Si 251.611†	641.5	-0.00547	mg/L	0.000367	-0.00547	mg/L	0.000367	6.70%

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Sn 189.927†	-9.3	-0.00152 mg/L	0.000441	-0.00152 mg/L	0.000441	29.11%
Ti 334.940†	450.9	0.00065 mg/L	0.000211	0.00065 mg/L	0.000211	32.57%
Tl 190.801†	-15.2	-0.00784 mg/L	0.002144	-0.00784 mg/L	0.002144	27.35%
V 290.880†	-6.3	0.00098 mg/L	0.000269	0.00098 mg/L	0.000269	27.47%
Zn 206.200†	-29.7	-0.00123 mg/L	0.000177	-0.00123 mg/L	0.000177	14.39%
K 766.490†	-143.9	-0.0660 mg/L	0.02694	-0.0660 mg/L	0.02694	40.82%
Na 589.592†	104466.6	7.76 mg/L	0.119	7.76 mg/L	0.119	1.53%
Sr 407.771†	1330.9	0.00124 mg/L	0.000327	0.00124 mg/L	0.000327	26.28%
Li 670.784†	48.9	0.00000 mg/L	0.001547	0.00000 mg/L	0.001547	>999.9%

Sequence No.: 93 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/25/2011 1:55:34 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	171.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4825801.7						90593.18	1.88%
YRADIAL	303104.0						5442.46	1.80%
Ga 417.206	1269021.2						24063.03	1.90%
GaRADIAL	64622.1						434.48	0.67%
Ag 328.068†	78265.0	0.381	mg/L	0.0081	0.381	mg/L	0.0081	2.13%
QC value within limits for Ag 328.068 Recovery = 95.32%								
Al 396.153†	50985.1	10.2	mg/L	0.04	10.2	mg/L	0.04	0.38%
QC value within limits for Al 396.153 Recovery = 102.44%								
As 188.979†	401.7	0.365	mg/L	0.0053	0.365	mg/L	0.0053	1.44%
QC value within limits for As 188.979 Recovery = 91.22%								
Ba 233.527†	57934.7	0.979	mg/L	0.0222	0.979	mg/L	0.0222	2.27%
QC value within limits for Ba 233.527 Recovery = 97.92%								
Be 234.861†	27064.8	0.0470	mg/L	0.00117	0.0470	mg/L	0.00117	2.50%
QC value within limits for Be 234.861 Recovery = 93.98%								
B 249.677†	24970.8	0.472	mg/L	0.0102	0.472	mg/L	0.0102	2.16%
QC value within limits for B 249.677 Recovery = 94.33%								
Ca 227.546†	1065.4	10.2	mg/L	0.16	10.2	mg/L	0.16	1.60%
QC value within limits for Ca 227.546 Recovery = 102.24%								
Cd 228.802†	861.4	0.0488	mg/L	0.00098	0.0488	mg/L	0.00098	2.00%
QC value within limits for Cd 228.802 Recovery = 97.52%								
Co 228.616†	3810.2	0.196	mg/L	0.0034	0.196	mg/L	0.0034	1.73%
QC value within limits for Co 228.616 Recovery = 98.16%								
Cr 267.716†	56828.9	0.489	mg/L	0.0124	0.489	mg/L	0.0124	2.54%
QC value within limits for Cr 267.716 Recovery = 97.84%								
Cu 327.393†	70992.6	0.480	mg/L	0.0103	0.480	mg/L	0.0103	2.14%
QC value within limits for Cu 327.393 Recovery = 95.98%								
Fe 239.562†	1686.1	3.84	mg/L	0.023	3.84	mg/L	0.023	0.60%
QC value within limits for Fe 239.562 Recovery = 95.99%								
Mg 279.077†	7795.9	9.77	mg/L	0.077	9.77	mg/L	0.077	0.79%
QC value within limits for Mg 279.077 Recovery = 97.72%								
Mn 257.610†	222022.9	0.492	mg/L	0.0117	0.492	mg/L	0.0117	2.37%
QC value within limits for Mn 257.610 Recovery = 98.49%								
Mo 202.031†	13417.6	0.991	mg/L	0.0187	0.991	mg/L	0.0187	1.89%
QC value within limits for Mo 202.031 Recovery = 99.09%								
Ni 231.604†	16910.5	0.492	mg/L	0.0122	0.492	mg/L	0.0122	2.48%
QC value within limits for Ni 231.604 Recovery = 98.50%								
Pb 220.353†	2870.2	0.480	mg/L	0.0092	0.480	mg/L	0.0092	1.91%
QC value within limits for Pb 220.353 Recovery = 95.98%								
Sb 206.836†	1808.5	1.13	mg/L	0.020	1.13	mg/L	0.020	1.76%
QC value within limits for Sb 206.836 Recovery = 94.22%								
Se 196.026†	559.5	0.395	mg/L	0.0102	0.395	mg/L	0.0102	2.58%
QC value within limits for Se 196.026 Recovery = 98.78%								
Si 251.611†	166599.0	4.72	mg/L	0.099	4.72	mg/L	0.099	2.09%
QC value within limits for Si 251.611 Recovery = 94.48%								
Sn 189.927†	5728.0	0.987	mg/L	0.0174	0.987	mg/L	0.0174	1.76%
QC value within limits for Sn 189.927 Recovery = 98.72%								
Ti 334.940†	715493.5	0.967	mg/L	0.0067	0.967	mg/L	0.0067	0.69%

Approved: February 25, 2011

Pierre Morris

QC value within limits for Ti 334.940 Recovery = 96.75%
Tl 190.801† 817.8 0.491 mg/L 0.0090 0.491 mg/L 0.0090 1.84%
QC value within limits for Tl 190.801 Recovery = 98.19%
V 290.880† 149733.5 0.979 mg/L 0.0235 0.979 mg/L 0.0235 2.40%
QC value within limits for V 290.880 Recovery = 97.87%
Zn 206.200† 31570.4 0.951 mg/L 0.0255 0.951 mg/L 0.0255 2.68%
QC value within limits for Zn 206.200 Recovery = 95.08%
K 766.490† 129984.1 50.4 mg/L 0.22 50.4 mg/L 0.22 0.44%
QC value within limits for K 766.490 Recovery = 100.82%
Na 589.592† 653010.5 49.2 mg/L 0.64 49.2 mg/L 0.64 1.30%
QC value within limits for Na 589.592 Recovery = 98.47%
Sr 407.771† 1222207.9 1.19 mg/L 0.098 1.19 mg/L 0.098 8.24%
QC value greater than the upper limit for Sr 407.771 Recovery = 118.77%
Li 670.784† 81985.3 1.02 mg/L 0.008 1.02 mg/L 0.008 0.81%
QC value within limits for Li 670.784 Recovery = 102.18%
QC Failed. Continue with analysis.

Sequence No.: 94 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/25/2011 2:02:17 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	170.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4952804.4						6600.06	0.13%
YRADIAL	298390.9						7926.67	2.66%
Ga 417.206	1284893.1						11948.79	0.93%
GaRADIAL	63367.4						694.25	1.10%
Ag 328.068†	-732.0	-0.00307	mg/L	0.000173	-0.00307	mg/L	0.000173	5.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	59.3	-0.0100	mg/L	0.00683	-0.0100	mg/L	0.00683	68.21%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.6	-0.00047	mg/L	0.001081	-0.00047	mg/L	0.001081	228.47%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.1	-0.00012	mg/L	0.000080	-0.00012	mg/L	0.000080	66.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	86.4	0.00018	mg/L	0.000024	0.00018	mg/L	0.000024	13.76%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	-420.5	-0.00419	mg/L	0.000156	-0.00419	mg/L	0.000156	3.72%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	5.7	0.0250	mg/L	0.03526	0.0250	mg/L	0.03526	141.30%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-3.4	-0.00026	mg/L	0.000024	-0.00026	mg/L	0.000024	9.42%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-7.6	-0.00048	mg/L	0.000116	-0.00048	mg/L	0.000116	24.37%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	21.8	-0.00002	mg/L	0.000110	-0.00002	mg/L	0.000110	601.29%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-307.5	-0.00164	mg/L	0.000613	-0.00164	mg/L	0.000613	37.41%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-0.4	-0.00035	mg/L	0.002582	-0.00035	mg/L	0.002582	734.14%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-2.3	-0.00799	mg/L	0.006112	-0.00799	mg/L	0.006112	76.54%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	1.3	-0.00049	mg/L	0.000002	-0.00049	mg/L	0.000002	0.50%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-9.9	-0.00086	mg/L	0.000219	-0.00086	mg/L	0.000219	25.29%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	0.9	-0.00012	mg/L	0.000282	-0.00012	mg/L	0.000282	235.64%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	7.2	0.00100	mg/L	0.001108	0.00100	mg/L	0.001108	111.31%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.0	0.00100	mg/L	0.001446	0.00100	mg/L	0.001446	144.31%
QC value within limits for Sb 206.836 Recovery = Not calculated								

Approved: February 25, 2011

Pierre Morris

```
Se 196.026†               0.6    -0.00012 mg/L      0.005680    -0.00012 mg/L      0.005680 >999.9%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             -71.2     -0.0258 mg/L       0.00037     -0.0258 mg/L       0.00037   1.45%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -6.1    -0.00097 mg/L      0.000513    -0.00097 mg/L      0.000513  52.96%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†              35.5     0.00009 mg/L      0.000106     0.00009 mg/L      0.000106 124.96%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†            -20.2      -0.0108 mg/L       0.00308     -0.0108 mg/L       0.00308  28.60%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†             106.0      0.00171 mg/L      0.000464     0.00171 mg/L      0.000464  27.08%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†            -120.8    -0.00396 mg/L      0.000164    -0.00396 mg/L      0.000164   4.12%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†             -142.1     -0.0576 mg/L       0.02779     -0.0576 mg/L       0.02779  48.26%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             372.9      0.0215 mg/L       0.00769      0.0215 mg/L       0.00769  35.69%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†            -265.1    -0.00030 mg/L      0.000181    -0.00030 mg/L      0.000181  59.66%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†            -66.5     -0.00144 mg/L      0.001339    -0.00144 mg/L      0.001339  93.21%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.
```

Approved: February 25, 2011

Pierre Morris

2.1.2 Metals CVAA Data (Mercury)

2.1.2.1 Summary Data

Login Number: L11020572

Department: Metals - AA

Analyst: Pierce Morris

METHOD

Preparation: SW-846 7470

Analysis: SW-846 7470

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG357502 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 22245
Approved By: Sheri Pfalzgraf



LABORATORY REPORT

L11020572

03/04/11 16:17

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-B4-0-6-WC	L11020572-01	7470A	1	19-FEB-11
SWMU-57-SB7-0-2-WC	L11020572-02	7470A	1	19-FEB-11
SWMU-57-PS-0-6-WC	L11020572-03	7470A	1	19-FEB-11
SWMU-57-SB2-0-2-WC	L11020572-04	7470A	1	19-FEB-11
SWMU-57-SB3-0-2-WC	L11020572-05	7470A	1	19-FEB-11
SWMU-57-SB18-0-2-WC	L11020572-06	7470A	1	19-FEB-11
SWMU-57-PS2-0-6-WC	L11020572-07	7470A	1	19-FEB-11

Microbac Laboratories Inc.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	L11020572-01	PrePrep Method:	1311	Instrument:	HYDRA
Client ID:	SWMU-57-B4-0-6-WC	Prep Method:	7470A	Prep Date:	02/24/2011 09:08
Matrix:	Leachate	Analytical Method:	7470A	Cal Date:	02/24/2011 13:18
Workgroup Number:	WG357502	Analyst:	PDM	Run Date:	02/24/2011 13:46
Collect Date:	02/18/2011 10:35	Dilution:	1	File ID:	HY.022411.134629
Sample Tag:	01	Units:	mg/L		

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6	0.00123	J	.002	.001	D009	.2

J Estimated value ; the analyte concentration was less than the low standard (LOQ)

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	L11020572-02	PrePrep Method:	1311	Instrument:	HYDRA
Client ID:	SWMU-57-SB7-0-2-WC	Prep Method:	7470A	Prep Date:	02/24/2011 09:08
Matrix:	Leachate	Analytical Method:	7470A	Cal Date:	02/24/2011 13:20
Workgroup Number:	WG357502	Analyst:	PDM	Run Date:	02/24/2011 13:54
Collect Date:	02/18/2011 11:20	Dilution:	1	File ID:	HY.022411.135406
Sample Tag:	01	Units:	mg/L		

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6		U	.002	.001	D009	.2

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	L11020572-03	PrePrep Method:	1311	Instrument:	HYDRA
Client ID:	SWMU-57-PS-0-6-WC	Prep Method:	7470A	Prep Date:	02/24/2011 09:08
Matrix:	Leachate	Analytical Method:	7470A	Cal Date:	02/24/2011 13:20
Workgroup Number:	WG357502	Analyst:	PDM	Run Date:	02/24/2011 13:55
Collect Date:	02/18/2011 12:20	Dilution:	1	File ID:	HY.022411.135558
Sample Tag:	01	Units:	mg/L		

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6		U	.002	.001	D009	.2

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	L11020572-04	PrePrep Method:	1311	Instrument:	HYDRA
Client ID:	SWMU-57-SB2-0-2-WC	Prep Method:	7470A	Prep Date:	02/24/2011 09:08
Matrix:	Leachate	Analytical Method:	7470A	Cal Date:	02/24/2011 13:20
Workgroup Number:	WG357502	Analyst:	PDM	Run Date:	02/24/2011 13:57
Collect Date:	02/18/2011 13:00	Dilution:	1	File ID:	HY.022411.135740
Sample Tag:	01	Units:	mg/L		

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6		U	.002	.001	D009	.2

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	L11020572-05	PrePrep Method:	1311	Instrument:	HYDRA
Client ID:	SWMU-57-SB3-0-2-WC	Prep Method:	7470A	Prep Date:	02/24/2011 09:08
Matrix:	Leachate	Analytical Method:	7470A	Cal Date:	02/24/2011 13:20
Workgroup Number:	WG357502	Analyst:	PDM	Run Date:	02/24/2011 13:59
Collect Date:	02/18/2011 13:20	Dilution:	1	File ID:	HY.022411.135933
Sample Tag:	01	Units:	mg/L		

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6		U	.002	.001	D009	.2

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	L11020572-06	PrePrep Method:	1311	Instrument:	HYDRA
Client ID:	SWMU-57-SB18-0-2-WC	Prep Method:	7470A	Prep Date:	02/24/2011 09:08
Matrix:	Leachate	Analytical Method:	7470A	Cal Date:	02/24/2011 13:20
Workgroup Number:	WG357502	Analyst:	PDM	Run Date:	02/24/2011 14:01
Collect Date:	02/18/2011 13:45	Dilution:	1	File ID:	HY.022411.140118
Sample Tag:	01	Units:	mg/L		

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6		U	.002	.001	D009	.2

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	L11020572-07	PrePrep Method:	1311	Instrument:	HYDRA
Client ID:	SWMU-57-PS2-0-6-WC	Prep Method:	7470A	Prep Date:	02/24/2011 09:08
Matrix:	Leachate	Analytical Method:	7470A	Cal Date:	02/24/2011 13:20
Workgroup Number:	WG357502	Analyst:	PDM	Run Date:	02/24/2011 14:03
Collect Date:	02/18/2011 14:30	Dilution:	1	File ID:	HY.022411.140303
Sample Tag:	01	Units:	mg/L		

Analyte	CAS.Number	Result	Qual	LOQ	LOD	EPA HW#	Reg. Limit
Mercury	7439-97-6		U	.002	.001	D009	.2

U Analyte was not detected. The concentration is below the reported LOD.

2.1.2.2 QC Summary

Example Cold Vapor Mercury Calculations
Hydra AA Mercury Analyzer

1.0 Initial Calibration (ICAL) Parameters
The system performs linear regression from data consisting of a blank and five standards.

2.0 Calculating the concentration (C) of an element in water using data from run log and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted to Volume (mL)	40
Vi = Aliquot Volume (mL)	40
D = Manual dilution factor, if required (10X = 10)	1
Cx = Concentration of element in ppb (ug/L)	0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Ws} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted to volume (mL)	40
Ws = Aliquot weight (g)	0.6
D = Manual dilution factor	1
Cx = Concentration of element in ug/kg	6.67

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

1 Cx = Concentration calculated as received (wet basis)	6.67
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (ug/kg)	8.33

8.33 ug/kg = 0.00833 mg/kg

TCLP Non-Volatile

Analyst(s): Rac
Date: 02-23-11
Filter Lot #: H11368979

Agitator Speed 30 ± 2 rpm ☑

Analyst/Date		Analyst/Date	
RAL 2-23-11		RAL 2-24-11	
Time On	Temp On °C	Time Off	Temp Off °C
1330	23	0630	23

Jug #	Sample #	Tests	Method	Fluid #	Matrix*	%Solid	Size Reduction Yes	Size Reduction No	Int. Wt. (g)	Fluid Vol. (mL)
D	02-572-01	ME	1311	FI-814	S/S	100		✓	100.04	2000
	02								100.00	
	03								100.06	
	04								100.01	
	05								100.00	
	06								100.03	
	07								100.04	
	02-587-01				O *				100.08	
	02-588-01				S				100.00	
N/A	FBLK				N/A	N/A			2000	

Rac 2-23-11

*Matrix Code = (S-solid) (SS-sand, soil or sludge) (P-paint) (O-organic) (W-water or waste)
Agitator speed is 30 ± 2 rpm unless otherwise noted.

Comments: *Extremely thick ORGANIC MATERIAL - TREATED AS A SOLID AS PER 1311 - Rac

Peer Review By: _____ Supervisor Review: _____

Microbac Laboratories Inc.
Metals Digest Log

Workgroup: WG357469
Analyst: BRG
Spike Analyst: BRG
Method: 7470A
Run Date: 02/24/2011 09:08
Hotblock Start Temp: 95.6 @ 08:45
Hotblock End Temp: 97.3 @ 10:45

SOP: ME404 Revison 12
Spike Solution: STD44127
Spike Witness: VC
Digestion Tubes Lot #: COA15251
HNO3 Lot #: COA15168
KMnO4 1:1 Lot #: RGT15577
H2SO4 Lot #: COA14202
K2S2O8 1:1 Lot #: RGT15459
Mercury Water ICV Lot #: STD44129
HG H2O STDS 10PPM Lot #: STD44135

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG357469-02	BLANK	1	40 mL	40 mL		
2	WG357088-01	FBLK	18	4 mL	40 mL		
3	WG357390-01	FBLK	17	4 mL	40 mL		
4	WG357469-03	LCS	1	40 mL	40 mL	4 mL	
5	L11020502-17	SAMP	18	4 mL	40 mL		02/28/11
6	L11020506-10	SAMP	18	4 mL	40 mL		02/28/11
7	L11020506-11	SAMP	18	4 mL	40 mL		02/28/11
8	L11020572-01	SAMP	17	4 mL	40 mL		02/28/11
9	L11020572-02	SAMP	17	4 mL	40 mL		02/28/11
10	L11020572-03	SAMP	17	4 mL	40 mL		02/28/11
11	L11020572-04	SAMP	17	4 mL	40 mL		02/28/11
12	L11020572-05	SAMP	17	4 mL	40 mL		02/28/11
13	L11020572-06	SAMP	17	4 mL	40 mL		02/28/11
14	L11020572-07	SAMP	17	4 mL	40 mL		02/28/11
15	WG357469-01	REF	1	40 mL	40 mL		
16	L11020574-01	SAMP	1	40 mL	40 mL		03/04/11
17	L11020587-01	SAMP	17	4 mL	40 mL		02/28/11
18	L11020588-01	SAMP	17	4 mL	40 mL		03/01/11
19	L11020612-02	SAMP	1	40 mL	40 mL		02/28/11
20	L11020612-03	SAMP	1	40 mL	40 mL		02/28/11
21	WG357469-04	MS	1	36 mL	40 mL	4 mL	
22	WG357469-05	MSD	1	36 mL	40 mL	4 mL	

WG357088-01	CALWET Blank
L11020502-17	CALWET; High NA
L11020506-10	CALWET; High NA
L11020506-11	CALWET; High NA

Analyst: Brenda Gregory

Reviewer: Vicki Collins

HB_DIG - Modified 09/30/2009
PDF ID: 1928506
Report generated: 02/24/2011 11:35

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 022411A.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 12
Maintenance Log ID: 36568

Calibration Std: STD44135 ICV Std: STD44129 Post Spike: STD44135
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

357502
Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.022411.131017	WG357632-01	Calibration Point		1		02/24/11 13:10
2	HY.022411.131200	WG357632-02	Calibration Point		1		02/24/11 13:12
3	HY.022411.131352	WG357632-03	Calibration Point		1		02/24/11 13:13
4	HY.022411.131634	WG357632-04	Calibration Point		1		02/24/11 13:16
5	HY.022411.131827	WG357632-05	Calibration Point		1		02/24/11 13:18
6	HY.022411.132020	WG357632-06	Calibration Point		1		02/24/11 13:20
7	HY.022411.132202	WG357632-07	Initial Calibration Verification		1		02/24/11 13:22
8	HY.022411.132357	WG357632-08	Initial Calib Blank		1		02/24/11 13:23
9	HY.022411.132541	WG357632-09	CCV		1		02/24/11 13:25
10	HY.022411.132724	WG357632-10	CCB		1		02/24/11 13:27
11	HY.022411.133115	WG357469-02	Method/Prep Blank	40/40	1		02/24/11 13:31
12	HY.022411.133326	WG357469-03	Laboratory Control S	40/40	1		02/24/11 13:33
13	HY.022411.133521	WG357088-01	Fluid Blank		1		02/24/11 13:35
14	HY.022411.133706	WG357390-01	Fluid Blank		1		02/24/11 13:37
15	HY.022411.133850	L11020502-17	GB-81-5	4/40	1		02/24/11 13:38
16	HY.022411.134034	WG357502-01	Post Digestion Spike		1	L11020502-17	02/24/11 13:40
17	HY.022411.134232	L11020506-10	GB-66-1	4/40	1		02/24/11 13:42
18	HY.022411.134435	L11020506-11	GB-66-1-DUP	4/40	1		02/24/11 13:44
19	HY.022411.134629	L11020572-01	SWMU-57-B4-0-6-WC	4/40	1		02/24/11 13:46
20	HY.022411.134812	WG357502-02	Post Digestion Spike		1	L11020572-01	02/24/11 13:48
21	HY.022411.134957	WG357632-11	CCV		1		02/24/11 13:49
22	HY.022411.135211	WG357632-12	CCB		1		02/24/11 13:52
23	HY.022411.135406	L11020572-02	SWMU-57-SB7-0-2-WC	4/40	1		02/24/11 13:54
24	HY.022411.135558	L11020572-03	SWMU-57-PS-0-6-WC	4/40	1		02/24/11 13:55
25	HY.022411.135740	L11020572-04	SWMU-57-SB2-0-2-WC	4/40	1		02/24/11 13:57
26	HY.022411.135933	L11020572-05	SWMU-57-SB3-0-2-WC	4/40	1		02/24/11 13:59
27	HY.022411.140118	L11020572-06	SWMU-57-SB18-0-2-WC	4/40	1		02/24/11 14:01
28	HY.022411.140303	L11020572-07	SWMU-57-PS2-0-6-WC	4/40	1		02/24/11 14:03
29	HY.022411.140516	WG357469-01	Reference Sample	40/40	1	L11020574-01	02/24/11 14:05
30	HY.022411.140709	WG357469-04	Matrix Spike	36/40	1	L11020574-01	02/24/11 14:07
31	HY.022411.140915	WG357469-05	Matrix Spike Duplica	36/40	1	L11020574-01	02/24/11 14:09
32	HY.022411.141100	L11020587-01	OH VALLEY COAL	4/40	1		02/24/11 14:11
33	HY.022411.141244	WG357632-13	CCV		1		02/24/11 14:12
34	HY.022411.141427	WG357632-14	CCB		1		02/24/11 14:14

Page: 1 Approved: February 28, 2011

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 022411A.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 12
Maintenance Log ID: 36568

Calibration Std: STD44135 ICV Std: STD44129 Post Spike: STD44135
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

357502
Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	HY.022411.141611	L11020588-01	SANDBLAST SAND	4/40	1		02/24/11 14:16
36	HY.022411.141808	L11020612-02	AV-OU7-VBII-C1-022111	40/40	1		02/24/11 14:18
37	HY.022411.141952	WG357502-03	Post Digestion Spike		1	L11020612-02	02/24/11 14:19
38	HY.022411.142138	L11020612-03	AV-OU7-VBII-C2-022111	40/40	1		02/24/11 14:21
39	HY.022411.142341	WG357502-04	Post Digestion Spike		1	L11020506-10	02/24/11 14:23
40	HY.022411.142629	WG357502-05	Post Digestion Spike		1	L11020506-11	02/24/11 14:26
41	HY.022411.142833	WG357632-15	CCV		1		02/24/11 14:28
42	HY.022411.143027	WG357632-16	CCB		1		02/24/11 14:30

  Approved: February 28, 2011

Maren Berry

Microbac Laboratories Inc.

Data Checklist

Date: 24-FEB-2011
Analyst: PDM
Analyst: NA
Method: 7470
Instrument: HYDRA
Curve Workgroup: 357632
Runlog ID: 39217
Analytical Workgroups: 357502

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0502,0506,0572,0574,0612
Client Forms	X
Level X	
Level 3	0502,0506
Level 4	0572,0574,0612
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	PDM
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
25-FEB-2011
Pierce Morris

Secondary Reviewer:
28-FEB-2011
Maren Berry

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-28-2011 10:30:01

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method 7470A AAB#: WG357502

Login Number: L11020572

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-B4-0-6-WC	01	02/18/11	02/23/11	5.1			02/24/11	5.9	28		02/24/11	1	28	
SWMU-57-SB7-0-2-WC	02	02/18/11	02/23/11	5.1			02/24/11	5.9	28		02/24/11	1	28	
SWMU-57-PS-0-6-WC	03	02/18/11	02/23/11	5			02/24/11	5.9	28		02/24/11	1	28	
SWMU-57-SB2-0-2-WC	04	02/18/11	02/23/11	5			02/24/11	5.8	28		02/24/11	1	28	
SWMU-57-SB3-0-2-WC	05	02/18/11	02/23/11	5			02/24/11	5.8	28		02/24/11	1	28	
SWMU-57-SB18-0-2-WC	06	02/18/11	02/23/11	5			02/24/11	5.8	28		02/24/11	1	28	
SWMU-57-PS2-0-6-WC	07	02/18/11	02/23/11	5			02/24/11	5.8	28		02/24/11	1	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1930025
Report generated 02/25/2011 13:39

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L11020572
Blank File ID: HY.022411.133115
Prep Date: 02/24/11 09:08
Analyzed Date: 02/24/11 13:31
Analyst: PDM

Work Group: WG357502
Blank Sample ID: WG357469-02
Instrument ID: HYDRA
Method: 7470A

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357469-03	HY.022411.133326	02/24/11 13:33	01
SWMU-57-B4-0-6-WC	L11020572-01	HY.022411.134629	02/24/11 13:46	01
SWMU-57-SB7-0-2-WC	L11020572-02	HY.022411.135406	02/24/11 13:54	01
SWMU-57-PS-0-6-WC	L11020572-03	HY.022411.135558	02/24/11 13:55	01
SWMU-57-SB2-0-2-WC	L11020572-04	HY.022411.135740	02/24/11 13:57	01
SWMU-57-SB3-0-2-WC	L11020572-05	HY.022411.135933	02/24/11 13:59	01
SWMU-57-SB18-0-2-WC	L11020572-06	HY.022411.140118	02/24/11 14:01	01
SWMU-57-PS2-0-6-WC	L11020572-07	HY.022411.140303	02/24/11 14:03	01

Report Name: BLANK_SUMMARY
PDF File ID: 1930026
Report generated 02/25/2011 13:39

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11020572 Prep Date: 02/24/11 09:08 Sample ID: WG357469-02
Instrument ID: HYDRA Run Date: 02/24/11 13:31 Prep Method: 7470A
File ID: HY.022411.133115 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG357502 Matrix: Leachate Units: mg/L
Contract #: Cal ID: HYDRA-24-FEB-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Mercury	0.000100	0.000200	0.000100	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1930027
25-FEB-2011 13:40

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357469-03
Instrument ID: HYDRA Run Time: 13:33 Prep Method: 7470A
File ID: HY.022411.133326 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG357502 Matrix: Leachate Units: mg/L
QC Key: DOD4 Lot#: STD44127 Cal ID: HYDRA-24-FEB-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00368	92.0	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1930028
Report generated: 02/25/2011 13:40

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11020572 Cal ID:HYDRA- Worknum:WG357502
Instrument ID:HYDRA Contract #: Method:7470A
Parent ID:WG357469-01 File ID:HY.022411.140516 Dil:1 Matrix:WATER
Sample ID:WG357469-04 MS File ID:HY.022411.140709 Dil:1 Units:mg/L
Sample ID:WG357469-05 MSD File ID:HY.022411.140915 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury	0.000133	0.00444	0.00447	97.5	0.00444	0.00437	95.3	2.26	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008
PDF File ID:1930029
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11020572 **Worknum:** WG357502
Instrument ID: HYDRA **Method:** 7470A
Post Spike ID: WG357502-02 **File ID:** HY.022411.134812 **Dil:** 1 **Units:** ug/L
Sample ID: L11020572-01 **File ID:** HY.022411.134629 **Dil:** 1 **Matrix:** Leachate

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.04		0.123	F	1	92.9	85 - 115	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1930024
Report generated: 02/25/2011 13:39

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L11020572
Analytical Method: 7470A
ICAL Worknum: WG357632

Workgroup (AAB#): WG357502
Instrument ID: HYDRA
Initial Calibration Date: 02/24/2011 13:20

Analyte	WG357632-01		WG357632-02		WG357632-03		WG357632-04		WG357632-05		WG357632-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	-10	0.200	671	1.00	3317	2.00	6838	5.00	16825	10.0	34237

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 1930030
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L11020572
Analytical Method: 7470A
ICAL Worknum: WG357632

Workgroup (AAB#): WG357502
Instrument ID: HYDRA
Initial Calibration Date: 02/24/2011 13:20

Analyte	R	Q
Mercury	1.000	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 1930030
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357632-08
Instrument ID: HYDRA Run Time: 13:23 Method: 7470A
File ID: HY.022411.132357 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG357502 Cal ID: HYDRA - 24-FEB-11
Matrix: LEACHATE

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

U = Result is less than 2 x MDL
F = Result is between MDL and 2 x MDL
* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1930032
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020572	Run Date:	02/24/2011	Sample ID:	WG357632-10
Instrument ID:	HYDRA	Run Time:	13:27	Method:	7470A
File ID:	HY.022411.132724	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG357502	Cal ID:	HYDRA - 24-FEB-11		
Matrix:	LEACHATE	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1930035
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020572	Run Date:	02/24/2011	Sample ID:	WG357632-12
Instrument ID:	HYDRA	Run Time:	13:52	Method:	7470A
File ID:	HY.022411.135211	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG357502	Cal ID:	HYDRA - 24-FEB-11		
Matrix:	LEACHATE	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1930035
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020572	Run Date:	02/24/2011	Sample ID:	WG357632-14
Instrument ID:	HYDRA	Run Time:	14:14	Method:	7470A
File ID:	HY.022411.141427	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG357502	Cal ID:	HYDRA - 24-FEB-11		
Matrix:	LEACHATE	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1930035
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020572	Run Date:	02/24/2011	Sample ID:	WG357632-16
Instrument ID:	HYDRA	Run Time:	14:30	Method:	7470A
File ID:	HY.022411.143027	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG357502	Cal ID:	HYDRA - 24-FEB-11		
Matrix:	LEACHATE	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1930035
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357632-07

Instrument ID: HYDRA Run Time: 13:22 Method: 7470A

File ID: HY.022411.132202 Analyst: PDM Units: ug/L

Workgroup (AAB#): WG357502 Cal ID: HYDRA - 24-FEB-11

QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.03	102	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008

PDF File ID: 1930031

Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357632-09

Instrument ID: HYDRA Run Time: 13:25 Method: 7470A

File ID: HY.022411.132541 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357502 Cal ID: HYDRA - 24-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00201	mg/L	101	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1930033

Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357632-11

Instrument ID: HYDRA Run Time: 13:49 Method: 7470A

File ID: HY.022411.134957 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357502 Cal ID: HYDRA - 24-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00205	mg/L	103	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1930033

Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357632-13

Instrument ID: HYDRA Run Time: 14:12 Method: 7470A

File ID: HY.022411.141244 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357502 Cal ID: HYDRA - 24-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00206	mg/L	103	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1930033

Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020572 Run Date: 02/24/2011 Sample ID: WG357632-15

Instrument ID: HYDRA Run Time: 14:28 Method: 7470A

File ID: HY.022411.142833 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357502 Cal ID: HYDRA - 24-FEB-11

Matrix: LEACHATE

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00199	mg/L	99.5	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1930033

Report generated 02/25/2011 13:40

2.1.2.3 Raw Data

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number:L11020588
Analytical Method:7470A
ICAL Worknum:WG357632

Workgroup (AAB#):WG357502
Instrument ID:HYDRA
Initial Calibration Date:02/24/2011 13:20

Analyte	WG357632-01		WG357632-02		WG357632-03		WG357632-04		WG357632-05		WG357632-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	-10	0.200	671	1.00	3317	2.00	6838	5.00	16825	10.0	34237

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 1930053
Report generated 02/25/2011 13:40

Approved: February 25, 2011

Pierce Morris

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L11020588
Analytical Method: 7470A
ICAL Worknum: WG357632

Workgroup (AAB#): WG357502
Instrument ID: HYDRA
Initial Calibration Date: 02/24/2011 13:20

Analyte	R	Q
Mercury	1.000	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 1930053
Report generated 02/25/2011 13:40

Approved: February 25, 2011

Pierce Morris

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Standard: 1 Rep: 1              Seq:  1       13:10:17 24 Feb 11   HG

Hg    .000    ppb      -10

*** Standard: 2 Rep: 1              Seq:  2       13:12:00 24 Feb 11   HG

Hg    .200    ppb      671

*** Standard: 3 Rep: 1              Seq:  3       13:13:52 24 Feb 11   HG

Hg    1.00    ppb      3317

*** Standard: 4 Rep: 1              Seq:  4       13:16:34 24 Feb 11   HG

Hg    2.00    ppb      6838

*** Standard: 5 Rep: 1              Seq:  5       13:18:27 24 Feb 11   HG

Hg    5.00    ppb      16825

*** Standard: 6 Rep: 1              Seq:  6       13:20:20 24 Feb 11   HG

Hg    10.0    ppb      34237

*** Check Standard: 2  Ck2ICV       Seq:  7       13:22:02 24 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          102.     2.03    2.00   ppb        .000

*** Check Standard: 3  Ck3ICB       Seq:  8       13:23:57 24 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -8.25    -.016    .200   ppb        .000

*** Check Standard: 4  Ck4CCV       Seq:  9       13:25:41 24 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          101.     2.01    2.00   ppb        .000

*** Check Standard: 5  Ck5CCB       Seq:  10      13:27:24 24 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          4.18     .008    .200   ppb        .000

*** Sample ID: WG35746902            Seq:  11     13:31:15 24 Feb 11   HG
                          PBW 01
Hg    .053    ppb       .000      .053

*** Sample ID: WG35746903            Seq:  12     13:33:26 24 Feb 11   HG
                          LCSW 01
Hg    3.68    ppb       .000      3.68
```

Approved: February 25, 2011

Pierre Morris

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: WG35708801 Seq: 13 13:35:21 24 Feb 11 HG								
				SPLP BLANK				
Hg	.022	ppb	.000	.022				
*** Sample ID: WG35739001 Seq: 14 13:37:06 24 Feb 11 HG								
				TCLP BLANK				
Hg	.051	ppb	.000	.051				
*** Sample ID: 1102050217 Seq: 15 13:38:50 24 Feb 11 HG								
Hg	.018	ppb	.000	.018				
*** Sample ID: WG35750201 Seq: 16 13:40:34 24 Feb 11 HG								
				1102050217PS.9				
Hg	.675	ppb	.000	.675				
*** Sample ID: 1102050610 Seq: 17 13:42:32 24 Feb 11 HG								
Hg	.053	ppb	.000	.053				
*** Sample ID: 1102050611 Seq: 18 13:44:35 24 Feb 11 HG								
Hg	.002	ppb	.000	.002				
*** Sample ID: 1102057201 Seq: 19 13:46:29 24 Feb 11 HG								
Hg	.123	ppb	.000	.123				
*** Sample ID: WG35750202 Seq: 20 13:48:12 24 Feb 11 HG								
				1102057201PS.9				
Hg	1.04	ppb	.000	1.04				

*** Check Standard: 4 Ck4CCV Seq: 21 13:49:57 24 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.	2.05	2.00	ppb	.000

*** Check Standard: 5 Ck5CCB Seq: 22 13:52:11 24 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		13.5	.027	.200	ppb	.000

*** Sample ID: 1102057202 Seq: 23 13:54:06 24 Feb 11 HG								
Hg	.043	ppb	.000	.043				
*** Sample ID: 1102057203 Seq: 24 13:55:58 24 Feb 11 HG								
Hg	.033	ppb	.000	.033				

Approved: February 25, 2011
Pierre Morris

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID: 1102057204            Seq:  25     13:57:40 24 Feb 11   HG

Hg    .039    ppb       .000      .039

*** Sample ID: 1102057205            Seq:  26     13:59:33 24 Feb 11   HG

Hg    .017    ppb       .000      .017

*** Sample ID: 1102057206            Seq:  27     14:01:18 24 Feb 11   HG

Hg    .049    ppb       .000      .049

*** Sample ID: 1102057207            Seq:  28     14:03:03 24 Feb 11   HG

Hg    .056    ppb       .000      .056

*** Sample ID: 1102057401            Seq:  29     14:05:16 24 Feb 11   HG
                          WG35746901
Hg    .133    ppb       .000      .133

*** Sample ID: WG35746904            Seq:  30     14:07:09 24 Feb 11   HG
                        1102057401S
Hg    4.02    ppb       .000      4.02

*** Sample ID: WG35746905            Seq:  31     14:09:15 24 Feb 11   HG
                        1102057401SD
Hg    3.93    ppb       .000      3.93

*** Sample ID: 1102058701            Seq:  32     14:11:00 24 Feb 11   HG

Hg   -.005    ppb       .000     -.005

*** Check Standard: 4  Ck4CCV        Seq:  33      14:12:44 24 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          103.     2.06    2.00   ppb        .000

*** Check Standard: 5  Ck5CCB        Seq:  34      14:14:27 24 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          5.79     .012    .200   ppb        .000

*** Sample ID: 1102058801            Seq:  35     14:16:11 24 Feb 11   HG

Hg    .030    ppb       .000      .030

*** Sample ID: 1102061202            Seq:  36     14:18:08 24 Feb 11   HG

Hg    .227    ppb       .000      .227
```

Approved: February 25, 2011

Pierre Morris

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID: WG35750203            Seq:  37     14:19:52 24 Feb 11   HG
                          1102061202PS.9
Hg    1.17    ppb       .000      1.17

*** Sample ID: 1102061203            Seq:  38     14:21:38 24 Feb 11   HG

Hg    .156    ppb       .000      .156

*** Sample ID: WG35750204            Seq:  39     14:23:41 24 Feb 11   HG
                          1102050610PS.9
Hg    .801    ppb       .000      .801

*** Sample ID: WG35750205            Seq:  40     14:26:29 24 Feb 11   HG
                          1102050611PS.9
Hg    .847    ppb       .000      .847

*** Check Standard: 4  Ck4CCV        Seq:  41     14:28:33 24 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          99.6     1.99    2.00   ppb        .000

*** Check Standard: 5  Ck5CCB        Seq:  42     14:30:27 24 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          3.16     .006    .200   ppb        .000
```

Approved: February 25, 2011

Pierre Morris

2.2 General Chemistry Data

2.2.1 PH Data

2.2.1.1 Summary Data

Login Number: L11020572

Department: Conventionals

Analyst: Jeremy Kinney

METHOD

Analysis SW846 9040C,9045D/EPA 150.1/SM4500-H B (pH)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 22628
Approved By: Deanna Hesson

LABORATORY REPORT

L11020572

03/04/11 16:17

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-B4-0-6-WC	L11020572-01	9045D	1	19-FEB-11
SWMU-57-SB7-0-2-WC	L11020572-02	9045D	1	19-FEB-11
SWMU-57-PS-0-6-WC	L11020572-03	9045D	1	19-FEB-11
SWMU-57-SB2-0-2-WC	L11020572-04	9045D	1	19-FEB-11
SWMU-57-SB3-0-2-WC	L11020572-05	9045D	1	19-FEB-11
SWMU-57-SB18-0-2-WC	L11020572-06	9045D	1	19-FEB-11
SWMU-57-PS2-0-6-WC	L11020572-07	9045D	1	19-FEB-11

Microbac Laboratories Inc.

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	**L11020572-01**	PrePrep Method:	**NONE**	Instrument:	**ORION-4STAR**
Client ID:	**SWMU-57-B4-0-6-WC**	Prep Method:	**9045D**	Prep Date:	**03/03/2011 10:55**
Matrix:	**Soil**	Analytical Method:	**9045D**	Cal Date:	
Workgroup Number:	**WG358112**	Analyst:	**JBK**	Run Date:	**03/03/2011 10:55**
Collect Date:	**02/18/2011 10:35**	Dilution:	**1**	File ID:	**OS11030312540601**
		Units:	**UNITS**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	**10-29-7**	**7.03**			

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	L11020572-02	PrePrep Method:	NONE	Instrument:	ORION-4STAR
Client ID:	SWMU-57-SB7-0-2-WC	Prep Method:	9045D	Prep Date:	03/03/2011 10:55
Matrix:	Soil	Analytical Method:	9045D	Cal Date:	
Workgroup Number:	WG358112	Analyst:	JBK	Run Date:	03/03/2011 10:55
Collect Date:	02/18/2011 11:20	Dilution:	1	File ID:	OS11030312541701
		Units:	UNITS		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.11			

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	**L11020572-03**	PrePrep Method:	**NONE**	Instrument:	**ORION-4STAR**
Client ID:	**SWMU-57-PS-0-6-WC**	Prep Method:	**9045D**	Prep Date:	**03/03/2011 10:55**
Matrix:	**Soil**	Analytical Method:	**9045D**	Cal Date:	
Workgroup Number:	**WG358112**	Analyst:	**JBK**	Run Date:	**03/03/2011 10:55**
Collect Date:	**02/18/2011 12:20**	Dilution:	**1**	File ID:	**OS11030312542401**
		Units:	**UNITS**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	**10-29-7**	**6.64**			

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number: **L11020572-04**
Client ID: **SWMU-57-SB2-0-2-WC**
Matrix: **Soil**
Workgroup Number: **WG358112**
Collect Date: **02/18/2011 13:00**

PrePrep Method: **NONE**
Prep Method: **9045D**
Analytical Method: **9045D**
Analyst: **JBK**
Dilution: **1**
Units: **UNITS**

Instrument: **ORION-4STAR**
Prep Date: **03/03/2011 10:55**
Cal Date:
Run Date: **03/03/2011 10:55**
File ID: **OS11030312543301**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	**10-29-7**	**7.52**			

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	L11020572-05	PrePrep Method:	NONE	Instrument:	ORION-4STAR
Client ID:	SWMU-57-SB3-0-2-WC	Prep Method:	9045D	Prep Date:	03/03/2011 10:55
Matrix:	Soil	Analytical Method:	9045D	Cal Date:	
Workgroup Number:	WG358112	Analyst:	JBK	Run Date:	03/03/2011 10:55
Collect Date:	02/18/2011 13:20	Dilution:	1	File ID:	OS11030312544301
		Units:	UNITS		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.43			

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number:	L11020572-06	PrePrep Method:	NONE	Instrument:	ORION-4STAR
Client ID:	SWMU-57-SB18-0-2-WC	Prep Method:	9045D	Prep Date:	03/03/2011 10:55
Matrix:	Soil	Analytical Method:	9045D	Cal Date:	
Workgroup Number:	WG358112	Analyst:	JBK	Run Date:	03/03/2011 10:55
Collect Date:	02/18/2011 13:45	Dilution:	1	File ID:	OS11030312545101
		Units:	UNITS		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	10-29-7	7.24			

Report Number: **L11020572**
Report Date : **March 4, 2011**

Sample Number: **L11020572-07**
Client ID: **SWMU-57-PS2-0-6-WC**
Matrix: **Soil**
Workgroup Number: **WG358112**
Collect Date: **02/18/2011 14:30**

PrePrep Method: **NONE**
Prep Method: **9045D**
Analytical Method: **9045D**
Analyst: **JBK**
Dilution: **1**
Units: **UNITS**

Instrument: **ORION-4STAR**
Prep Date: **03/03/2011 10:55**
Cal Date:
Run Date: **03/03/2011 10:55**
File ID: **OS11030312545901**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Corrosivity pH	**10-29-7**	**7.25**			

2.2.1.2 QC Summary Data

Example pH Calculations
(Direct Readout Parameter)

Readout from instrument = result in S.U.

where:

Readout = direct readout from the instrument

Microbac Laboratories Inc.

Data Checklist

Date: 03-MAR-2011
Analyst: JBK
Analyst: NA
Method: PH
Instrument: ORION 4*
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG358112

Calibration/Linearity	03/03/2011
Second Source Check	
ICV/CCV (std)	
ICB/CCB	
Blank	
LCS/LCS Dup	X
MS/MSD	
Duplicate	X
Upload Results	
Client Forms	X
QC Violation Sheet	
Case Narratives	
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	JBK
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
03-MAR-2011

Secondary Reviewer:
03-MAR-2011

CHECKLIST1 - Modified 03/05/2008
Generated: MAR-03-2011 15:08:32

2.2.1.3 Raw Data

WORKGROUP: WG358112

pH

Sample	Calibration Buffers	A Water Misc. Liquid	B 50% Slurry Of Solid	C 50% Water Org. Liq. Mix
LCS 6 STD43917 2/28	7, 4, 10	6.02		
02-572-01			7.03	
-02			7.11	
-03			6.64	
-04			7.52	
-05			7.43	
-06			7.24	
-07			7.25	
03-047-01			8.00	
03-048-01			7.91	
03-047-01		5.45		
-02		9.58		
03-048-01		6.43		
-02		9.47		
03-060-01*		5.34		
LCS 6		6.05		
LCS 9		9.01		
DUP 03-060-01		5.37		
LCS 9 STD43300		9.01		

060-01 left organic residue on probe

B,C) SW846 9045D

A) SM 4500-H(+)-B

A) EPA 150.1

A) SW846 9040C

SOP K1501 Rev 12

Circle Instrument

Orion 4-Star

Orion 710A #1

Orion 710A #2

Bante 922

Analyst: [signature] Date: 3/3/11/1055

* Sx is >50 % aqueous. SW846 9045D requires sx to be <20% aqueous for analysis. Analyzed per SW846 9040C.

DCN#86277

[signature]

Approved: March 03, 2011

TCLP Daily

Date: 3-02-11

	Kemron#	Client	Due	Me	Sv	Pest	Herb	Voa	PCB	pH-I		Comments
#1	03-00124-01	BWK	3/4	✓		✓	✓					FC
#2	03-00124-01	MICRO	3/8	✓		✓	✓					
#3	03-00124-01	SAUN	3/7	✓		✓				✓		
#4	0004881	1	1	✓		✓	✓			✓		
#5	0004881	1	1	✓		✓	✓					
#6	0004881	1	1	✓		✓						FC
#7												
#8												
#9												
#10												
#11												
#12												
#13												
#14												
#15												
#16												
#17												
#18												
#19												
#20												
#21												
#22												

Start Time:
Solids: 1300
Filtration:

Work Groups | Run ID's

Filtered:

TC-Me: WG R
TC-Sv: WG R
TC-Pest: WG R
TC-Herb: WG R
TC-Voa: WG R
TC-Me(org): WG R
TC-Sv(org): WG R
TC-Voa(org): WG R

Agitated:

TC-Me: WG 358073 R
TC-Sv: WG 358075 R
TC-Pest: WG 358074 R
TC-Herb: WG R
TC-Voa: WG 358068 R
pH-I: WG R
WG R
WG R
WG R

☑ perform analysis
★ perform analysis and spike sample

Comments: _____

Approved: March 03, 2011

SPLP Daily

Date: 03-02-11

	Microbac#	Client	Due	Me	8270	8081	8151	8082	827-pahl	VOA	pH-L	Comments
1	03-0047-02	SHAW	3/7	✓							✓	
2	0048-02	"	"	✓							✓	
3	FBLK	—	—	✓								
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												

Start Time:

Solids: 1500

Filtration:

Work Groups | Run ID's

Agitated:

Spip-Me:	WG	358071	R
Spip-8270:	WG		R
Spip-Voa:	WG		R
Spip-827-pahl:	WG		R
Spip-8081:	WG		R
Spip-8082:	WG		R
pH-L:	WG	358070	R
	WG		R
	WG		R
	WG		R
	WG		R
	WG		R
	WG		R

☑ perform analysis

★ perform analysis and spike sample

Comments: _____

_____

_____

Approved: March 03, 2011

3.0 Attachments

Microbac Laboratories Inc.
Analyst Listing
March 4, 2011

ADC – ANTHONY D. CANTER	AJF – AMANDA J. FICKIESEN	ALB – ANNIE L. BROWN
ALV – AMY L. VALENTINE	AML – TONY M. LONG	AZH – AFTER HOURS
BLG – BRENDA L. GREENWALT	BRG – BRENDA R. GREGORY	CAA – CASSIE A. AUGENSTEIN
CAF – CHERYL A. FLOWERS	CEB – CHAD E. BARNES	CLC – CHRYS L. CRAWFORD
CLS – CARA L. STRICKLER	CLW – CHARISSA L. WINTERS	CPD – CHAD P. DAVIS
CSH – CHRIS S. HILL	DDE – DEBRA D. ELLIOTT	DEL – DON E. LIGHTFRITZ
DEV – DAVID E. VANDENBERG	DGB – DOUGLAS G. BUTCHER	DIH – DEANNA I. HESSON
DLB – DAVID L. BUMGARNER	DLP – DOROTHY L. PAYNE	DLR – DIANNA L. RAUCH
ECL – ERIC C. LAWSON	EDL – ERIN D. LONG	ERP – ERIN R. PORTER
FJB – FRANCES J. BOLDEN	HAV – HEMA VILASAGAR	HJR – HOLLY J. REED
JAL – JOHN A. LENT	JBK – JEREMY B. KINNEY	JDH – JUSTIN D. HESSON
JKT – JANE K. THOMPSON	JLL – JOHN L. LENT	JWR – JOHN W. RICHARDS
JWS – JACK W. SHEAVES	JYH – JI Y. HU	KEB – KATIE E. BARNES
KHR – KIM H. RHODES	KRA – KATHY R. ALBERTSON	LKN – LINDA K. NEDEFF
LSB – LESLIE S. BUCINA	MDA – MIKE D. ALBERTSON	MDC – MIKE D. COCHRAN
MES – MARY E. SCHILLING	MMB – MAREN M. BEERY	MRT – MICHELLE R. TAYLOR
MSW – MATT S. WILSON	PDM – PIERCE D. MORRIS	PWD – PAUL W. DENT
RAH – ROY A. HALSTEAD	RB – BOB BUCHANAN	REK – BOB E. KYER
RLK – ROBIN L. KLINGER	RWC – RODNEY W. CAMPBELL	SLM – STEPHANIE L. MOSSBURG
SLP – SHERI L. PFALZGRAF	TIP – TAE I. PARRISH	TMB – TIFFANY M. BAILEY
TMM – TAMMY M. MORRIS	VC – VICKI COLLIER	WJB – WILL J. BEASLEY
WTD – WADE T. DELONG		

Microbac Laboratories Inc.
List of Valid Qualifiers
March 04, 2011

Qualkey: DOD

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	The reported result is associated with a contaminated method blank.
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
I	Semiquantitative result (out of instrument calibration range)
J	Estimated concentration; sample matrix interference.
J	Estimated value ; the analyte concentration was greater than the highest standard
J	Estimated value ; the analyte concentration was less than the low standard (LOQ)
J	The reported result is an estimated value.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Nontarget analyte; the analyte is a tentativlely identified compound (TIC) by GC/MS
NA	Not applicable
ND	Not detected at or above the reporting limit (RL).
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Analyte was not detected. The concentration is below the reported LOD.
UJ	Undetected; the analyte was analyzed for, but not detected.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)
Z	Cannot be resolved from isomer - see below

*****Special Notes for Organic Analytes**

Qualkey: DOD

1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methylphenol and 4-Methylphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound an are matrix dependent.

COC No. A 2481

156 Starlite Drive
Marietta, OH 45750

KEMRON
ENVIRONMENTAL SERVICES

CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4308
Fax: 740-376-2536

Company Name: UXB-KEMRON

Project Contact: MARY LOU ROCHOTTE | Contact Phone #: 740-373-4308

Turn Around Requirements: 5-DAY | Location: RFAAP SWMU-57 WASTE SOIL CHARACTERIZATION

Project ID: MRO669-004-002 RFAAP

Sampler (print): JONAH ANDERSON | Signature:

Program: ☐ CWA ☐ RCRA ☐ DOD ☐ AFCEE ☐ Other

Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	TCLP-METALS, pH	TOTAL # (LAB USE)	ADDITIONAL REQUIREMENTS
SWMU-57-B4-6-6'-WC	X		2-18-11	1035	S	2	1	1		FOR CHARACTERIZATION OF SWMU-57 SOIL FOR LAND FILL
SWMU-57-B4-0-2'-WC	X		2-18-11	0930	S	1	1			
SWMU-57-SB7-0-2-WC	X		2-18-11	1120	S	2	1	1		
SWMU-57-PS-6-6'-WC	X		2-18-11	1220	S	2	1	1		
SWMU-57-SB2-0-2'-WC	X		2-18-11	1300	S	2	1	1		
SWMU-57-SB3-0-2'-WC	X		2-18-11	1320	S	2	1	1		
SWMU-57-SB18-02'WC	X		2-18-11	1345	S	2	1	1		* 8 oz JARS
SWMU-57-PS2-06'-WC	X		2-18-11	1430	S	2	1	1		

Microbac OVD 221000012526
Received: 02/19/2011 15:23
By: ROBIN KLINGER

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks:
	2-19-11	1325				
Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks:
				2-19-11	1325	

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

Page _____ of _____

1000012526

COOLER INSPECTION

Received: 02/19/2011 15:23
Delivery Method: Client
Opened By: Robin Klinger
Comments:

Login(s): L11020572|L11020573|

Cooler(s)

Cooler #	Temp Gun	Temp	Tracking #	COC #	Comments
5474	G	1.0		2481	

1	NA	Were shipping coolers sealed?
2	NA	Were custody seals intact?
3	Yes	Were cooler temperatures in range of 0-6?
4	Yes	Was ice present?
5	Yes	Were COC's received/information complete/signed and dated?
6	Yes	Were sample containers and labels intact and match COC?
7	Yes	Were the correct containers and volumes received?
8	Yes	Were samples received within EPA hold times?
9	NA	Were correct perservatives used? (water only)
10	NA	Were pH ranges acceptable? (voa's excluded)
11	NA	Were VOA samples free of headspace (less than 6mm)?

Discrepancies:

Microbac - Ohio Valley Division
158 Starlite Drive
Marietta, OH 45750
Tel: (740)373-4071 Fax: (740)373-4835

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L11020572
Account: 2820
Project: 2820.216
Samples: 7
Due Date: 28-FEB-2011

Samplenum	Container ID	Products
L11020572-01	799614	TC-EX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	22-FEB-2011 15:10	RLK	
2	PREP	W1	TCL	23-FEB-2011 07:03	RWC	AZH
3	STORE	TCL	A2	23-FEB-2011 11:23	RLK	RWC
4	ANALYZ	L1	WET	03-MAR-2011 10:26	JBK	JKT
5	STORE	WET	W1	03-MAR-2011 10:37	JKT	JBK

Samplenum	Container ID	Products
L11020572-02	799615	TC-EX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	22-FEB-2011 15:10	RLK	
2	PREP	W1	TCL	23-FEB-2011 07:03	RWC	AZH
3	STORE	TCL	A2	23-FEB-2011 11:23	RLK	RWC
4	ANALYZ	L1	WET	03-MAR-2011 10:26	JBK	JKT
5	STORE	WET	W1	03-MAR-2011 10:37	JKT	JBK

Samplenum	Container ID	Products
L11020572-03	799616	TC-EX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	22-FEB-2011 15:10	RLK	
2	PREP	W1	TCL	23-FEB-2011 07:03	RWC	AZH
3	STORE	TCL	A2	23-FEB-2011 11:23	RLK	RWC
4	ANALYZ	L1	WET	03-MAR-2011 10:26	JBK	JKT
5	STORE	WET	W1	03-MAR-2011 10:37	JKT	JBK

Samplenum	Container ID	Products
L11020572-04	799617	TC-EX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	22-FEB-2011 15:10	RLK	
2	PREP	W1	TCL	23-FEB-2011 07:03	RWC	AZH
3	STORE	TCL	A2	23-FEB-2011 11:23	RLK	RWC
4	ANALYZ	L1	WET	03-MAR-2011 10:26	JBK	JKT
5	STORE	WET	W1	03-MAR-2011 10:37	JKT	JBK

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L11020572
Account: 2820
Project: 2820.216
Samples: 7
Due Date: 28-FEB-2011

Samplenum	Container ID	Products
L11020572-05	799618	TC-EX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	22-FEB-2011 15:10	RLK	
2	PREP	W1	TCL	23-FEB-2011 07:03	RWC	AZH
3	STORE	TCL	A2	23-FEB-2011 11:23	RLK	RWC
4	ANALYZ	L1	WET	03-MAR-2011 10:26	JBK	JKT
5	STORE	WET	W1	03-MAR-2011 10:37	JKT	JBK

Samplenum	Container ID	Products
L11020572-06	799619	TC-EX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	22-FEB-2011 15:10	RLK	
2	PREP	W1	TCL	23-FEB-2011 07:03	RWC	AZH
3	STORE	TCL	A2	23-FEB-2011 11:23	RLK	RWC
4	ANALYZ	L1	WET	03-MAR-2011 10:26	JBK	JKT
5	STORE	WET	W1	03-MAR-2011 10:37	JKT	JBK

Samplenum	Container ID	Products
L11020572-07	799620	TC-EX

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	22-FEB-2011 15:10	RLK	
2	PREP	W1	TCL	23-FEB-2011 07:03	RWC	AZH
3	STORE	TCL	A2	23-FEB-2011 11:23	RLK	RWC
4	ANALYZ	L1	WET	03-MAR-2011 10:27	JBK	JKT
5	STORE	WET	W1	03-MAR-2011 10:37	JKT	JBK

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

L11020574 – IDM Water

158 Starlite Drive, Marietta, OH 45750 • T:740-373-4071 • F:740-373-4835 • http://www.microbac.com

Laboratory Report Number: L11020574

Client: Mary Lou Rochette, 156 Starlite Drive, Marietta, OH, 45750

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories.

Review and compilation of your report was completed by Microbac's Sales and Service Team. If you have questions, comments or require further assistance regarding this report, please contact your team member noted in the reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

Kathy Albertson	*Team Chemist/Data Specialist*	Kathy.Albertson@microbac.com
Stephanie Mossburg	*Team Chemist/Data Specialist*	Stephanie.Mossburg@microbac.com
Tony Long	*Team Chemist/Data Specialist*	Tony.Long@microbac.com
Amanda Fickiesen	*Client Services Specialist*	Amanda.Fickiesen@microbac.com
Annie Brown	*Client Services Specialist*	Annie.Brown@microbac.com

This report was reviewed on March 07, 2011.

Stephanie Mossburg - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the DoD QSM and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in this report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, DoD ELAP certification number 2936.01. The reported results are related only to the samples analyzed as received.

This report was certified on March 07, 2011.

David Vandenberg - Managing Director

State of origin: Virginia
Accrediting authority: N/A ID:N/A
QAPP: DOD Ver 4.1
This report contains a total of 588 pages.

Look closer. Go further. Do more.

Microbac REPORT L11020574
PREPARED FOR Kemron Environmental Services
WORK ID:

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1.0 Introduction

LABORATORY REPORT

L11020574

03/07/11 10:27

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Summary

Client ID	Lab ID	Date Collected	Date Received
SWMU-57-1DM-21811-W	L11020574-01	02/18/2011 15:45	02/19/2011

Report Number: **L11020574**
Report Date : **March 7, 2011**

Sample Number: **L11020574-01**
Client ID: **SWMU-57-1DM-21811-W**
Matrix: **Water**
Workgroup Number: **WG357502**
Collect Date: **02/18/2011 15:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **7470A**
Analytical Method: **7470A**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **02/24/2011 09:08**
Cal Date: **02/24/2011 13:20**
Run Date: **02/24/2011 14:05**
File ID: **HY.022411.140516**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Mercury	7439-97-6	0.000133	J	0.000200	0.000100

J Estimated value ; the analyte concentration was less than the low standard (LOQ)

Sample Number: **L11020574-01**
Client ID: **SWMU-57-1DM-21811-W**
Matrix: **Water**
Workgroup Number: **WG357407**
Collect Date: **02/18/2011 15:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/23/2011 07:36**
Cal Date: **02/23/2011 09:44**
Run Date: **02/23/2011 18:03**
File ID: **P2.022311.180322**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Aluminum, Total	7429-90-5	13.4		0.100	0.0500
Barium, Total	7440-39-3	0.0433		0.0100	0.00500
Beryllium, Total	7440-41-7		U	0.0100	0.00500
Calcium, Total	7440-70-2	16.8		0.200	0.100
Cobalt, Total	7440-48-4		U	0.0200	0.0100
Copper, Total	7440-50-8	0.0119	J	0.0200	0.0100
Iron, Total	7439-89-6	10.3		0.100	0.0500
Lead, Total	7439-92-1	0.0124		0.00500	0.00250
Magnesium, Total	7439-95-4	9.59		0.500	0.250
Manganese, Total	7439-96-5	0.241		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.0200
Potassium, Total	7440-09-7	10.3		1.00	0.500
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	37.5		0.500	0.250
Vanadium, Total	7440-62-2	0.0256		0.0100	0.00500
Zinc, Total	7440-66-6	0.248		0.0200	0.0100

J Estimated value ; the analyte concentration was less than the low standard (LOQ)
U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11020574-01**
Client ID: **SWMU-57-1DM-21811-W**
Matrix: **Water**
Workgroup Number: **WG357403**
Collect Date: **02/18/2011 15:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **1**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **02/23/2011 08:10**
Cal Date: **02/25/2011 10:03**
Run Date: **02/25/2011 14:06**
File ID: **EL.022511.140618**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Antimony, Total	7440-36-0	0.00916		0.00100	0.000500
Arsenic, Total	7440-38-2	0.00174		0.00100	0.000500
Cadmium, Total	7440-43-9	0.00198		0.000600	0.000300
Chromium, Total	7440-47-3	0.0197		0.00200	0.00100
Selenium, Total	7782-49-2	0.000864	J	0.00100	0.000500
Thallium, Total	7440-28-0	0.000107	J	0.000200	0.000100

J Estimated value ; the analyte concentration was less than the low standard (LOQ)

Login Number: L11020574

Department: Login

Chain of Custody:

Shipment Conditions

COC #	Cooler #	Temperature
2498	5474	1.0

Sample Management: All samples were received intact.

Sample Identification

Lab ID	Client ID
L11020574-01	SWMU-57-1DM-21811-W

Narrative ID: 21929
Approved By: Stephanie Mossburg
Stephanie Mossburg

2.0 Full Sample Data Package

2.1 Metals Data

2.1.1 Metals I C P Data

2.1.1.1 Summary Data

Login Number: L11020574

Department: Metals

Analyst: Pierce Morris

METHOD

Preparation: SW-846 3005

Analysis: SW-846 6010

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG357407 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 22072
Approved By: Sheri Pfalzgraf

LABORATORY REPORT

L11020574

03/07/11 10:27

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-1DM-21811-W	L11020574-01	6010B	1	19-FEB-11

Report Number: **L11020574**
Report Date : **March 7, 2011**

Sample Number: **L11020574-01**
Client ID: **SWMU-57-1DM-21811-W**
Matrix: **Water**
Workgroup Number: **WG357407**
Collect Date: **02/18/2011 15:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **02/23/2011 07:36**
Cal Date: **02/23/2011 09:44**
Run Date: **02/23/2011 18:03**
File ID: **P2.022311.180322**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Aluminum, Total	7429-90-5	13.4		0.100	0.0500
Barium, Total	7440-39-3	0.0433		0.0100	0.00500
Beryllium, Total	7440-41-7		U	0.0100	0.00500
Calcium, Total	7440-70-2	16.8		0.200	0.100
Cobalt, Total	7440-48-4		U	0.0200	0.0100
Copper, Total	7440-50-8	0.0119	J	0.0200	0.0100
Iron, Total	7439-89-6	10.3		0.100	0.0500
Lead, Total	7439-92-1	0.0124		0.00500	0.00250
Magnesium, Total	7439-95-4	9.59		0.500	0.250
Manganese, Total	7439-96-5	0.241		0.0100	0.00500
Nickel, Total	7440-02-0		U	0.0400	0.0200
Potassium, Total	7440-09-7	10.3		1.00	0.500
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	37.5		0.500	0.250
Vanadium, Total	7440-62-2	0.0256		0.0100	0.00500
Zinc, Total	7440-66-6	0.248		0.0200	0.0100

J Estimated value ; the analyte concentration was less than the low standard (LOQ)
U Analyte was not detected. The concentration is below the reported LOD.

2.1.1.2 QC Summary Data

Example 6010 Calculations
Perkin Elmer Optima 4300 DV

1.0 Initial Calibration (ICAL) Parameters
The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system in ug/mL (ppm)	0.1
Vf = Final volume (mL)	50
Vi = Initial volume (mL)	50
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in ug/mL (mg/L)	0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (mg/L) (ppm)	0.1
Vf = Final volume (mL)	50
Vi = Initial weight (g)	1
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in ug/g (mg/kg)	5

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:	**Example:**
Cx = Concentration calculated as received (wet basis)	5
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (mg/kg)	6.25

Microbac Laboratories Inc.
Metals Digest Log

Workgroup: WG357312
Analyst: REK
Spike Analyst: REK
Method: 3005A
Run Date: 02/23/2011 07:36
Hotblock Start Temp: 95 @ 07:05
Hotblock End Temp: 95 @ 11:05

SOP: ME401 Revison 13
Spike Solution: STD39933
Spike Witness: VC
HNO3 Lot #: COA15168
HCL Lot #: COA15185
Digestion Tubes Lot #: COA15251

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG357312-03	BLANK	1	50 mL	50 mL		
2	WG357312-04	LCS	1	50 mL	50 mL	5 mL	
3	WG357312-01	REF	1	50 mL	50 mL		
4	L11020568-01	RS01	1	50 mL	50 mL		03/04/11
5	WG357312-05	MSD	1	50 mL	50 mL	5 mL	
6	L11020568-02	SD01	1	50 mL	50 mL	5 mL	03/04/11
7	WG357312-06	MS	1	50 mL	50 mL	5 mL	
8	L11020568-03	MS01	1	50 mL	50 mL	5 mL	03/04/11
9	WG357312-02	REF	1	50 mL	50 mL		
10	L11020569-01	RS01	1	50 mL	50 mL		03/04/11
11	WG357312-07	MSD	1	50 mL	50 mL	5 mL	
12	L11020569-02	SD01	1	50 mL	50 mL	5 mL	03/04/11
13	WG357312-08	MS	1	50 mL	50 mL	5 mL	
14	L11020569-03	MS01	1	50 mL	50 mL	5 mL	03/04/11
15	L11020571-01	SAMP	1	50 mL	50 mL		02/28/11
16	L11020571-02	SAMP	1	50 mL	50 mL		02/28/11
17	L11020574-01	SAMP	1	50 mL	50 mL		03/04/11
18	L11020579-01	SAMP	1	50 mL	50 mL		03/04/11
19	L11020579-02	SAMP	1	50 mL	50 mL		03/04/11

L11020574-01	filtered w/coa15138

Analyst: 

Reviewer: Brenda Gregory

HB_DIG - Modified 09/30/2009
PDF ID: 1926732
Report generated: 02/23/2011 11:25

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022311HR.CSV
Analyst1: PDM Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 36542

Calibration Std: STD44101 ICV Std: STD43946 Post Spike: STD39932
ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44052
CCV: STD44102 LLCCV:

Workgroups: 352834,357379,357405,357406,357407,357223,357117,357224

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.022311.091744	WG357414-01	Calibration Point		1		02/23/11 09:17
2	P2.022311.092421	WG357414-02	Calibration Point		1		02/23/11 09:24
3	P2.022311.093103	WG357414-03	Calibration Point		1		02/23/11 09:31
4	P2.022311.093743	WG357414-04	Calibration Point		1		02/23/11 09:37
5	P2.022311.094423	WG357414-05	Calibration Point		1		02/23/11 09:44
6	P2.022311.095111	WG357414-06	Initial Calibration Verification		1		02/23/11 09:51
7	P2.022311.095752	WG357414-07	Initial Calib Blank		1		02/23/11 09:57
8	P2.022311.100429	WG357414-08	Interference Check		1		02/23/11 10:04
9	P2.022311.101011	WG357414-09	Interference Check		1		02/23/11 10:10
10	P2.022311.101555	WG357414-10	CCV		1		02/23/11 10:15
11	P2.022311.102234	WG357414-11	CCB		1		02/23/11 10:22
12	P2.022311.102915	WG357153-02	Method/Prep Blank	50/50	1		02/23/11 10:29
13	P2.022311.103555	WG357153-03	Laboratory Control S	50/50	1		02/23/11 10:35
14	P2.022311.104239	WG357153-01	Reference Sample		1	L11020504-01	02/23/11 10:42
15	P2.022311.104822	WG357153-04	Duplicate	50/50	1	L11020504-01	02/23/11 10:48
16	P2.022311.105409	WG357153-05	Matrix Spike	50/50	1	L11020504-01	02/23/11 10:54
17	P2.022311.105955	L11020522-01	1102-227-1	50/50	1		02/23/11 10:59
18	P2.022311.110633	L11020522-03	1102-228-1	50/50	1		02/23/11 11:06
19	P2.022311.111329	WG357234-01	Post Digestion Spike		1	L11020522-03	02/23/11 11:13
20	P2.022311.112014	WG357234-02	Serial Dilution		5	L11020522-03	02/23/11 11:20
21	P2.022311.112656	L11020523-11	1102-241-1	50/50	1		02/23/11 11:26
22	P2.022311.113346	WG357414-12	CCV		1		02/23/11 11:33
23	P2.022311.114029	WG357414-13	CCB		1		02/23/11 11:40
24	P2.022311.114706	L11020524-01	1102-184-1	50/50	1		02/23/11 11:47
25	P2.022311.115352	L11020524-02	1102-239-1	50/50	1		02/23/11 11:53
26	P2.022311.120034	L11020524-04	1102-240-1	50/50	1		02/23/11 12:00
27	P2.022311.120712	WG357414-14	CCV		1		02/23/11 12:07
28	P2.022311.121357	WG357414-15	CCB		1		02/23/11 12:13
29	P2.022311.125622	WG357322-02	Method/Prep Blank	5/50	1		02/23/11 12:56
30	P2.022311.130300	WG357322-03	Laboratory Control S	5/50	1		02/23/11 13:03
31	P2.022311.130938	WG357257-01	Fluid Blank		1		02/23/11 13:09
32	P2.022311.131621	WG357322-01	Reference Sample		1	L11020542-01	02/23/11 13:16
33	P2.022311.132302	WG357379-01	Post Digestion Spike		1	L11020542-01	02/23/11 13:23
34	P2.022311.132945	WG357379-02	Serial Dilution		5	L11020542-01	02/23/11 13:29

Page: 1 Approved: February 24, 2011

Esther L. Babgard

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022311HR.CSV
Analyst1: PDM Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 36542

Calibration Std: STD44101 ICV Std: STD43946 Post Spike: STD39932
ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44052
CCV: STD44102 LLCCV:

Workgroups: 352834,357379,357405,357406,357407,357223,357117,357224

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.022311.133628	WG357322-04	Matrix Spike	5/50	1	L11020542-01	02/23/11 13:36
36	P2.022311.134310	WG357322-05	Matrix Spike Duplica	5/50	1	L11020542-01	02/23/11 13:43
37	P2.022311.134954	WG357414-16	CCV		1		02/23/11 13:49
38	P2.022311.135633	WG357414-17	CCB		1		02/23/11 13:56
39	P2.022311.143500	WG357296-02	Method/Prep Blank	50/50	1		02/23/11 14:35
40	P2.022311.144814	WG357296-03	Laboratory Control S	50/50	1		02/23/11 14:48
41	P2.022311.145427	WG357296-01	Reference Sample		1	L11020562-01	02/23/11 14:54
42	P2.022311.150116	WG357296-04	Duplicate	50/50	1	L11020562-01	02/23/11 15:01
43	P2.022311.150755	WG357296-05	Matrix Spike	50/50	1	L11020562-01	02/23/11 15:07
44	P2.022311.151439	L11020586-01	001	50/50	1		02/23/11 15:14
45	P2.022311.152123	WG357405-01	Post Digestion Spike		1	L11020586-01	02/23/11 15:21
46	P2.022311.152808	WG357405-02	Serial Dilution		5	L11020586-01	02/23/11 15:28
47	P2.022311.153545	WG357414-18	CCV		1		02/23/11 15:35
48	P2.022311.154224	WG357414-19	CCB		1		02/23/11 15:42
49	P2.022311.154900	WG357295-01	Method/Prep Blank	1/50	1		02/23/11 15:49
50	P2.022311.155545	WG357295-02	Laboratory Control S	1/50	1		02/23/11 15:55
51	P2.022311.160224	WG357295-03	Laboratory Control S	1/50	1		02/23/11 16:02
52	P2.022311.160902	L11020439-01	24451 WW SLUDGE	1/50	1		02/23/11 16:09
53	P2.022311.161546	WG357406-01	Post Digestion Spike		1	L11020439-01	02/23/11 16:15
54	P2.022311.162230	WG357406-02	Serial Dilution		1	L11020439-01	02/23/11 16:22
55	P2.022311.162910	WG357414-20	CCV		1		02/23/11 16:29
56	P2.022311.163616	WG357414-21	CCB		1		02/23/11 16:36
57	P2.022311.164259	WG357312-03	Method/Prep Blank	50/50	1		02/23/11 16:42
58	P2.022311.164940	WG357312-04	Laboratory Control S	50/50	1		02/23/11 16:49
59	P2.022311.165621	WG357312-01	Reference Sample		1	L11020568-01	02/23/11 16:56
60	P2.022311.170300	WG357312-05	Matrix Spike Duplica	50/50	1	L11020568-01	02/23/11 17:03
61	P2.022311.170944	WG357312-06	Matrix Spike	50/50	1	L11020568-01	02/23/11 17:09
62	P2.022311.171633	WG357312-02	Reference Sample		1	L11020569-01	02/23/11 17:16
63	P2.022311.172312	WG357312-07	Matrix Spike Duplica	50/50	1	L11020569-01	02/23/11 17:23
64	P2.022311.172955	WG357312-08	Matrix Spike	50/50	1	L11020569-01	02/23/11 17:29
65	P2.022311.173640	L11020571-01	SWMU-57-21711-EB	50/50	1		02/23/11 17:36
66	P2.022311.174319	L11020571-02	SWMU-57-21711-FB	50/50	1		02/23/11 17:43
67	P2.022311.174959	WG357414-22	CCV		1		02/23/11 17:49
68	P2.022311.175639	WG357414-23	CCB		1		02/23/11 17:56

Page: 2 Approved: February 24, 2011

Esther L. Babgard

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022311HR.CSV

Analyst1: PDM Analyst2: N/A

Method: 6010 SOP: ME600E Rev: 10

Maintenance Log ID: 36542

Calibration Std: STD44101 ICV Std: STD43946 Post Spike: STD39932

ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44052

CCV: STD44102 LLCCV:

Workgroups: 352834,357379,357405,357406,357407,357223,357117,357224

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	P2.022311.180322	L11020574-01	SWMU-57-1DM-21811-W	50/50	1		02/23/11 18:03
70	P2.022311.180908	WG357407-01	Post Digestion Spike		1	L11020574-01	02/23/11 18:09
71	P2.022311.181457	WG357407-02	Serial Dilution		5	L11020574-01	02/23/11 18:14
72	P2.022311.182136	L11020579-01	LH18/24-SP650-6445-GRAB	50/50	1		02/23/11 18:21
73	P2.022311.182823	L11020579-02	LH18/24-SP650-6445-COMP	50/50	1		02/23/11 18:28
74	P2.022311.183512	WG357414-24	CCV		1		02/23/11 18:35
75	P2.022311.184151	WG357414-25	CCB		1		02/23/11 18:41
76	P2.022311.184833	WG357204-02	Method/Prep Blank	5/50	1		02/23/11 18:48
77	P2.022311.185513	WG357204-03	Laboratory Control S	5/50	1		02/23/11 18:55
78	P2.022311.190156	WG357124-01	TCLP Fluid Blank 1		1		02/23/11 19:01
79	P2.022311.190841	WG357124-02	TCLP Fluid Blank 2		1		02/23/11 19:08
80	P2.022311.191522	L11020492-01	SWMU-57-POND-21711-W	5/50	1		02/23/11 19:15
81	P2.022311.192202	WG357223-03	Post Digestion Spike		1	L11020492-01	02/23/11 19:22
82	P2.022311.192845	WG357223-04	Serial Dilution		5	L11020492-01	02/23/11 19:28
83	P2.022311.193523	WG357204-01	Reference Sample		1	L11020535-01	02/23/11 19:35
84	P2.022311.194202	WG357204-04	Matrix Spike	5/50	1	L11020535-01	02/23/11 19:42
85	P2.022311.194844	WG357204-05	Matrix Spike Duplica	5/50	1	L11020535-01	02/23/11 19:48
86	P2.022311.195529	WG357414-26	CCV		1		02/23/11 19:55
87	P2.022311.200213	WG357414-27	CCB		1		02/23/11 20:02
88	P2.022311.200850	WG357047-02	Method/Prep Blank	50/50	1		02/23/11 20:08
89	P2.022311.201532	WG357047-03	Laboratory Control S	50/50	1		02/23/11 20:15
90	P2.022311.202215	WG357047-01	Reference Sample		1	L11020486-07	02/23/11 20:22
91	P2.022311.202854	WG357047-04	Matrix Spike	50/50	1	L11020486-07	02/23/11 20:28
92	P2.022311.203541	WG357047-05	Matrix Spike Duplica	50/50	1	L11020486-07	02/23/11 20:35
93	P2.022311.204221	L11020475-01	11228-W0001	50/50	1		02/23/11 20:42
94	P2.022311.204950	L11020492-02	SWMU-57-POND-21711-W	50/50	1		02/23/11 20:49
95	P2.022311.205634	WG357117-03	Post Digestion Spike		1	L11020492-02	02/23/11 20:56
96	P2.022311.210314	WG357117-04	Serial Dilution		5	L11020492-02	02/23/11 21:03
97	P2.022311.210956	WG357414-28	CCV		1		02/23/11 21:09
98	P2.022311.211634	WG357414-29	CCB		1		02/23/11 21:16
99	P2.022311.212311	L11020517-01	PSO2-GW-021811	50/50	5		02/23/11 21:23
100	P2.022311.212958	WG357414-30	Interference Check		1		02/23/11 21:29
101	P2.022311.213540	WG357414-31	Interference Check		1		02/23/11 21:35
102	P2.022311.214125	WG357414-32	CCV		1		02/23/11 21:41

Page: 3 Approved: February 24, 2011

Sheri L. Babgard

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 022311HR.CSV

Analyst1: PDM Analyst2: N/A

Method: 6010 SOP: ME600E Rev: 10

Maintenance Log ID: 36542

Calibration Std: STD44101 ICV Std: STD43946 Post Spike: STD39932

ICSA: STD44050 ICSAB: STD44051 Int. Std: STD44052

CCV: STD44102 LLCCV:

Workgroups: 352834,357379,357405,357406,357407,357223,357117,357224

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	P2.022311.214805	WG357414-33	CCB		1		02/23/11 21:48

 Approved: February 24, 2011

Esther L. Babgard

Microbac

Microbac Laboratories Inc.

Data Checklist

Date: 23-FEB-2011
Analyst: PDM
Analyst: NA
Method: 6010
Instrument: PE-ICP2
Curve Workgroup: 357414
Runlog ID: 39181
Analytical Workgroups: 352834,357379,357405,357406,357407,357223,357117,357224

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0522,0523,0524,0542,0439,0568,0569
	0571,0574,0579,0492,0475,0517
Client Forms	X
Level X	
Level 3	0568,0569,0579,0517
Level 4	0542,0571,0574,0492,0475
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	PDM
Secondary Reviewer	SLP
Comments	

Primary Reviewer:
24-FEB-2011
Pierce Morris

Secondary Reviewer:
24-FEB-2011
Sheri L. Babcock

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-24-2011 13:00:44

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method 6010B AAB#: WG357407

Login Number: L11020574

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-1DM-21811-W	01	02/18/11					02/23/11	4.7	180		02/23/11	5.1	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1928274
Report generated 02/24/2011 09:06

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L11020574	Work Group:	WG357407
Blank File ID:	P2.022311.164259	Blank Sample ID:	WG357312-03
Prep Date:	02/23/11 07:36	Instrument ID:	PE-ICP2
Analyzed Date:	02/23/11 16:42	Method:	6010B
Analyst:	PDM		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357312-04	P2.022311.164940	02/23/11 16:49	01
SWMU-57-1DM-21811-W	L11020574-01	P2.022311.180322	02/23/11 18:03	01

Report Name: BLANK_SUMMARY
PDF File ID: 1928275
Report generated 02/24/2011 09:06

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L11020574 Prep Date:02/23/11 07:36 Sample ID:WG357312-03
Instrument ID:PE-ICP2 Run Date:02/23/11 16:42 Prep Method:3005A
File ID:P2.022311.164259 Analyst:PDM Method:6010B
Workgroup (AAB#):WG357407 Matrix:Water Units:mg/L
Contract #: Cal ID:PE-ICP-23-FEB-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Barium, Total	0.00500	0.0100	0.00500	1	U
Beryllium, Total	0.00500	0.0100	0.00500	1	U
Calcium, Total	0.100	0.200	0.100	1	U
Cobalt, Total	0.0100	0.0200	0.0100	1	U
Copper, Total	0.0100	0.0200	0.0100	1	U
Iron, Total	0.0500	0.100	0.0500	1	U
Lead, Total	0.00250	0.00500	0.00250	1	U
Magnesium, Total	0.250	0.500	0.250	1	U
Manganese, Total	0.00500	0.0100	0.00500	1	U
Nickel, Total	0.0200	0.0400	0.0200	1	U
Potassium, Total	0.500	1.00	0.500	1	U
Silver, Total	0.00500	0.0100	0.00500	1	U
Sodium, Total	0.250	0.500	0.250	1	U
Vanadium, Total	0.00500	0.0100	0.00500	1	U
Zinc, Total	0.0100	0.0200	0.0100	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1928276
24-FEB-2011 09:06

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020574 Run Date: 02/23/2011 Sample ID: WG357312-04
Instrument ID: PE-ICP2 Run Time: 16:49 Prep Method: 3005A
File ID: P2.022311.164940 Analyst: PDM Method: 6010B
Workgroup (AAB#): WG357407 Matrix: Water Units: mg/L
QC Key: DOD4 Lot#: STD39933 Cal ID: PE-ICP-23-FEB-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Total	5.00	4.94	98.9	80 - 120	
Barium, Total	0.500	0.488	97.6	80 - 120	
Beryllium, Total	0.0250	0.0237	95.0	80 - 120	
Calcium, Total	5.00	4.86	97.2	80 - 120	
Cobalt, Total	0.100	0.0942	94.2	80 - 120	
Copper, Total	0.250	0.235	94.0	80 - 120	
Iron, Total	2.00	1.92	95.8	80 - 120	
Lead, Total	0.250	0.243	97.0	80 - 120	
Magnesium, Total	5.00	4.91	98.3	80 - 120	
Manganese, Total	0.250	0.247	99.0	80 - 120	
Nickel, Total	0.250	0.245	98.1	80 - 120	
Potassium, Total	25.0	24.1	96.2	80 - 120	
Silver, Total	0.200	0.192	96.1	80 - 120	
Sodium, Total	25.0	23.9	95.6	80 - 120	
Vanadium, Total	0.500	0.484	96.9	80 - 120	
Zinc, Total	0.500	0.477	95.4	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1928277
Report generated: 02/24/2011 09:06

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11020574 Cal ID:PE-ICP2- Worknum:WG357407

Instrument ID:PE-ICP2 Contract #: Method:6010B

Parent ID:WG357312-01 File ID:P2.022311.165621 Dil:1 Matrix:WATER

Sample ID:WG357312-05 MSD File ID:P2.022311.170300 Dil:1 Units:mg/L

Sample ID:WG357312-06 MS File ID:P2.022311.170944 Dil:1

Analyte	Parent	MSD Spiked	MSD Found	MSD %Rec	MS Spiked	MS Found	MS %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum	0.0700	5.00	4.90	96.6	5.00	4.87	96.1	0.551	80 - 120	20	
Barium	0.0196	0.500	0.507	97.4	0.500	0.508	97.6	0.181	80 - 120	20	
Beryllium	ND	0.0250	0.0244	97.8	0.0250	0.0243	97.1	0.682	80 - 120	20	
Calcium	51.2	5.00	57.4	123	5.00	56.7	110	1.17	80 - 120	20	*
Cobalt	ND	0.100	0.0932	93.2	0.100	0.0940	94.0	0.840	80 - 120	20	
Copper	ND	0.250	0.235	94.1	0.250	0.233	93.1	1.09	80 - 120	20	
Iron	0.624	2.00	2.49	93.3	2.00	2.52	94.6	1.01	80 - 120	20	
Lead	ND	0.250	0.242	96.8	0.250	0.242	96.9	0.0904	80 - 120	20	
Magnesium	8.84	5.00	13.3	89.9	5.00	13.5	92.5	0.951	80 - 120	20	
Manganese	0.168	0.250	0.416	99.4	0.250	0.417	99.7	0.163	80 - 120	20	
Nickel	ND	0.250	0.241	96.2	0.250	0.242	97.0	0.781	80 - 120	20	
Potassium	2.74	25.0	26.8	96.1	25.0	26.8	96.1	0.00808	80 - 120	20	
Silver	ND	0.200	0.196	97.8	0.200	0.193	96.6	1.15	80 - 120	20	
Sodium	8.48	25.0	32.4	95.6	25.0	32.4	95.5	0.111	80 - 120	20	
Vanadium	ND	0.500	0.493	98.6	0.500	0.495	98.9	0.306	80 - 120	20	
Zinc	ND	0.500	0.477	95.5	0.500	0.479	95.7	0.297	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008

PDF File ID:1928278

Report generated 02/24/2011 09:06

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11020574 Cal ID:PE-ICP2- Worknum:WG357407

Instrument ID:PE-ICP2 Contract #: Method:6010B

Parent ID:WG357312-02 File ID:P2.022311.171633 Dil:1 Matrix:WATER

Sample ID:WG357312-07 MSD File ID:P2.022311.172312 Dil:1 Units:mg/L

Sample ID:WG357312-08 MS File ID:P2.022311.172955 Dil:1

Analyte	Parent	MSD Spiked	MSD Found	MSD %Rec	MS Spiked	MS Found	MS %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum	ND	5.00	4.84	96.9	5.00	4.74	94.8	2.11	80 - 120	20	
Barium	0.00670	0.500	0.488	96.3	0.500	0.480	94.6	1.77	80 - 120	20	
Beryllium	ND	0.0250	0.0241	96.3	0.0250	0.0239	95.6	0.772	80 - 120	20	
Calcium	61.2	5.00	68.7	150	5.00	66.6	108	3.09	80 - 120	20	*
Cobalt	ND	0.100	0.0927	92.7	0.100	0.0901	90.1	2.85	80 - 120	20	
Copper	ND	0.250	0.227	91.0	0.250	0.228	91.1	0.155	80 - 120	20	
Iron	0.221	2.00	2.18	98.2	2.00	2.09	93.5	4.42	80 - 120	20	
Lead	ND	0.250	0.242	96.8	0.250	0.237	94.7	2.21	80 - 120	20	
Magnesium	19.3	5.00	24.4	102	5.00	23.5	83.0	3.98	80 - 120	20	
Manganese	0.138	0.250	0.389	100	0.250	0.379	96.3	2.64	80 - 120	20	
Nickel	ND	0.250	0.239	95.7	0.250	0.233	93.1	2.69	80 - 120	20	
Potassium	1.44	25.0	25.6	96.8	25.0	25.1	94.7	2.10	80 - 120	20	
Silver	ND	0.200	0.192	96.0	0.200	0.190	95.2	0.862	80 - 120	20	
Sodium	13.2	25.0	37.9	99.0	25.0	37.3	96.4	1.77	80 - 120	20	
Vanadium	ND	0.500	0.485	97.1	0.500	0.477	95.4	1.74	80 - 120	20	
Zinc	ND	0.500	0.476	95.2	0.500	0.466	93.2	2.13	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008

PDF File ID:1928278

Report generated 02/24/2011 09:06

Microbac Laboratories Inc.
Serial Dilution Report

Login: L11020574 **Worknum:** WG357407
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG357407-02 **File ID:** P2.022311.181457 **Dil:** 5 **Units:** mg/L
Sample: L11020574-01 **File ID:** P2.022311.180322 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	13.4		13.4		0.00	
Barium	.0433	X	.0412	F	4.85	
Beryllium	ND	U	ND	U		
Calcium	16.8		16.6		1.19	
Cobalt	ND	U	ND	U		
Copper	.0119	F	ND	U		
Iron	10.3		10.5		1.94	
Lead	.0124	X	.01675	F	35.10	
Magnesium	9.59	X	9.85	X	2.71	
Manganese	.241	X	.2405	X	0.21	
Nickel	ND	U	ND	U		
Potassium	10.3	X	10.6	X	2.91	
Silver	ND	U	ND	U		
Sodium	37.5		37.05		1.20	
Vanadium	.0256	X	ND	U		
Zinc	.248	X	.234	X	5.65	

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 50 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 50 times the MDL.

SERIAL_DIL - Modified 09/22/2008
PDF File ID: 1928272
02/24/2011 09:06

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11020574 **Worknum:** WG357407
Instrument ID: PE-ICP2 **Method:** 6010B
Post Spike ID: WG357407-01 **File ID:** P2.022311.180908 **Dil:** 1 **Units:** mg/L
Sample ID: L11020574-01 **File ID:** P2.022311.180322 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	17.4		13.4		5	106.8	75 - 125	
BARIUM	0.554		0.0433		.5	103.0	75 - 125	
BERYLLIUM	0.0256		0	U	.025	102.3	75 - 125	
CALCIUM	21.2		16.8		5	120.7	75 - 125	
COBALT	0.102		0	U	.1	102.1	75 - 125	
COPPER	0.258		0.0119	F	.25	99.1	75 - 125	
IRON	11.5		10.3		2	111.1	75 - 125	
LEAD	0.264		0.0124		.25	101.3	75 - 125	
MAGNESIUM	13.8		9.59		5	103.8	75 - 125	
MANGANESE	0.481		0.241		.25	105.9	75 - 125	
NICKEL	0.264		0	U	.25	105.8	75 - 125	
POTASSIUM	34.5		10.3		25	100.8	75 - 125	
SILVER	0.202		0	U	.2	101.0	75 - 125	
SODIUM	60.2		37.5		25	105.6	75 - 125	
VANADIUM	0.534		0.0256		.5	102.2	75 - 125	
ZINC	0.737		0.248		.5	102.8	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1928273
Report generated: 02/24/2011 09:06

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L11020574**	Workgroup (AAB#):	**WG357407**
Analytical Method:	**6010B**	Instrument ID:	**PE-ICP2**
ICAL Worknum:	**WG357414**	Initial Calibration Date:	**23-FEB-2011 09:44**

	WG357414-01		WG357414-02		WG357414-03		WG357414-04		WG357414-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	-201	.1	526	.2	990	10	47600	20	92900	.999923	
BARIUM	0	-40.5	.01	623	.02	1210	1	58900	2	119000	.999982	
BERYLLIUM	0	-580	.0005	287	.001	576	.05	28800	.1	58100	.999988	
CALCIUM	0	-44.3	NA	NA	.2	24.6	10	1050	20	2150	.999904	
COBALT	0	-20.3	.002	29.8	.004	76.9	.1	3870	.4	7850	.998293	
COPPER	0	-1270	.005	710	.01	1500	.5	71800	1	147000	.9996	
IRON	0	1.34	.04	17.7	.08	34.9	4	1680	8	3410	.999961	
LEAD	0	37.4	.005	33.8	.01	65.9	.5	2990	1	6050	.999794	
MAGNESIUM	0	2.42	.1	84.0	.2	159	10	7770	20	15800	.999902	
MANGANESE	0	216	.005	2410	.01	4590	.5	225000	1	452000	.999953	
NICKEL	0	-0.328	.005	178	.01	352	.5	17300	1	34700	.999996	
POTASSIUM	0	225	.5	1190	1	2420	50	124000	100	246000	1	
SILVER	0	-1460	.004	954	.008	1640	.4	79800	.8	162000	.999059	
SODIUM	0	887	.5	6710	1	13100	50	646000	100	1260000	1	
VANADIUM	0	4150	.01	1720	.02	3090	1	149000	2	306000	.999583	
ZINC	0	330	.01	355	.02	650	1	33700	2	67500	.999322	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

INT_CAL_ICP - Modified 03/06/2008
PDF File ID 1928281
Report generated: 24-FEB-2011 09:07

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11020574 Run Date: 02/23/2011 Sample ID: WG357414-07
Instrument ID: PE-ICP2 Run Time: 09:57 Method: 6010B
File ID: P2.022311.095752 Analyst: PDM Units: mg/L
Workgroup (AAB#): WG357407 Cal ID: PE-ICP2 - 23-FEB-11
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ALUMINUM	.05	.1	.05	U
BARIUM	.005	.01	.005	U
BERYLLIUM	.005	.01	.005	U
CALCIUM	.1	.2	.1	U
COBALT	.01	.02	.01	U
COPPER	.01	.02	.01	U
IRON	.05	.1	.05	U
LEAD	.0025	.005	.0025	U
MAGNESIUM	.25	.5	.25	U
MANGANESE	.005	.01	.005	U
NICKEL	.02	.04	.02	U
POTASSIUM	.5	1	.5	U
SILVER	.005	.01	.005	U
SODIUM	.25	.5	.25	U
VANADIUM	.005	.01	.005	U
ZINC	.01	.02	.01	U

U = Result is less than 2 x MDL
F = Result is between MDL and 2 x MDL
* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1928283
Report generated 02/24/2011 09:07

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020574 Run Date: 02/23/2011 Sample ID: WG357414-11

Instrument ID: PE-ICP2 Run Time: 10:22 Method: 6010B

File ID: P2.022311.102234 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357407 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1928286
Report generated 02/24/2011 09:07

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020574 Run Date: 02/23/2011 Sample ID: WG357414-21

Instrument ID: PE-ICP2 Run Time: 16:36 Method: 6010B

File ID: P2.022311.163616 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357407 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1928286
Report generated 02/24/2011 09:07

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020574 Run Date: 02/23/2011 Sample ID: WG357414-23

Instrument ID: PE-ICP2 Run Time: 17:56 Method: 6010B

File ID: P2.022311.175639 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357407 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1928286
Report generated 02/24/2011 09:07

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020574 Run Date: 02/23/2011 Sample ID: WG357414-25

Instrument ID: PE-ICP2 Run Time: 18:41 Method: 6010B

File ID: P2.022311.184151 Analyst: PDM Units: mg/L

Workgroup (AAB#): WG357407 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1928286
Report generated 02/24/2011 09:07

Microbac Laboratories Inc.
INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11020574 Run Date: 02/23/2011 Sample ID: WG357414-06
Instrument ID: PE-ICP2 Run Time: 09:51 Method: 6010B
File ID: P2.022311.095111 Analyst: PDM Units: mg/L
Workgroup (AAB#): WG357407 Cal ID: PE-ICP - 23-FEB-11
QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Aluminum		10	10.1	101	90 - 110	
Barium		1	1.01	101	90 - 110	
Beryllium		.05	0.0495	99.1	90 - 110	
Calcium		10	10.3	103	90 - 110	
Cobalt		.2	0.192	96.1	90 - 110	
Copper		.5	0.496	99.2	90 - 110	
Iron		4	3.93	98.2	90 - 110	
Lead		.5	0.501	100	90 - 110	
Magnesium		10	9.87	98.7	90 - 110	
Manganese		.5	0.516	103	90 - 110	
Nickel		.5	0.504	101	90 - 110	
Potassium		50	49.4	98.7	90 - 110	
Silver		.4	0.403	101	90 - 110	
Sodium		50	48.2	96.3	90 - 110	
Vanadium		1	0.984	98.4	90 - 110	
Zinc		1	1.00	100	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 1928282
Report generated 02/24/2011 09:07

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020574 Run Date: 02/23/2011 Sample ID: WG357414-10

Instrument ID: PE-ICP2 Run Time: 10:15 Method: 6010B

File ID: P2.022311.101555 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357407 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.0	mg/L	100	90 - 110		
Barium		1.00	0.988	mg/L	98.8	90 - 110		
Beryllium		0.0500	0.0493	mg/L	98.7	90 - 110		
Calcium		10.0	9.93	mg/L	99.3	90 - 110		
Cobalt		0.200	0.190	mg/L	95.2	90 - 110		
Copper		0.500	0.480	mg/L	96.1	90 - 110		
Iron		4.00	3.97	mg/L	99.3	90 - 110		
Lead		0.500	0.492	mg/L	98.3	90 - 110		
Magnesium		10.0	10.0	mg/L	100	90 - 110		
Manganese		0.500	0.498	mg/L	99.6	90 - 110		
Nickel		0.500	0.490	mg/L	98.0	90 - 110		
Potassium		50.0	49.3	mg/L	98.6	90 - 110		
Silver		0.400	0.393	mg/L	98.4	90 - 110		
Sodium		50.0	49.2	mg/L	98.3	90 - 110		
Vanadium		1.00	0.982	mg/L	98.2	90 - 110		
Zinc		1.00	0.992	mg/L	99.2	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1928285

Report generated 02/24/2011 09:07

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020574 Run Date: 02/23/2011 Sample ID: WG357414-20

Instrument ID: PE-ICP2 Run Time: 16:29 Method: 6010B

File ID: P2.022311.162910 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357407 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.87	mg/L	98.7	90 - 110		
Barium		1.00	0.990	mg/L	99.0	90 - 110		
Beryllium		0.0500	0.0486	mg/L	97.3	90 - 110		
Calcium		10.0	9.75	mg/L	97.5	90 - 110		
Cobalt		0.200	0.189	mg/L	94.7	90 - 110		
Copper		0.500	0.474	mg/L	94.7	90 - 110		
Iron		4.00	3.81	mg/L	95.3	90 - 110		
Lead		0.500	0.490	mg/L	97.9	90 - 110		
Magnesium		10.0	9.71	mg/L	97.1	90 - 110		
Manganese		0.500	0.499	mg/L	99.9	90 - 110		
Nickel		0.500	0.494	mg/L	98.9	90 - 110		
Potassium		50.0	48.7	mg/L	97.4	90 - 110		
Silver		0.400	0.388	mg/L	96.9	90 - 110		
Sodium		50.0	47.8	mg/L	95.6	90 - 110		
Vanadium		1.00	0.986	mg/L	98.6	90 - 110		
Zinc		1.00	0.993	mg/L	99.3	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1928285

Report generated 02/24/2011 09:07

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020574 Run Date: 02/23/2011 Sample ID: WG357414-22

Instrument ID: PE-ICP2 Run Time: 17:49 Method: 6010B

File ID: P2.022311.174959 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357407 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.78	mg/L	97.8	90 - 110		
Barium		1.00	0.985	mg/L	98.5	90 - 110		
Beryllium		0.0500	0.0496	mg/L	99.2	90 - 110		
Calcium		10.0	9.98	mg/L	99.8	90 - 110		
Cobalt		0.200	0.189	mg/L	94.3	90 - 110		
Copper		0.500	0.485	mg/L	97.0	90 - 110		
Iron		4.00	3.75	mg/L	93.8	90 - 110		
Lead		0.500	0.487	mg/L	97.3	90 - 110		
Magnesium		10.0	9.55	mg/L	95.5	90 - 110		
Manganese		0.500	0.497	mg/L	99.3	90 - 110		
Nickel		0.500	0.492	mg/L	98.5	90 - 110		
Potassium		50.0	48.4	mg/L	96.9	90 - 110		
Silver		0.400	0.397	mg/L	99.3	90 - 110		
Sodium		50.0	48.2	mg/L	96.5	90 - 110		
Vanadium		1.00	0.979	mg/L	97.9	90 - 110		
Zinc		1.00	0.985	mg/L	98.5	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1928285

Report generated 02/24/2011 09:07

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020574 Run Date: 02/23/2011 Sample ID: WG357414-24

Instrument ID: PE-ICP2 Run Time: 18:35 Method: 6010B

File ID: P2.022311.183512 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357407 Cal ID: PE-ICP - 23-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.91	mg/L	99.1	90 - 110		
Barium		1.00	0.990	mg/L	99.0	90 - 110		
Beryllium		0.0500	0.0499	mg/L	99.7	90 - 110		
Calcium		10.0	9.96	mg/L	99.6	90 - 110		
Cobalt		0.200	0.189	mg/L	94.7	90 - 110		
Copper		0.500	0.484	mg/L	96.8	90 - 110		
Iron		4.00	3.83	mg/L	95.9	90 - 110		
Lead		0.500	0.488	mg/L	97.6	90 - 110		
Magnesium		10.0	9.76	mg/L	97.6	90 - 110		
Manganese		0.500	0.498	mg/L	99.5	90 - 110		
Nickel		0.500	0.492	mg/L	98.3	90 - 110		
Potassium		50.0	48.9	mg/L	97.7	90 - 110		
Silver		0.400	0.396	mg/L	99.1	90 - 110		
Sodium		50.0	48.8	mg/L	97.6	90 - 110		
Vanadium		1.00	0.982	mg/L	98.2	90 - 110		
Zinc		1.00	0.990	mg/L	99.0	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1928285

Report generated 02/24/2011 09:07

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11020574 **Workgroup (AAB#):** WG357407
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG357414-08 **File ID:** P2.022311.100429 **Units:** mg/L
Sol. AB : WG357414-09 **File ID:** P2.022311.101011 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	235	94.0	250	248	99.2	
Barium	NS	-0.000700	NS	0.250	0.254	102	
Beryllium	NS	0	NS	0.250	0.257	103	
Calcium	250	277	111	250	277	111	
Cobalt	NS	-0.000910	NS	0.250	0.233	93.2	
Copper	NS	0.000790	NS	0.250	0.252	101	
Iron	100	93.8	93.8	100	97.7	97.7	
Lead	NS	0.00117	NS	0.500	0.494	98.8	
Magnesium	250	240	96.0	250	251	100	
Manganese	NS	-0.0000400	NS	0.250	0.254	102	
Nickel	NS	-0.00212	NS	0.500	0.478	95.6	
Potassium	NS	0.0518	NS	5.00	5.21	104	
Silver	NS	-0.00133	NS	0.500	0.520	104	
Sodium	NS	0.0441	NS	5.00	5.03	101	
Vanadium	NS	0.00194	NS	0.250	0.253	101	
Zinc	NS	0.00110	NS	0.500	0.477	95.4	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 1928284
Report generated 02/24/2011 09:07

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020574 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	AG	AL	AS	B	BA
ALUMINUM	396.15	0	0	0.206	0	0
ANTIMONY	206.84	0	0	-0.740	0	0
ARSENIC	188.98	0	0.0893	0	0	0
BARIUM	233.53	0	0.00932	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	1.12	0	0	0
CADMIUM	228.80	0	0	6.68	0	0
CALCIUM	227.55	0	0.195	10.0	0	0
CHROMIUM	267.72	0	0.0250	0	0	0
COBALT	228.62	0	0	0	0	0.337
COPPER	327.39	0	0	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	0	-0.0210	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-0.185	0	-0.231	-0.0949	-0.230
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0.111	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0.200	0	0.0400
ZINC	206.20	0	0	0	0	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1928280
Report generated: 02/24/2011 09:06

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020574 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	BE	CA	CD	CO	CR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	0	6.33
ARSENIC	188.98	0	0.0200	-0.0875	0	-5.90
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	-0.0733
BORON	249.68	0	0	24.1	5.90	1.50
CADMIUM	228.80	0	0	0	-10.7	0
CALCIUM	227.55	0	0	0	300	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	-0.244
COPPER	327.39	0	0	0	0.380	-0.0400
IRON	239.56	0	0	0	1.91	0
LEAD	220.35	0	-0.0480	0	0.116	-0.0700
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-1.04	0	-0.755	-0.0418	-0.110
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	-0.566	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.250	0	-1.52	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0.0900	0	3.48	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	-0.0100	0	0	0.297
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	0	0	0	0	-3.64

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1928280
Report generated: 02/24/2011 09:06

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020574 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	CU	FE	K	LI	MG
ALUMINUM	396.15	0	-0.0800	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	-0.139	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0.195	0	0	0
BORON	249.68	0	-4.66	0	0	0
CADMIUM	228.80	0	0.00130	0	0	0
CALCIUM	227.55	-2.00	-5.00	0	0	0.104
CHROMIUM	267.72	0	-0.000800	0	0	0
COBALT	228.62	0	0.0262	0	0	0
COPPER	327.39	0	-0.115	0	0.154	0
IRON	239.56	0	0	0	0	0.0276
LEAD	220.35	0.740	0.0440	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0.540	0	0	0
MANGANESE	257.61	-0.0457	-0.0453	-0.0181	-0.794	0.0147
MOLYBDENUM	202.03	0	-0.0494	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.369	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0.0717	0.0498	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0.120	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.134	0	0	0
ZINC	206.20	-0.200	0.0230	0	0	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1928280
Report generated: 02/24/2011 09:06

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020574 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	MN	MO	NA	NI	PB
ALUMINUM	396.15	0	13.5	0	0	0
ANTIMONY	206.84	0	-7.69	0	0	0
ARSENIC	188.98	0	6.00	0	0	0
BARIUM	233.53	0	-0.548	0	0	0
BERYLLIUM	234.86	-0.131	-1.50	0	-0.00974	0
BORON	249.68	0	-2.20	0	0	0
CADMIUM	228.80	0	-0.00900	0	-0.398	0
CALCIUM	227.55	0	-8.00	0	-900	0
CHROMIUM	267.72	0.434	-0.00100	0	0	0
COBALT	228.62	0	-0.125	0	0.129	0
COPPER	327.39	0	-0.0774	0	0.150	0.257
IRON	239.56	0.480	0	0	0	0.407
LEAD	220.35	0.100	-5.00	0	0.100	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-5.00	0	0	0.0252
MANGANESE	257.61	0	-0.0482	-0.00916	-0.0340	-0.0413
MOLYBDENUM	202.03	-0.209	0	0	0.120	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	1.00	0	0
SELENIUM	196.03	0.451	0.300	0	0.0940	0
SILICON	251.61	0	15.0	0	0	0
SILVER	328.07	0.130	0.100	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	-1.50	1.20	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.578	0	0	0
ZINC	206.20	0	0.180	0	-0.200	-0.100

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1928280
Report generated: 02/24/2011 09:06

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020574 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	SB	SE	SI	SN	SR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	0	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	0	0	0	0
CADMIUM	228.80	0	0	0	0	0
CALCIUM	227.55	0	0	2.79	0	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	0
COPPER	327.39	0	0.148	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	-0.0100	0	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-0.0924	0	0	0
MANGANESE	257.61	-0.0505	-0.0281	-0.185	-0.0445	-0.625
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	-0.0500	-0.0100	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0.200
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	-0.300	0	0	0	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1928280
Report generated: 02/24/2011 09:06

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11020574 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	TI	TL	V	ZN
ALUMINUM	396.15	0	0	0	0
ANTIMONY	206.84	0	0	0.000100	0
ARSENIC	188.98	0	0	0.0930	0
BARIUM	233.53	0	0	-2.29	0
BERYLLIUM	234.86	0	0	0	0
BORON	249.68	0	0	0	0
CADMIUM	228.80	0	0	0.0800	0
CALCIUM	227.55	0	0	60.0	0
CHROMIUM	267.72	0	0	-0.567	-0.0400
COBALT	228.62	2.21	0	0	0
COPPER	327.39	-1.05	0	-0.700	-0.0613
IRON	239.56	0	0	0	0
LEAD	220.35	0	0	0.0560	0
LITHIUM	670.78	0	0	0	0
MAGNESIUM	279.08	0	0	0	0
MANGANESE	257.61	-0.00931	-0.0414	-0.0601	-0.0552
MOLYBDENUM	202.03	0	0	-0.288	0
NICKEL	231.60	0	0.617	0	0
POTASSIUM	766.49	0	0	0	0
SELENIUM	196.03	-0.220	0	-0.126	0
SILICON	251.61	0	0	0	0
SILVER	328.07	0	0	-1.67	0
SODIUM	589.59	0	0	0	0
STRONTIUM	407.77	0	0	0	0
THALLIUM	190.80	-12.0	0.617	-1.41	0
TIN	189.93	0	0	0	0
TITANIUM	334.94	0	0	0	0
VANADIUM	290.88	0	0	0	0
ZINC	206.20	0	0	-0.100	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1928280
Report generated: 02/24/2011 09:06

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L11020574 **Date:** 01/12/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Integration Time (Sec.)	Concentration (mg/L)
Aluminum	10.00	450.0
Antimony	10.00	45.0
Arsenic	10.00	9.0
Barium	10.00	9.0
Beryllium	10.00	4.5
Boron	10.00	45.0
Cadmium	10.00	9.0
Calcium	10.00	450.0
Chromium	10.00	45.0
Cobalt	10.00	45.0
Copper	10.00	45.0
Iron	10.00	450.0
Lead	10.00	90.0
Lithium	10.00	0.9
Magnesium	10.00	450.0
Manganese	10.00	27.0
Molybdenum	10.00	45.0
Nickel	10.00	45.0
Potassium	10.00	72.0
Selenium	10.00	45.0
Silicon	10.00	36.0
Silver	10.00	9.0
Sodium	10.00	180.0
Strontium	10.00	4.5
Thallium	10.00	45.0
Tin	10.00	45.0
Titanium	10.00	45.0
Vanadium	10.00	45.0
Zinc	10.00	45.0

Comments:
All analytes passed acceptance criteria at the specified concentration.

LINEAR_RANGE - Modified 03/06/2008
PDF File ID: 1928279
Report generated: 02/24/2011 09:06

2.1.1.3 Raw Data

==========

Analysis Begun

Start Time: 2/23/2011 2:34:58 PM **Plasma On Time: 2/23/2011 7:13:52 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\WEDNESDAY1.sif
Batch ID:
Results Data Set: 022311H2
Results Library: C:\pe\peicp2\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 59**
Sample ID: PBW 81 WG357296-02 **Date Collected: 2/23/2011 2:35:00 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 81 WG357296-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: PBW 81 WG357296-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5150243.3						57428.53	1.12%
YRADIAL	300809.7						9507.11	3.16%
Ga 417.206	1389964.2						22390.64	1.61%
GaRADIAL	64722.3						1947.01	3.01%
Ag 328.068†	-93.2	-0.00118	mg/L	0.000855	-0.00118	mg/L	0.000855	72.45%
Al 396.153†	86.4	0.00658	mg/L	0.003706	0.00658	mg/L	0.003706	56.36%
As 188.979†	0.5	0.00087	mg/L	0.001699	0.00087	mg/L	0.001699	196.02%
Ba 233.527†	20.1	-0.00017	mg/L	0.000043	-0.00017	mg/L	0.000043	24.74%
Be 234.861†	39.5	0.00007	mg/L	0.000028	0.00007	mg/L	0.000028	39.56%
B 249.677†	-240.5	-0.00105	mg/L	0.000308	-0.00105	mg/L	0.000308	29.36%
Ca 227.546†	6.0	0.0244	mg/L	0.05571	0.0244	mg/L	0.05571	228.61%
Cd 228.802†	-2.0	-0.00005	mg/L	0.000059	-0.00005	mg/L	0.000059	112.15%
Co 228.616†	-6.8	0.00008	mg/L	0.000205	0.00008	mg/L	0.000205	243.80%
Cr 267.716†	-17.1	-0.00037	mg/L	0.000115	-0.00037	mg/L	0.000115	30.94%
Cu 327.393†	39.2	0.00034	mg/L	0.000357	0.00034	mg/L	0.000357	106.22%
Fe 239.562†	2.9	0.00475	mg/L	0.001944	0.00475	mg/L	0.001944	40.97%
Mg 279.077†	-1.8	-0.00951	mg/L	0.006026	-0.00951	mg/L	0.006026	63.34%
Mn 257.610†	31.3	-0.00028	mg/L	0.000025	-0.00028	mg/L	0.000025	8.88%
Mo 202.031†	1.5	-0.00067	mg/L	0.000128	-0.00067	mg/L	0.000128	19.24%
Ni 231.604†	4.0	-0.00003	mg/L	0.000220	-0.00003	mg/L	0.000220	679.93%
Pb 220.353†	6.8	0.00047	mg/L	0.001124	0.00047	mg/L	0.001124	237.38%
Sb 206.836†	-0.1	-0.00022	mg/L	0.001115	-0.00022	mg/L	0.001115	517.12%
Se 196.026†	-5.9	0.00012	mg/L	0.002698	0.00012	mg/L	0.002698	>999.9%
Si 251.611†	58.4	0.00025	mg/L	0.000350	0.00025	mg/L	0.000350	142.08%
Sn 189.927†	-77.0	-0.0115	mg/L	0.00068	-0.0115	mg/L	0.00068	5.93%
Ti 334.940†	39.7	-0.00011	mg/L	0.000074	-0.00011	mg/L	0.000074	67.88%
Tl 190.801†	1.5	-0.00211	mg/L	0.002843	-0.00211	mg/L	0.002843	134.99%
V 290.880†	-1.0	-0.00133	mg/L	0.001066	-0.00133	mg/L	0.001066	79.89%
Zn 206.200†	-118.6	-0.00400	mg/L	0.000116	-0.00400	mg/L	0.000116	2.91%
K 766.490†	-66.6	-0.00678	mg/L	0.008622	-0.00678	mg/L	0.008622	127.21%
Na 589.592†	-167.0	-0.0118	mg/L	0.00755	-0.0118	mg/L	0.00755	63.96%
Sr 407.771†	199.4	-0.00044	mg/L	0.000016	-0.00044	mg/L	0.000016	3.72%
Li 670.784†	-76.4	-0.00255	mg/L	0.001509	-0.00255	mg/L	0.001509	59.25%

User canceled analysis.

Approved: February 24, 2011

Pierre Morris

Reprocessing Begun
Logged In Analyst: peicp2 Technique: ICP Continuous

Results Data Set (original): 022311H2
Results Library (original): C:\pe\peicp2\Results\Results.mdb
Results Data Set (reprocessed): 022311HR
Results Library (reprocessed): C:\pe\peicp2\Results\Results.mdb

Sequence No.: 1 Autosampler Location: 1
Sample ID: S0 Date Collected: 2/23/2011 9:17:44 AM
Analyst: Data Type: Reprocessed on 2/23/2011 2:45:43 PM
Logged In Analyst (Original) : peicp2
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: S0

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	4915315.7	54071.43	1.10%		
YRADIAL	283340.1	3177.33	1.12%		
Ga 417.206	1275429.3	9655.61	0.76%		
GaRADIAL	60879.6	751.31	1.23%		
Ag 328.068†	-1458.5	208.35	14.29%	[0.00]	mg/L
Al 396.153†	-201.2	32.00	15.91%	[0.00]	mg/L
As 188.979†	2.8	3.63	127.64%	[0.00]	mg/L
Ba 233.527†	-40.5	4.36	10.76%	[0.00]	mg/L
Be 234.861†	-580.0	19.07	3.29%	[0.00]	mg/L
B 249.677†	949.8	44.26	4.66%	[0.00]	mg/L
Ca 227.546†	-44.3	5.10	11.53%	[0.00]	mg/L
Cd 228.802†	24.3	2.68	11.00%	[0.00]	mg/L
Co 228.616†	-20.3	1.27	6.28%	[0.00]	mg/L
Cr 267.716†	-34.9	10.43	29.88%	[0.00]	mg/L
Cu 327.393†	-1271.2	52.20	4.11%	[0.00]	mg/L
Fe 239.562†	1.3	3.79	283.47%	[0.00]	mg/L
Mg 279.077†	2.4	9.14	377.13%	[0.00]	mg/L
Mn 257.610†	215.5	13.56	6.29%	[0.00]	mg/L
Mo 202.031†	-34.1	7.58	22.25%	[0.00]	mg/L
Ni 231.604†	-0.3	13.22	>999.9%	[0.00]	mg/L
Pb 220.353†	37.4	4.70	12.58%	[0.00]	mg/L
Sb 206.836†	17.1	1.10	6.45%	[0.00]	mg/L
Se 196.026†	9.5	3.91	41.11%	[0.00]	mg/L
Si 251.611†	316.5	6.49	2.05%	[0.00]	mg/L
Sn 189.927†	115.9	3.50	3.02%	[0.00]	mg/L
Ti 334.940†	-491.9	91.19	18.54%	[0.00]	mg/L
Tl 190.801†	-34.0	1.76	5.17%	[0.00]	mg/L
V 290.880†	4152.8	121.39	2.92%	[0.00]	mg/L
Zn 206.200†	330.2	12.24	3.71%	[0.00]	mg/L
K 766.490†	225.3	117.79	52.28%	[0.00]	mg/L
Na 589.592†	887.0	63.26	7.13%	[0.00]	mg/L
Sr 407.771†	-686.7	93.59	13.63%	[0.00]	mg/L
Li 670.784†	167.9	51.40	30.62%	[0.00]	mg/L

Sequence No.: 2 Autosampler Location: 2
Sample ID: S1 Date Collected: 2/23/2011 9:24:21 AM
Analyst: Data Type: Reprocessed on 2/23/2011 2:45:45 PM
Logged In Analyst (Original) : peicp2
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: S1

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Approved: February 24, 2011
Pierre Morris

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4871784.0	79988.54	1.64%		
YRADIAL	287497.3	3746.04	1.30%		
Ga 417.206	1275556.0	32097.65	2.52%		
GaRADIAL	61454.2	388.93	0.63%		
Ag 328.068†	953.8	96.56	10.12%	[0.0040]	mg/L
Al 396.153†	525.9	51.22	9.74%	[0.10]	mg/L
Ba 233.527†	622.6	9.51	1.53%	[0.010]	mg/L
Be 234.861†	286.8	11.26	3.93%	[0.0005]	mg/L
Cd 228.802†	7.9	3.23	41.15%	[0.00050]	mg/L
Co 228.616†	29.8	2.28	7.63%	[0.0020]	mg/L
Cr 267.716†	602.0	17.85	2.96%	[0.0050]	mg/L
Cu 327.393†	710.1	22.34	3.15%	[0.0050]	mg/L
Fe 239.562†	17.7	1.06	5.96%	[0.040]	mg/L
Mg 279.077†	84.0	4.13	4.92%	[0.10]	mg/L
Mn 257.610†	2414.2	33.56	1.39%	[0.0050]	mg/L
Mo 202.031†	147.3	4.33	2.94%	[0.010]	mg/L
Ni 231.604†	178.2	14.63	8.21%	[0.0050]	mg/L
Pb 220.353†	33.8	9.02	26.66%	[0.0050]	mg/L
Sb 206.836†	19.4	1.00	5.14%	[0.012]	mg/L
Si 251.611†	1794.8	45.21	2.52%	[0.050]	mg/L
Sn 189.927†	50.7	5.70	11.25%	[0.010]	mg/L
Ti 334.940†	7407.2	225.30	3.04%	[0.010]	mg/L
V 290.880†	1717.7	122.96	7.16%	[0.010]	mg/L
Zn 206.200†	355.5	7.77	2.19%	[0.010]	mg/L
K 766.490†	1191.1	43.85	3.68%	[0.50]	mg/L
Na 589.592†	6711.4	279.30	4.16%	[0.50]	mg/L
Sr 407.771†	10822.6	440.20	4.07%	[0.010]	mg/L
Li 670.784†	864.4	77.73	8.99%	[0.010]	mg/L

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Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S2 **Date Collected: 2/23/2011 9:31:03 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:45:46 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S2

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4950675.7	45426.71	0.92%		
YRADIAL	289632.4	2632.81	0.91%		
Ga 417.206	1275238.8	6339.96	0.50%		
GaRADIAL	61957.2	1093.11	1.76%		
Ag 328.068†	1640.4	86.98	5.30%	[0.0080]	mg/L
Al 396.153†	990.4	75.00	7.57%	[0.20]	mg/L
As 188.979†	8.4	1.35	16.17%	[0.0080]	mg/L
Ba 233.527†	1205.9	15.69	1.30%	[0.020]	mg/L
Be 234.861†	575.7	6.52	1.13%	[0.0010]	mg/L
B 249.677†	344.1	32.26	9.37%	[0.010]	mg/L
Ca 227.546†	24.6	9.93	40.33%	[0.20]	mg/L
Cd 228.802†	16.1	2.81	17.43%	[0.0010]	mg/L
Co 228.616†	76.9	1.34	1.74%	[0.0040]	mg/L
Cr 267.716†	1200.5	11.85	0.99%	[0.010]	mg/L
Cu 327.393†	1502.7	71.95	4.79%	[0.010]	mg/L
Fe 239.562†	34.9	2.16	6.20%	[0.080]	mg/L
Mg 279.077†	158.9	5.48	3.45%	[0.20]	mg/L
Mn 257.610†	4594.4	75.29	1.64%	[0.010]	mg/L
Mo 202.031†	275.5	1.26	0.46%	[0.020]	mg/L
Ni 231.604†	351.7	9.79	2.78%	[0.010]	mg/L
Pb 220.353†	65.9	4.24	6.43%	[0.010]	mg/L
Sb 206.836†	39.1	2.71	6.92%	[0.024]	mg/L

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Se 196.026†	5.4	7.28	133.86%	[0.0080]	mg/L
Si 251.611†	3405.3	36.37	1.07%	[0.10]	mg/L
Sn 189.927†	99.6	5.10	5.12%	[0.020]	mg/L
Ti 334.940†	14485.0	149.29	1.03%	[0.020]	mg/L
Tl 190.801†	22.3	3.56	16.01%	[0.010]	mg/L
V 290.880†	3094.7	115.86	3.74%	[0.020]	mg/L
Zn 206.200†	650.2	3.39	0.52%	[0.020]	mg/L
K 766.490†	2416.0	93.70	3.88%	[1.00]	mg/L
Na 589.592†	13127.2	298.59	2.27%	[1.00]	mg/L
Sr 407.771†	20667.4	1214.05	5.87%	[0.020]	mg/L
Li 670.784†	1684.5	78.74	4.67%	[0.020]	mg/L

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S3 **Date Collected: 2/23/2011 9:37:43 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:45:47 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S3

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Calib Conc.	Units
Y 371.029	4773762.1	27518.08	0.58%		
YRADIAL	279606.5	2307.80	0.83%		
Ga 417.206	1243004.4	25668.82	2.07%		
GaRADIAL	60038.6	1160.04	1.93%		
Ag 328.068†	79837.5	2289.08	2.87%	[0.40]	mg/L
Al 396.153†	47629.4	702.44	1.47%	[10.00]	mg/L
As 188.979†	434.0	4.87	1.12%	[0.40]	mg/L
Ba 233.527†	58932.7	557.14	0.95%	[1.00]	mg/L
Be 234.861†	28754.9	725.38	2.52%	[0.05]	mg/L
B 249.677†	25900.0	698.64	2.70%	[0.50]	mg/L
Ca 227.546†	1046.3	20.12	1.92%	[10.00]	mg/L
Cd 228.802†	887.5	11.17	1.26%	[0.05]	mg/L
Co 228.616†	3872.5	17.16	0.44%	[0.20]	mg/L
Cr 267.716†	57518.1	602.02	1.05%	[0.50]	mg/L
Cu 327.393†	71808.6	2018.42	2.81%	[0.50]	mg/L
Fe 239.562†	1675.7	32.28	1.93%	[4.00]	mg/L
Mg 279.077†	7769.2	124.77	1.61%	[10.00]	mg/L
Mn 257.610†	224850.8	2592.82	1.15%	[0.50]	mg/L
Mo 202.031†	13513.2	145.04	1.07%	[1.00]	mg/L
Ni 231.604†	17267.6	223.92	1.30%	[0.50]	mg/L
Pb 220.353†	2990.6	14.56	0.49%	[0.50]	mg/L
Sb 206.836†	1916.0	33.45	1.75%	[1.20]	mg/L
Se 196.026†	567.4	12.89	2.27%	[0.40]	mg/L
Si 251.611†	171433.7	4586.58	2.68%	[5.00]	mg/L
Sn 189.927†	5904.8	3.10	0.05%	[1.00]	mg/L
Ti 334.940†	723404.1	3292.98	0.46%	[1.00]	mg/L
Tl 190.801†	861.5	6.52	0.76%	[0.50]	mg/L
V 290.880†	148754.6	1930.39	1.30%	[1.00]	mg/L
Zn 206.200†	33687.8	265.98	0.79%	[1.00]	mg/L
K 766.490†	124020.8	1474.17	1.19%	[50.00]	mg/L
Na 589.592†	646151.5	13486.28	2.09%	[50.00]	mg/L
Sr 407.771†	1007330.0	49797.17	4.94%	[1.00]	mg/L
Li 670.784†	76262.1	1075.76	1.41%	[1.00]	mg/L

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S4 **Date Collected: 2/23/2011 9:44:23 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:45:49 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S4

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Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4657480.1	28772.89	0.62%		
YRADIAL	275821.0	6134.56	2.22%		
Ga 417.206	1229054.9	10848.91	0.88%		
GaRADIAL	60926.0	1783.62	2.93%		
Ag 328.068†	162084.7	2247.45	1.39%	[0.80]	mg/L
Al 396.153†	92876.9	288.20	0.31%	[20.00]	mg/L
As 188.979†	883.4	8.36	0.95%	[0.80]	mg/L
Ba 233.527†	118890.8	697.38	0.59%	[2.00]	mg/L
Be 234.861†	58111.5	615.04	1.06%	[0.10]	mg/L
B 249.677†	53324.4	629.86	1.18%	[1.00]	mg/L
Ca 227.546†	2146.9	24.17	1.13%	[20.00]	mg/L
Cd 228.802†	1789.8	24.14	1.35%	[0.10]	mg/L
Co 228.616†	7853.7	51.07	0.65%	[0.40]	mg/L
Cr 267.716†	116227.8	876.79	0.75%	[1.00]	mg/L
Cu 327.393†	146752.4	2210.54	1.51%	[1.00]	mg/L
Fe 239.562†	3406.4	77.28	2.27%	[8.00]	mg/L
Mg 279.077†	15752.5	314.37	2.00%	[20.00]	mg/L
Mn 257.610†	451800.6	651.58	0.14%	[1.00]	mg/L
Mo 202.031†	27458.2	176.75	0.64%	[2.00]	mg/L
Ni 231.604†	34726.1	185.55	0.53%	[1.00]	mg/L
Pb 220.353†	6045.4	46.33	0.77%	[1.00]	mg/L
Sb 206.836†	3868.4	45.84	1.18%	[2.40]	mg/L
Se 196.026†	1142.9	15.81	1.38%	[0.80]	mg/L
Si 251.611†	350668.3	3853.00	1.10%	[10.00]	mg/L
Sn 189.927†	11986.8	88.04	0.73%	[2.00]	mg/L
Ti 334.940†	1461801.7	4478.73	0.31%	[2.00]	mg/L
Tl 190.801†	1728.0	8.96	0.52%	[1.00]	mg/L
V 290.880†	306009.1	2920.40	0.95%	[2.00]	mg/L
Zn 206.200†	67501.6	259.60	0.38%	[2.00]	mg/L
K 766.490†	245699.7	1096.29	0.45%	[100.00]	mg/L
Na 589.592†	1259257.9	44747.87	3.55%	[100.00]	mg/L
Sr 407.771†	2048296.5	163228.55	7.97%	[2.00]	mg/L
Li 670.784†	149196.5	1768.82	1.19%	[2.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Wt. Lin	140.1	198200	0.00000	0.999059	
Al 396.153	4	Wt. Lin	55.6	4694	0.00000	0.999923	
As 188.979	3	Wt. Lin	-0.4	1095	0.00000	0.999963	
Ba 233.527	4	Wt. Lin	30.2	59090	0.00000	0.999982	
Be 234.861	4	Wt. Lin	-2.3	578100	0.00000	0.999988	
B 249.677	3	Wt. Lin	-184.3	52840	0.00000	0.999917	
Ca 227.546	3	Wt. Lin	3.5	105.7	0.00000	0.999904	
Cd 228.802	4	Wt. Lin	-1.1	17720	0.00000	0.999773	
Co 228.616	4	Wt. Lin	-8.5	19900	0.00000	0.998293	
Cr 267.716	4	Wt. Lin	25.9	116000	0.00000	0.999935	
Cu 327.393	4	Wt. Lin	-10.1	146400	0.00000	0.999600	
Fe 239.562	4	Wt. Lin	0.9	422.7	0.00000	0.999961	
Mg 279.077	4	Wt. Lin	5.6	778.9	0.00000	0.999902	
Mn 257.610	4	Wt. Lin	155.1	449200	0.00000	0.999953	
Mo 202.031	4	Wt. Lin	10.5	13540	0.00000	0.999825	
Ni 231.604	4	Wt. Lin	5.1	34630	0.00000	0.999996	
Pb 220.353	4	Wt. Lin	4.0	6045	0.00000	0.999794	
Sb 206.836	4	Wt. Lin	0.2	1607	0.00000	0.999968	
Se 196.026	3	Wt. Lin	-6.0	1435	0.00000	1.000000	
Si 251.611	4	Wt. Lin	50.3	34440	0.00000	0.999726	
Sn 189.927	4	Wt. Lin	-9.8	5859	0.00000	0.998589	
Ti 334.940	4	Wt. Lin	119.2	725300	0.00000	0.999958	
Tl 190.801	3	Wt. Lin	5.1	1718	0.00000	0.999995	
V 290.880	4	Wt. Lin	198.6	149500	0.00000	0.999583	
Zn 206.200	4	Wt. Lin	14.6	33320	0.00000	0.999322	
K 766.490	4	Non Lin, Calc Int	-49.6	2505	-0.47748	1.000000	
Na 589.592	4	Non Lin, Calc Int	-10.6	13250	-6.61005	1.000000	
Sr 407.771	4	Wt. Lin	642.0	1012000	0.00000	0.999928	

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Li 670.784 4 Wt. Lin 117.0 75950 0.00000 0.999626

Sequence No.: 6 **Autosampler Location: 9**
Sample ID: ICV 2nd Vendor **Date Collected: 2/23/2011 9:51:11 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:45:50 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICV 2nd Vendor

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: ICV 2nd Vendor

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4783407.8						40196.24	0.84%
YRADIAL	288269.1						5052.65	1.75%
Ga 417.206	1254978.7						11947.26	0.95%
GaRADIAL	61906.5						324.92	0.52%
Ag 328.068†	79760.7	0.403	mg/L	0.0078	0.403	mg/L	0.0078	1.93%
QC value within limits for Ag 328.068 Recovery = 100.71%								
Al 396.153†	47322.8	10.1	mg/L	0.04	10.1	mg/L	0.04	0.38%
QC value within limits for Al 396.153 Recovery = 100.57%								
As 188.979†	429.1	0.389	mg/L	0.0081	0.389	mg/L	0.0081	2.08%
QC value within limits for As 188.979 Recovery = 97.17%								
Ba 233.527†	59428.3	1.01	mg/L	0.015	1.01	mg/L	0.015	1.47%
QC value within limits for Ba 233.527 Recovery = 100.79%								
Be 234.861†	28209.3	0.0495	mg/L	0.00110	0.0495	mg/L	0.00110	2.22%
QC value within limits for Be 234.861 Recovery = 99.08%								
B 249.677†	26175.9	0.505	mg/L	0.0109	0.505	mg/L	0.0109	2.16%
QC value within limits for B 249.677 Recovery = 100.99%								
Ca 227.546†	1055.1	10.3	mg/L	0.15	10.3	mg/L	0.15	1.50%
QC value within limits for Ca 227.546 Recovery = 102.87%								
Cd 228.802†	878.7	0.0492	mg/L	0.00101	0.0492	mg/L	0.00101	2.05%
QC value within limits for Cd 228.802 Recovery = 98.47%								
Co 228.616†	3866.7	0.192	mg/L	0.0029	0.192	mg/L	0.0029	1.49%
QC value within limits for Co 228.616 Recovery = 96.14%								
Cr 267.716†	57783.7	0.498	mg/L	0.0091	0.498	mg/L	0.0091	1.83%
QC value within limits for Cr 267.716 Recovery = 99.63%								
Cu 327.393†	72368.0	0.496	mg/L	0.0091	0.496	mg/L	0.0091	1.84%
QC value within limits for Cu 327.393 Recovery = 99.23%								
Fe 239.562†	1661.6	3.93	mg/L	0.027	3.93	mg/L	0.027	0.69%
QC value within limits for Fe 239.562 Recovery = 98.19%								
Mg 279.077†	7687.7	9.87	mg/L	0.070	9.87	mg/L	0.070	0.71%
QC value within limits for Mg 279.077 Recovery = 98.66%								
Mn 257.610†	229851.0	0.516	mg/L	0.0068	0.516	mg/L	0.0068	1.33%
QC value within limits for Mn 257.610 Recovery = 103.21%								
Mo 202.031†	13284.4	0.981	mg/L	0.0180	0.981	mg/L	0.0180	1.83%
QC value within limits for Mo 202.031 Recovery = 98.08%								
Ni 231.604†	17475.0	0.504	mg/L	0.0077	0.504	mg/L	0.0077	1.52%
QC value within limits for Ni 231.604 Recovery = 100.87%								
Pb 220.353†	2999.7	0.501	mg/L	0.0040	0.501	mg/L	0.0040	0.79%
QC value within limits for Pb 220.353 Recovery = 100.13%								
Sb 206.836†	1945.7	1.21	mg/L	0.024	1.21	mg/L	0.024	1.97%
QC value within limits for Sb 206.836 Recovery = 101.24%								
Se 196.026†	553.8	0.393	mg/L	0.0102	0.393	mg/L	0.0102	2.61%
QC value within limits for Se 196.026 Recovery = 98.26%								
Si 251.611†	176264.5	5.10	mg/L	0.100	5.10	mg/L	0.100	1.97%
QC value within limits for Si 251.611 Recovery = 102.02%								
Sn 189.927†	5985.8	1.02	mg/L	0.015	1.02	mg/L	0.015	1.44%
QC value within limits for Sn 189.927 Recovery = 102.33%								
Ti 334.940†	730420.5	1.01	mg/L	0.001	1.01	mg/L	0.001	0.09%
QC value within limits for Ti 334.940 Recovery = 100.68%								
Tl 190.801†	861.4	0.510	mg/L	0.0057	0.510	mg/L	0.0057	1.12%
QC value within limits for Tl 190.801 Recovery = 101.99%								
V 290.880†	147358.6	0.984	mg/L	0.0143	0.984	mg/L	0.0143	1.45%
QC value within limits for V 290.880 Recovery = 98.37%								
Zn 206.200†	33255.1	1.000	mg/L	0.0136	1.000	mg/L	0.0136	1.36%
QC value within limits for Zn 206.200 Recovery = 99.99%								

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K 766.490† 122554.8 49.4 mg/L 0.46 49.4 mg/L 0.46 0.93%
QC value within limits for K 766.490 Recovery = 98.71%
Na 589.592† 622838.6 48.2 mg/L 0.46 48.2 mg/L 0.46 0.96%
QC value within limits for Na 589.592 Recovery = 96.30%
Sr 407.771† 1017791.9 1.00 mg/L 0.069 1.00 mg/L 0.069 6.84%
QC value within limits for Sr 407.771 Recovery = 100.42%
Li 670.784† 75706.6 0.995 mg/L 0.0024 0.995 mg/L 0.0024 0.24%
QC value within limits for Li 670.784 Recovery = 99.52%
All analyte(s) passed QC.

Sequence No.: 7 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 2/23/2011 9:57:52 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:45:51 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4986851.7						4616.73	0.09%
YRADIAL	282815.9						553.14	0.20%
Ga 417.206	1294362.8						13687.85	1.06%
GaRADIAL	60704.4						1042.38	1.72%
Ag 328.068†	35.0	-0.00053	mg/L	0.000301	-0.00053	mg/L	0.000301	56.60%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-39.1	-0.0202	mg/L	0.00980	-0.0202	mg/L	0.00980	48.62%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.0	0.00035	mg/L	0.000382	0.00035	mg/L	0.000382	109.22%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	4.5	-0.00044	mg/L	0.000135	-0.00044	mg/L	0.000135	30.97%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	8.4	0.00002	mg/L	0.000012	0.00002	mg/L	0.000012	72.07%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	423.8	0.0116	mg/L	0.00145	0.0116	mg/L	0.00145	12.52%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	2.0	-0.0134	mg/L	0.06602	-0.0134	mg/L	0.06602	494.31%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	0.4	0.00009	mg/L	0.000075	0.00009	mg/L	0.000075	85.70%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-1.0	0.00038	mg/L	0.000226	0.00038	mg/L	0.000226	59.72%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-11.2	-0.00032	mg/L	0.000078	-0.00032	mg/L	0.000078	24.32%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	47.2	0.00039	mg/L	0.001149	0.00039	mg/L	0.001149	294.34%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	3.1	0.00526	mg/L	0.001007	0.00526	mg/L	0.001007	19.12%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	2.8	-0.00351	mg/L	0.005383	-0.00351	mg/L	0.005383	153.23%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	7.6	-0.00033	mg/L	0.000027	-0.00033	mg/L	0.000027	8.24%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.3	-0.00031	mg/L	0.000102	-0.00031	mg/L	0.000102	33.19%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	10.6	0.00016	mg/L	0.000172	0.00016	mg/L	0.000172	107.70%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	3.3	-0.00012	mg/L	0.000884	-0.00012	mg/L	0.000884	759.31%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.1	-0.00006	mg/L	0.001424	-0.00006	mg/L	0.001424	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-3.4	0.00185	mg/L	0.001810	0.00185	mg/L	0.001810	97.99%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	0.4	-0.00144	mg/L	0.000470	-0.00144	mg/L	0.000470	32.54%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-14.0	-0.00071	mg/L	0.000211	-0.00071	mg/L	0.000211	29.55%
QC value within limits for Sn 189.927 Recovery = Not calculated								

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Ti 334.940†              1.3    -0.00016 mg/L      0.000098    -0.00016 mg/L      0.000098  60.46%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              0.5    -0.00270 mg/L      0.003309    -0.00270 mg/L      0.003309 122.74%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              98.4    -0.00067 mg/L      0.000554    -0.00067 mg/L      0.000554  82.64%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†            -37.3    -0.00156 mg/L      0.000207    -0.00156 mg/L      0.000207  13.29%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              89.3     0.0555 mg/L       0.02919      0.0555 mg/L       0.02919  52.63%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             94.2     0.00791 mg/L      0.006668     0.00791 mg/L      0.006668  84.29%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†            209.1    -0.00043 mg/L      0.000182    -0.00043 mg/L      0.000182  42.43%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†             71.5    -0.00060 mg/L      0.000615    -0.00060 mg/L      0.000615 102.77%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.

================================================================================================================
Sequence No.: 8                                    Autosampler Location: 7
Sample ID: ICSA                                    Date Collected: 2/23/2011 10:04:29 AM
Analyst:                                           Data Type: Reprocessed on 2/23/2011 2:46:00 PM
Logged In Analyst (Original) : peicp2
Initial Sample Wt:                                 Initial Sample Vol:
Dilution:                                          Sample Prep Vol:

----------------------------------------------------------------------------------------------------------------
Nebulizer Parameters: ICSA
Analyte                Back Pressure    Flow
All                    167.0 kPa        0.50 L/min

----------------------------------------------------------------------------------------------------------------
Mean Data: ICSA
                  Mean Corrected          Calib.                              Sample
Analyte              Intensity      Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029          4568221.8                                                    37012.18   0.81%
YRADIAL             285987.4                                                    10410.69   3.64%
Ga 417.206         1212792.6                                                     7278.69   0.60%
GaRADIAL             63065.9                                                     1879.19   2.98%
Ag 328.068†            804.3    -0.00133 mg/L      0.000796    -0.00133 mg/L      0.000796  59.80%
   QC value within limits for Ag 328.068  Recovery = Not calculated
Al 396.153†        1103961.6         235 mg/L          11.7         235 mg/L          11.7   4.99%
   QC value within limits for Al 396.153  Recovery = 94.07%
As 188.979†             14.0     0.00421 mg/L      0.002478     0.00421 mg/L      0.002478  58.85%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†            119.2    -0.00070 mg/L      0.000222    -0.00070 mg/L      0.000222  31.89%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†            11573.4     0.00000 mg/L      0.001067     0.00000 mg/L      0.001067 >999.9%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†             -9932.5     -0.0108 mg/L       0.01436     -0.0108 mg/L       0.01436 132.88%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†            29261.9         277 mg/L           1.5         277 mg/L           1.5   0.53%
   QC value within limits for Ca 227.546  Recovery = 110.84%
Cd 228.802†              -0.8    -0.00017 mg/L      0.000152    -0.00017 mg/L      0.000152  87.59%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†              22.1    -0.00091 mg/L      0.000342    -0.00091 mg/L      0.000342  37.72%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†             615.8    -0.00072 mg/L      0.000485    -0.00072 mg/L      0.000485  67.41%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†            -1472.8     0.00079 mg/L      0.001049     0.00079 mg/L      0.001049 132.92%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†            39648.6         93.8 mg/L          5.20         93.8 mg/L          5.20   5.54%
   QC value within limits for Fe 239.562  Recovery = 93.79%
Mg 279.077†          187333.9          240 mg/L          13.0          240 mg/L          13.0   5.42%
   QC value within limits for Mg 279.077  Recovery = 96.19%
Mn 257.610†             -193.7    -0.00004 mg/L      0.000051    -0.00004 mg/L      0.000051 137.51%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -1.9     0.00372 mg/L      0.001002     0.00372 mg/L      0.001002  26.98%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†             -66.6    -0.00212 mg/L      0.000206    -0.00212 mg/L      0.000206   9.73%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†             -91.4     0.00117 mg/L      0.001975     0.00117 mg/L      0.001975 168.54%
   QC value within limits for Pb 220.353  Recovery = Not calculated
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Sb 206.836†              25.1      0.0155 mg/L       0.00226      0.0155 mg/L       0.00226  14.58%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†            -111.3     0.00434 mg/L      0.005866     0.00434 mg/L      0.005866 135.02%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†            1100.9      0.0305 mg/L       0.00115      0.0305 mg/L       0.00115   3.78%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -58.0    -0.00823 mg/L      0.000908    -0.00823 mg/L      0.000908  11.04%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†            -2373.6    -0.00067 mg/L      0.000588    -0.00067 mg/L      0.000588  87.60%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             147.7      0.0581 mg/L       0.00155      0.0581 mg/L       0.00155   2.68%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†             -587.9     0.00194 mg/L      0.001186     0.00194 mg/L      0.001186  61.06%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†             122.4     0.00110 mg/L      0.000463     0.00110 mg/L      0.000463  42.25%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†               80.2      0.0518 mg/L       0.01856      0.0518 mg/L       0.01856  35.86%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             573.2      0.0441 mg/L       0.00822      0.0441 mg/L       0.00822  18.65%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†           13482.7     0.00143 mg/L      0.000305     0.00143 mg/L      0.000305  21.38%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†             239.4     0.00161 mg/L      0.002199     0.00161 mg/L      0.002199 136.49%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 9                                     Autosampler Location: 8
Sample ID: ICSAB                                    Date Collected: 2/23/2011 10:10:11 AM
Analyst:                                            Data Type: Reprocessed on 2/23/2011 2:46:01 PM
Logged In Analyst (Original) : peicp2
Initial Sample Wt:                                  Initial Sample Vol:
Dilution:                                           Sample Prep Vol:

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Nebulizer Parameters: ICSAB
Analyte                 Back Pressure    Flow
All                    166.0 kPa        0.50 L/min

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Mean Data: ICSAB
                  Mean Corrected          Calib.                          Sample
Analyte              Intensity      Conc. Units      Std.Dev.      Conc. Units      Std.Dev.   RSD
Y 371.029          4384773.5                                                       31033.96   0.71%
YRADIAL             266581.1                                                        6006.99   2.25%
Ga 417.206         1184108.7                                                       23816.43   2.01%
GaRADIAL             58890.0                                                        1139.01   1.93%
Ag 328.068†          104121.9       0.520 mg/L        0.0123       0.520 mg/L        0.0123   2.36%
   QC value within limits for Ag 328.068  Recovery = 104.04%
Al 396.153†         1165722.5         248 mg/L           6.1         248 mg/L           6.1   2.44%
   QC value within limits for Al 396.153  Recovery = 99.33%
As 188.979†           283.5       0.251 mg/L        0.0039       0.251 mg/L        0.0039   1.54%
   QC value within limits for As 188.979  Recovery = 100.54%
Ba 233.527†          15143.3       0.254 mg/L        0.0022       0.254 mg/L        0.0022   0.85%
   QC value within limits for Ba 233.527  Recovery = 101.60%
Be 234.861†         160639.8       0.257 mg/L        0.0079       0.257 mg/L        0.0079   3.06%
   QC value within limits for Be 234.861  Recovery = 102.83%
B 249.677†           -9921.5     -0.0201 mg/L       0.01355     -0.0201 mg/L       0.01355  67.40%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†          29201.0         277 mg/L           4.3         277 mg/L           4.3   1.56%
   QC value within limits for Ca 227.546  Recovery = 110.76%
Cd 228.802†           8307.2       0.470 mg/L        0.0069       0.470 mg/L        0.0069   1.46%
   QC value within limits for Cd 228.802  Recovery = 93.92%
Co 228.616†           4681.2       0.233 mg/L        0.0020       0.233 mg/L        0.0020   0.87%
   QC value within limits for Co 228.616  Recovery = 93.22%
Cr 267.716†          29763.1       0.250 mg/L        0.0013       0.250 mg/L        0.0013   0.53%
   QC value within limits for Cr 267.716  Recovery = 100.14%
Cu 327.393†          35195.3       0.252 mg/L        0.0057       0.252 mg/L        0.0057   2.25%
   QC value within limits for Cu 327.393  Recovery = 100.62%
Fe 239.562†          41306.6        97.7 mg/L          0.28        97.7 mg/L          0.28   0.28%
   QC value within limits for Fe 239.562  Recovery = 97.71%
Mg 279.077†         195384.8         251 mg/L           0.7         251 mg/L           0.7   0.28%
   QC value within limits for Mg 279.077  Recovery = 100.32%
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Mn 257.610† 113331.4 0.254 mg/L 0.0044 0.254 mg/L 0.0044 1.73%
QC value within limits for Mn 257.610 Recovery = 101.55%
Mo 202.031† 3.1 0.00435 mg/L 0.000511 0.00435 mg/L 0.000511 11.76%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† 16558.5 0.478 mg/L 0.0029 0.478 mg/L 0.0029 0.60%
QC value within limits for Ni 231.604 Recovery = 95.56%
Pb 220.353† 2888.0 0.494 mg/L 0.0042 0.494 mg/L 0.0042 0.85%
QC value within limits for Pb 220.353 Recovery = 98.80%
Sb 206.836† 843.5 0.523 mg/L 0.0098 0.523 mg/L 0.0098 1.87%
QC value within limits for Sb 206.836 Recovery = 104.63%
Se 196.026† 241.5 0.250 mg/L 0.0082 0.250 mg/L 0.0082 3.27%
QC value within limits for Se 196.026 Recovery = 100.10%
Si 251.611† 264.1 0.00621 mg/L 0.001246 0.00621 mg/L 0.001246 20.05%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -60.2 -0.00860 mg/L 0.000506 -0.00860 mg/L 0.000506 5.88%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -2323.1 -0.00068 mg/L 0.000116 -0.00068 mg/L 0.000116 17.00%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 1016.5 0.564 mg/L 0.0012 0.564 mg/L 0.0012 0.22%
QC value within limits for Tl 190.801 Recovery = 112.75%
V 290.880† 36945.1 0.253 mg/L 0.0043 0.253 mg/L 0.0043 1.70%
QC value within limits for V 290.880 Recovery = 101.27%
Zn 206.200† 15927.5 0.477 mg/L 0.0045 0.477 mg/L 0.0045 0.95%
QC value within limits for Zn 206.200 Recovery = 95.33%
K 766.490† 12995.4 5.21 mg/L 0.027 5.21 mg/L 0.027 0.51%
QC value within limits for K 766.490 Recovery = 104.14%
Na 589.592† 66439.2 5.03 mg/L 0.027 5.03 mg/L 0.027 0.54%
QC value within limits for Na 589.592 Recovery = 100.53%
Sr 407.771† 13630.3 0.00110 mg/L 0.000181 0.00110 mg/L 0.000181 16.46%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 23.5 -0.00123 mg/L 0.000553 -0.00123 mg/L 0.000553 44.90%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 10 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 10:15:55 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:46:03 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4805403.4						22232.76	0.46%
YRADIAL	278370.5						4451.82	1.60%
Ga 417.206	1272602.1						13793.89	1.08%
GaRADIAL	60302.4						599.84	0.99%
Ag 328.068†	77901.1	0.393	mg/L	0.0038	0.393	mg/L	0.0038	0.97%
QC value within limits for Ag 328.068 Recovery = 98.36%								
Al 396.153†	47058.5	10.0	mg/L	0.06	10.0	mg/L	0.06	0.59%
QC value within limits for Al 396.153 Recovery = 100.00%								
As 188.979†	423.3	0.383	mg/L	0.0060	0.383	mg/L	0.0060	1.57%
QC value within limits for As 188.979 Recovery = 95.84%								
Ba 233.527†	58267.2	0.988	mg/L	0.0081	0.988	mg/L	0.0081	0.82%
QC value within limits for Ba 233.527 Recovery = 98.82%								
Be 234.861†	28098.5	0.0493	mg/L	0.00060	0.0493	mg/L	0.00060	1.22%
QC value within limits for Be 234.861 Recovery = 98.68%								
B 249.677†	25357.2	0.490	mg/L	0.0029	0.490	mg/L	0.0029	0.60%
QC value within limits for B 249.677 Recovery = 97.96%								
Ca 227.546†	1018.6	9.93	mg/L	0.118	9.93	mg/L	0.118	1.19%
QC value within limits for Ca 227.546 Recovery = 99.31%								
Cd 228.802†	860.3	0.0482	mg/L	0.00039	0.0482	mg/L	0.00039	0.81%
QC value within limits for Cd 228.802 Recovery = 96.42%								
Co 228.616†	3830.2	0.190	mg/L	0.0014	0.190	mg/L	0.0014	0.71%
QC value within limits for Co 228.616 Recovery = 95.25%								

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Cr 267.716†	56606.9	0.488 mg/L	0.0036	0.488 mg/L	0.0036	0.73%
QC value within limits for Cr 267.716 Recovery = 97.61%							
Cu 327.393†	70051.1	0.480 mg/L	0.0067	0.480 mg/L	0.0067	1.40%
QC value within limits for Cu 327.393 Recovery = 96.07%							
Fe 239.562†	1680.5	3.97 mg/L	0.041	3.97 mg/L	0.041	1.02%
QC value within limits for Fe 239.562 Recovery = 99.31%							
Mg 279.077†	7800.7	10.0 mg/L	0.11	10.0 mg/L	0.11	1.06%
QC value within limits for Mg 279.077 Recovery = 100.11%							
Mn 257.610†	221873.2	0.498 mg/L	0.0053	0.498 mg/L	0.0053	1.07%
QC value within limits for Mn 257.610 Recovery = 99.64%							
Mo 202.031†	13319.2	0.983 mg/L	0.0076	0.983 mg/L	0.0076	0.77%
QC value within limits for Mo 202.031 Recovery = 98.34%							
Ni 231.604†	16978.6	0.490 mg/L	0.0037	0.490 mg/L	0.0037	0.75%
QC value within limits for Ni 231.604 Recovery = 98.00%							
Pb 220.353†	2945.4	0.492 mg/L	0.0043	0.492 mg/L	0.0043	0.88%
QC value within limits for Pb 220.353 Recovery = 98.33%							
Sb 206.836†	1857.1	1.16 mg/L	0.015	1.16 mg/L	0.015	1.30%
QC value within limits for Sb 206.836 Recovery = 96.66%							
Se 196.026†	545.5	0.387 mg/L	0.0068	0.387 mg/L	0.0068	1.76%
QC value within limits for Se 196.026 Recovery = 96.80%							
Si 251.611†	166602.1	4.82 mg/L	0.050	4.82 mg/L	0.050	1.03%
QC value within limits for Si 251.611 Recovery = 96.41%							
Sn 189.927†	5791.8	0.990 mg/L	0.0049	0.990 mg/L	0.0049	0.49%
QC value within limits for Sn 189.927 Recovery = 99.02%							
Ti 334.940†	714703.3	0.985 mg/L	0.0117	0.985 mg/L	0.0117	1.18%
QC value within limits for Ti 334.940 Recovery = 98.52%							
Tl 190.801†	850.8	0.504 mg/L	0.0034	0.504 mg/L	0.0034	0.68%
QC value within limits for Tl 190.801 Recovery = 100.71%							
V 290.880†	147142.4	0.982 mg/L	0.0101	0.982 mg/L	0.0101	1.03%
QC value within limits for V 290.880 Recovery = 98.22%							
Zn 206.200†	33001.0	0.992 mg/L	0.0062	0.992 mg/L	0.0062	0.63%
QC value within limits for Zn 206.200 Recovery = 99.22%							
K 766.490†	122444.3	49.3 mg/L	0.22	49.3 mg/L	0.22	0.44%
QC value within limits for K 766.490 Recovery = 98.62%							
Na 589.592†	635599.6	49.2 mg/L	0.60	49.2 mg/L	0.60	1.22%
QC value within limits for Na 589.592 Recovery = 98.33%							
Sr 407.771†	1004231.9	0.991 mg/L	0.0737	0.991 mg/L	0.0737	7.44%
QC value within limits for Sr 407.771 Recovery = 99.08%							
Li 670.784†	75146.7	0.988 mg/L	0.0085	0.988 mg/L	0.0085	0.86%
QC value within limits for Li 670.784 Recovery = 98.79%							

All analyte(s) passed QC.

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Sequence No.: 11 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 10:22:34 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:46:04 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	5086218.7						114408.25	2.25%
YRADIAL	289913.4						2111.45	0.73%
Ga 417.206	1323392.9						49043.30	3.71%
GaRADIAL	61971.7						1227.06	1.98%
Ag 328.068†	50.2	-0.00046	mg/L	0.000745	-0.00046	mg/L	0.000745	163.64%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	2.6	-0.0113	mg/L	0.01811	-0.0113	mg/L	0.01811	160.64%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.5	0.00171	mg/L	0.002076	0.00171	mg/L	0.002076	121.64%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.6	-0.00045	mg/L	0.000074	-0.00045	mg/L	0.000074	16.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	17.4	0.00003	mg/L	0.000036	0.00003	mg/L	0.000036	110.38%
QC value within limits for Be 234.861 Recovery = Not calculated								

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B 249.677†	86.5	0.00515 mg/L	0.001238	0.00515 mg/L	0.001238	24.03%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	0.2	-0.0310 mg/L	0.01850	-0.0310 mg/L	0.01850	59.75%
QC value within limits for Ca 227.546 Recovery = Not calculated						
Cd 228.802†	-2.8	-0.00010 mg/L	0.000166	-0.00010 mg/L	0.000166	161.16%
QC value within limits for Cd 228.802 Recovery = Not calculated						
Co 228.616†	-1.4	0.00036 mg/L	0.000101	0.00036 mg/L	0.000101	28.22%
QC value within limits for Co 228.616 Recovery = Not calculated						
Cr 267.716†	-14.9	-0.00035 mg/L	0.000035	-0.00035 mg/L	0.000035	9.87%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	89.6	0.00068 mg/L	0.000434	0.00068 mg/L	0.000434	63.78%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	2.0	0.00267 mg/L	0.006111	0.00267 mg/L	0.006111	228.49%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	0.4	-0.00661 mg/L	0.008536	-0.00661 mg/L	0.008536	129.22%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-16.9	-0.00038 mg/L	0.000018	-0.00038 mg/L	0.000018	4.70%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	6.1	-0.00033 mg/L	0.000298	-0.00033 mg/L	0.000298	91.17%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	9.2	0.00012 mg/L	0.000095	0.00012 mg/L	0.000095	79.59%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	3.6	-0.00007 mg/L	0.000229	-0.00007 mg/L	0.000229	341.90%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	0.0	-0.00011 mg/L	0.000883	-0.00011 mg/L	0.000883	828.65%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-8.5	-0.00171 mg/L	0.005290	-0.00171 mg/L	0.005290	309.82%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-32.1	-0.00239 mg/L	0.000315	-0.00239 mg/L	0.000315	13.21%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-33.0	-0.00396 mg/L	0.000621	-0.00396 mg/L	0.000621	15.68%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	29.3	-0.00012 mg/L	0.000079	-0.00012 mg/L	0.000079	63.63%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	0.1	-0.00287 mg/L	0.001796	-0.00287 mg/L	0.001796	62.48%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	-0.6	-0.00133 mg/L	0.000164	-0.00133 mg/L	0.000164	12.34%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	-40.0	-0.00164 mg/L	0.000211	-0.00164 mg/L	0.000211	12.86%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	42.8	0.0369 mg/L	0.01591	0.0369 mg/L	0.01591	43.12%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	113.2	0.00934 mg/L	0.013294	0.00934 mg/L	0.013294	142.31%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	294.7	-0.00034 mg/L	0.000215	-0.00034 mg/L	0.000215	62.70%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	21.4	-0.00126 mg/L	0.001039	-0.00126 mg/L	0.001039	82.55%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 38**
Sample ID: PBW 2A WG357153-02 **Date Collected: 2/23/2011 10:29:15 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:10 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 2A WG357153-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: PBW 2A WG357153-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4986755.8						63492.58	1.27%
YRADIAL	294248.1						3535.88	1.20%
Ga 417.206	1315835.1						23496.90	1.79%
GaRADIAL	63519.7						1051.84	1.66%
Ag 328.068†	119.3	-0.00010	mg/L	0.000402	-0.00010	mg/L	0.000402	383.07%
Al 396.153†	14.1	-0.00883	mg/L	0.012812	-0.00883	mg/L	0.012812	145.17%

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As 188.979†	-0.1	0.00028 mg/L	0.001567	0.00028 mg/L	0.001567	563.74%
Ba 233.527†	-0.7	-0.00052 mg/L	0.000022	-0.00052 mg/L	0.000022	4.31%
Be 234.861†	14.9	0.00003 mg/L	0.000056	0.00003 mg/L	0.000056	202.68%
B 249.677†	-58.3	0.00242 mg/L	0.000402	0.00242 mg/L	0.000402	16.62%
Ca 227.546†	2.3	-0.0112 mg/L	0.04427	-0.0112 mg/L	0.04427	396.09%
Cd 228.802†	-1.2	0.00000 mg/L	0.000127	0.00000 mg/L	0.000127	>999.9%
Co 228.616†	-3.3	0.00026 mg/L	0.000240	0.00026 mg/L	0.000240	91.25%
Cr 267.716†	-2.9	-0.00025 mg/L	0.000176	-0.00025 mg/L	0.000176	71.36%
Cu 327.393†	52.4	0.00043 mg/L	0.001034	0.00043 mg/L	0.001034	242.23%
Fe 239.562†	3.4	0.00598 mg/L	0.004393	0.00598 mg/L	0.004393	73.49%
Mg 279.077†	2.0	-0.00460 mg/L	0.006860	-0.00460 mg/L	0.006860	149.21%
Mn 257.610†	-43.8	-0.00044 mg/L	0.000044	-0.00044 mg/L	0.000044	9.90%
Mo 202.031†	5.5	-0.00036 mg/L	0.000288	-0.00036 mg/L	0.000288	78.92%
Ni 231.604†	10.5	0.00016 mg/L	0.000178	0.00016 mg/L	0.000178	113.36%
Pb 220.353†	2.0	-0.00032 mg/L	0.000744	-0.00032 mg/L	0.000744	229.56%
Sb 206.836†	-1.9	-0.00129 mg/L	0.001463	-0.00129 mg/L	0.001463	113.18%
Se 196.026†	-4.6	0.00099 mg/L	0.003967	0.00099 mg/L	0.003967	400.54%
Si 251.611†	19.7	-0.00088 mg/L	0.000353	-0.00088 mg/L	0.000353	39.97%
Sn 189.927†	-42.0	-0.00550 mg/L	0.000791	-0.00550 mg/L	0.000791	14.40%
Ti 334.940†	-49.5	-0.00023 mg/L	0.000120	-0.00023 mg/L	0.000120	51.55%
Tl 190.801†	-0.4	-0.00319 mg/L	0.002869	-0.00319 mg/L	0.002869	89.82%
V 290.880†	187.1	-0.00008 mg/L	0.000475	-0.00008 mg/L	0.000475	619.70%
Zn 206.200†	-19.2	-0.00102 mg/L	0.000145	-0.00102 mg/L	0.000145	14.27%
K 766.490†	-19.1	0.0122 mg/L	0.01521	0.0122 mg/L	0.01521	124.51%
Na 589.592†	-221.1	-0.0159 mg/L	0.01964	-0.0159 mg/L	0.01964	123.67%
Sr 407.771†	126.4	-0.00051 mg/L	0.000219	-0.00051 mg/L	0.000219	42.89%
Li 670.784†	71.4	-0.00060 mg/L	0.000582	-0.00060 mg/L	0.000582	96.87%

Sequence No.: 13 **Autosampler Location: 39**
Sample ID: LCSW 2A WG357153-03 **Date Collected: 2/23/2011 10:35:55 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:14 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 2A WG357153-03

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: LCSW 2A WG357153-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4901320.2						23734.71	0.48%
YRADIAL	292375.8						4715.54	1.61%
Ga 417.206	1317412.5						38042.42	2.89%
GaRADIAL	62590.7						1332.15	2.13%
Ag 328.068†	39524.5	0.199	mg/L	0.0079	0.199	mg/L	0.0079	3.98%
Al 396.153†	23630.1	5.02	mg/L	0.028	5.02	mg/L	0.028	0.57%
As 188.979†	211.2	0.191	mg/L	0.0042	0.191	mg/L	0.0042	2.17%
Ba 233.527†	29636.3	0.502	mg/L	0.0054	0.502	mg/L	0.0054	1.07%
Be 234.861†	14063.6	0.0247	mg/L	0.00080	0.0247	mg/L	0.00080	3.25%
B 249.677†	51179.2	0.975	mg/L	0.0336	0.975	mg/L	0.0336	3.45%
Ca 227.546†	504.7	4.91	mg/L	0.102	4.91	mg/L	0.102	2.08%
Cd 228.802†	426.0	0.0239	mg/L	0.00062	0.0239	mg/L	0.00062	2.58%
Co 228.616†	1930.5	0.0962	mg/L	0.00022	0.0962	mg/L	0.00022	0.23%
Cr 267.716†	28625.4	0.247	mg/L	0.0024	0.247	mg/L	0.0024	0.97%
Cu 327.393†	35403.2	0.243	mg/L	0.0107	0.243	mg/L	0.0107	4.42%
Fe 239.562†	815.7	1.93	mg/L	0.036	1.93	mg/L	0.036	1.87%
Mg 279.077†	3849.3	4.94	mg/L	0.084	4.94	mg/L	0.084	1.71%
Mn 257.610†	114393.1	0.257	mg/L	0.0033	0.257	mg/L	0.0033	1.29%
Mo 202.031†	6771.3	0.500	mg/L	0.0094	0.500	mg/L	0.0094	1.88%
Ni 231.604†	8685.7	0.251	mg/L	0.0047	0.251	mg/L	0.0047	1.86%
Pb 220.353†	1484.9	0.248	mg/L	0.0010	0.248	mg/L	0.0010	0.42%
Sb 206.836†	916.8	0.573	mg/L	0.0130	0.573	mg/L	0.0130	2.27%
Se 196.026†	270.0	0.194	mg/L	0.0040	0.194	mg/L	0.0040	2.07%
Si 251.611†	86559.1	2.50	mg/L	0.098	2.50	mg/L	0.098	3.93%
Sn 189.927†	-38.8	-0.00495	mg/L	0.000441	-0.00495	mg/L	0.000441	8.91%
Ti 334.940†	354033.9	0.488	mg/L	0.0020	0.488	mg/L	0.0020	0.41%
Tl 190.801†	429.6	0.253	mg/L	0.0023	0.253	mg/L	0.0023	0.92%
V 290.880†	74651.7	0.498	mg/L	0.0067	0.498	mg/L	0.0067	1.35%

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Zn 206.200†	16488.6	0.496 mg/L	0.0028	0.496 mg/L	0.0028	0.57%
K 766.490†	60809.6	24.4 mg/L	0.09	24.4 mg/L	0.09	0.37%
Na 589.592†	320790.8	24.5 mg/L	0.32	24.5 mg/L	0.32	1.29%
Sr 407.771†	502496.0	0.495 mg/L	0.0375	0.495 mg/L	0.0375	7.56%
Li 670.784†	37808.3	0.496 mg/L	0.0029	0.496 mg/L	0.0029	0.58%

Sequence No.: 14 **Autosampler Location: 40**
Sample ID: L1102050401 WG357153-01 **Date Collected: 2/23/2011 10:42:39 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:15 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102050401 WG357153-01

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102050401 WG357153-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4613824.8						54636.80	1.18%
YRADIAL	288336.8						5401.01	1.87%
Ga 417.206	1230392.6						32384.36	2.63%
GaRADIAL	62362.9						1158.23	1.86%
Ag 328.068†	1408.3	0.00508	mg/L	0.001089	0.00508	mg/L	0.001089	21.44%
Al 396.153†	919.2	0.185	mg/L	0.0089	0.185	mg/L	0.0089	4.83%
As 188.979†	20.2	0.0158	mg/L	0.00132	0.0158	mg/L	0.00132	8.34%
Ba 233.527†	17851.2	0.302	mg/L	0.0031	0.302	mg/L	0.0031	1.03%
Be 234.861†	2034.4	0.00029	mg/L	0.000237	0.00029	mg/L	0.000237	82.53%
B 249.677†	67901.2	1.36	mg/L	0.031	1.36	mg/L	0.031	2.28%
Ca 227.546†	27553.4	261	mg/L	5.5	261	mg/L	5.5	2.10%
Cd 228.802†	2.0	0.00008	mg/L	0.000135	0.00008	mg/L	0.000135	171.82%
Co 228.616†	75.8	0.00372	mg/L	0.000658	0.00372	mg/L	0.000658	17.68%
Cr 267.716†	211.1	0.00112	mg/L	0.000023	0.00112	mg/L	0.000023	2.02%
Cu 327.393†	8455.3	0.0596	mg/L	0.00223	0.0596	mg/L	0.00223	3.74%
Fe 239.562†	6696.6	15.8	mg/L	0.41	15.8	mg/L	0.41	2.58%
Mg 279.077†	30267.4	38.8	mg/L	0.85	38.8	mg/L	0.85	2.18%
Mn 257.610†	494426.1	1.11	mg/L	0.009	1.11	mg/L	0.009	0.83%
Mo 202.031†	31.9	0.00259	mg/L	0.000301	0.00259	mg/L	0.000301	11.60%
Ni 231.604†	260.8	0.00733	mg/L	0.000321	0.00733	mg/L	0.000321	4.38%
Pb 220.353†	92.3	0.0263	mg/L	0.00156	0.0263	mg/L	0.00156	5.93%
Sb 206.836†	19.1	0.0118	mg/L	0.00034	0.0118	mg/L	0.00034	2.92%
Se 196.026†	-59.3	0.0333	mg/L	0.00204	0.0333	mg/L	0.00204	6.11%
Si 251.611†	534646.4	15.5	mg/L	0.33	15.5	mg/L	0.33	2.10%
Sn 189.927†	-52.7	-0.00732	mg/L	0.001754	-0.00732	mg/L	0.001754	23.98%
Ti 334.940†	-682.7	0.00150	mg/L	0.000110	0.00150	mg/L	0.000110	7.31%
Tl 190.801†	158.2	0.0673	mg/L	0.00263	0.0673	mg/L	0.00263	3.91%
V 290.880†	-888.3	-0.00607	mg/L	0.001546	-0.00607	mg/L	0.001546	25.47%
Zn 206.200†	220.5	0.00584	mg/L	0.000321	0.00584	mg/L	0.000321	5.50%
K 766.490†	41969.1	16.7	mg/L	0.13	16.7	mg/L	0.13	0.78%
Na 589.592†	1267104.7	101	mg/L	0.2	101	mg/L	0.2	0.17%
Sr 407.771†	1885101.1	1.86	mg/L	0.025	1.86	mg/L	0.025	1.32%
Li 670.784†	2647.2	0.0333	mg/L	0.00154	0.0333	mg/L	0.00154	4.63%

Sequence No.: 15 **Autosampler Location: 41**
Sample ID: L1102050401D WG357153-04 **Date Collected: 2/23/2011 10:48:22 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:16 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102050401D WG357153-04

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102050401D WG357153-04

Analyte	Mean Corrected	Calib.			Sample			

Approved: February 24, 2011

Pierre Morris

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	4567392.0						88651.04	1.94%
YRADIAL	286180.0						3149.12	1.10%
Ga 417.206	1218034.7						26715.12	2.19%
GaRADIAL	62036.5						484.31	0.78%
Ag 328.068†	1431.2	0.00513	mg/L	0.001352	0.00513	mg/L	0.001352	26.37%
Al 396.153†	890.0	0.179	mg/L	0.0045	0.179	mg/L	0.0045	2.50%
As 188.979†	24.3	0.0193	mg/L	0.00155	0.0193	mg/L	0.00155	8.03%
Ba 233.527†	18832.2	0.318	mg/L	0.0049	0.318	mg/L	0.0049	1.56%
Be 234.861†	2121.2	0.00022	mg/L	0.000115	0.00022	mg/L	0.000115	53.19%
B 249.677†	71935.9	1.44	mg/L	0.028	1.44	mg/L	0.028	1.91%
Ca 227.546†	29088.5	275	mg/L	5.3	275	mg/L	5.3	1.94%
Cd 228.802†	2.2	0.00007	mg/L	0.000151	0.00007	mg/L	0.000151	228.95%
Co 228.616†	82.7	0.00403	mg/L	0.000279	0.00403	mg/L	0.000279	6.92%
Cr 267.716†	171.3	0.00076	mg/L	0.000073	0.00076	mg/L	0.000073	9.61%
Cu 327.393†	8663.9	0.0612	mg/L	0.00108	0.0612	mg/L	0.00108	1.76%
Fe 239.562†	7151.5	16.9	mg/L	0.39	16.9	mg/L	0.39	2.31%
Mg 279.077†	31983.3	41.0	mg/L	0.85	41.0	mg/L	0.85	2.07%
Mn 257.610†	522330.4	1.17	mg/L	0.030	1.17	mg/L	0.030	2.54%
Mo 202.031†	42.4	0.00343	mg/L	0.000911	0.00343	mg/L	0.000911	26.53%
Ni 231.604†	276.1	0.00777	mg/L	0.000298	0.00777	mg/L	0.000298	3.83%
Pb 220.353†	107.4	0.0294	mg/L	0.00292	0.0294	mg/L	0.00292	9.93%
Sb 206.836†	19.2	0.0119	mg/L	0.00240	0.0119	mg/L	0.00240	20.24%
Se 196.026†	-54.6	0.0406	mg/L	0.00425	0.0406	mg/L	0.00425	10.45%
Si 251.611†	566061.9	16.4	mg/L	0.49	16.4	mg/L	0.49	2.98%
Sn 189.927†	-41.1	-0.00535	mg/L	0.001152	-0.00535	mg/L	0.001152	21.52%
Ti 334.940†	-661.2	0.00167	mg/L	0.000039	0.00167	mg/L	0.000039	2.36%
Tl 190.801†	170.0	0.0730	mg/L	0.00185	0.0730	mg/L	0.00185	2.54%
V 290.880†	-790.3	-0.00533	mg/L	0.000143	-0.00533	mg/L	0.000143	2.67%
Zn 206.200†	234.7	0.00624	mg/L	0.000435	0.00624	mg/L	0.000435	6.98%
K 766.490†	43792.9	17.5	mg/L	0.01	17.5	mg/L	0.01	0.07%
Na 589.592†	1312039.9	104	mg/L	0.7	104	mg/L	0.7	0.66%
Sr 407.771†	1929154.1	1.90	mg/L	0.030	1.90	mg/L	0.030	1.59%
Li 670.784†	2811.0	0.0355	mg/L	0.00103	0.0355	mg/L	0.00103	2.90%

Sequence No.: 16 **Autosampler Location: 42**
Sample ID: L1102050401S WG357153-05 **Date Collected: 2/23/2011 10:54:09 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:17 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102050401S WG357153-05

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102050401S WG357153-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4572478.1						52959.58	1.16%
YRADIAL	285115.4						6431.90	2.26%
Ga 417.206	1229842.2						9447.50	0.77%
GaRADIAL	62156.7						914.86	1.47%
Ag 328.068†	41666.1	0.209	mg/L	0.0031	0.209	mg/L	0.0031	1.48%
Al 396.153†	23308.2	4.95	mg/L	0.158	4.95	mg/L	0.158	3.19%
As 188.979†	236.4	0.211	mg/L	0.0020	0.211	mg/L	0.0020	0.94%
Ba 233.527†	47059.2	0.797	mg/L	0.0082	0.797	mg/L	0.0082	1.02%
Be 234.861†	16885.2	0.0264	mg/L	0.00063	0.0264	mg/L	0.00063	2.38%
B 249.677†	121674.4	2.38	mg/L	0.049	2.38	mg/L	0.049	2.04%
Ca 227.546†	28009.7	265	mg/L	7.0	265	mg/L	7.0	2.64%
Cd 228.802†	429.9	0.0240	mg/L	0.00074	0.0240	mg/L	0.00074	3.08%
Co 228.616†	1958.3	0.0971	mg/L	0.00152	0.0971	mg/L	0.00152	1.57%
Cr 267.716†	28776.0	0.248	mg/L	0.0031	0.248	mg/L	0.0031	1.24%
Cu 327.393†	44157.5	0.304	mg/L	0.0065	0.304	mg/L	0.0065	2.13%
Fe 239.562†	7587.8	17.9	mg/L	0.51	17.9	mg/L	0.51	2.85%
Mg 279.077†	34273.7	44.0	mg/L	0.96	44.0	mg/L	0.96	2.19%
Mn 257.610†	610541.7	1.37	mg/L	0.002	1.37	mg/L	0.002	0.14%
Mo 202.031†	6985.4	0.516	mg/L	0.0075	0.516	mg/L	0.0075	1.45%
Ni 231.604†	8667.2	0.250	mg/L	0.0043	0.250	mg/L	0.0043	1.70%
Pb 220.353†	1551.4	0.270	mg/L	0.0038	0.270	mg/L	0.0038	1.40%

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Sb 206.836†	983.4	0.614	mg/L	0.0082	0.614	mg/L	0.0082 1.34%
Se 196.026†	227.6	0.235	mg/L	0.0118	0.235	mg/L	0.0118 5.04%
Si 251.611†	623741.9	18.1	mg/L	0.24	18.1	mg/L	0.24 1.31%
Sn 189.927†	-39.7	-0.00510	mg/L	0.001541	-0.00510	mg/L	0.001541 30.20%
Ti 334.940†	371862.5	0.515	mg/L	0.0051	0.515	mg/L	0.0051 0.98%
Tl 190.801†	566.2	0.311	mg/L	0.0031	0.311	mg/L	0.0031 0.99%
V 290.880†	75097.1	0.502	mg/L	0.0072	0.502	mg/L	0.0072 1.44%
Zn 206.200†	16233.9	0.488	mg/L	0.0058	0.488	mg/L	0.0058 1.18%
K 766.490†	103808.1	41.7	mg/L	0.08	41.7	mg/L	0.08 0.18%
Na 589.592†	1582060.9	127	mg/L	0.7	127	mg/L	0.7 0.53%
Sr 407.771†	2364614.9	2.33	mg/L	0.072	2.33	mg/L	0.072 3.10%
Li 670.784†	39064.0	0.513	mg/L	0.0178	0.513	mg/L	0.0178 3.48%

Sequence No.: 17 **Autosampler Location: 43**
Sample ID: L1102052201 **Date Collected: 2/23/2011 10:59:55 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:18 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102052201

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052201

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4857123.2						10916.76	0.22%
YRADIAL	293306.4						6077.08	2.07%
Ga 417.206	1331308.0						27099.70	2.04%
GaRADIAL	62297.5						437.88	0.70%
Ag 328.068†	3460.7	0.0181	mg/L	0.00055	0.0181	mg/L	0.00055	3.02%
Al 396.153†	1543.4	0.317	mg/L	0.0054	0.317	mg/L	0.0054	1.70%
As 188.979†	21.3	0.0202	mg/L	0.00245	0.0202	mg/L	0.00245	12.13%
Ba 233.527†	6338.1	0.109	mg/L	0.0017	0.109	mg/L	0.0017	1.55%
Be 234.861†	696.3	0.00009	mg/L	0.000078	0.00009	mg/L	0.000078	87.05%
B 249.677†	61750.4	1.20	mg/L	0.021	1.20	mg/L	0.021	1.77%
Ca 227.546†	1041.9	9.82	mg/L	0.170	9.82	mg/L	0.170	1.73%
Cd 228.802†	-1.8	-0.00022	mg/L	0.000081	-0.00022	mg/L	0.000081	36.83%
Co 228.616†	22.5	0.00137	mg/L	0.000308	0.00137	mg/L	0.000308	22.39%
Cr 267.716†	239.5	0.00236	mg/L	0.000373	0.00236	mg/L	0.000373	15.80%
Cu 327.393†	30725.3	0.211	mg/L	0.0015	0.211	mg/L	0.0015	0.69%
Fe 239.562†	2256.9	5.34	mg/L	0.027	5.34	mg/L	0.027	0.51%
Mg 279.077†	742.3	0.943	mg/L	0.0053	0.943	mg/L	0.0053	0.56%
Mn 257.610†	34998.7	0.0795	mg/L	0.00111	0.0795	mg/L	0.00111	1.40%
Mo 202.031†	105.7	0.00759	mg/L	0.000248	0.00759	mg/L	0.000248	3.28%
Ni 231.604†	1483.3	0.0427	mg/L	0.00034	0.0427	mg/L	0.00034	0.80%
Pb 220.353†	-2.7	-0.00105	mg/L	0.000599	-0.00105	mg/L	0.000599	57.19%
Sb 206.836†	18.3	0.0113	mg/L	0.00058	0.0113	mg/L	0.00058	5.14%
Se 196.026†	-8.7	0.00259	mg/L	0.003508	0.00259	mg/L	0.003508	135.24%
Si 251.611†	144918.2	4.21	mg/L	0.038	4.21	mg/L	0.038	0.89%
Sn 189.927†	-14.3	-0.00077	mg/L	0.000979	-0.00077	mg/L	0.000979	126.39%
Ti 334.940†	1919.9	0.00258	mg/L	0.000049	0.00258	mg/L	0.000049	1.90%
Tl 190.801†	19.9	0.00923	mg/L	0.003173	0.00923	mg/L	0.003173	34.37%
V 290.880†	146103.5	0.976	mg/L	0.0159	0.976	mg/L	0.0159	1.63%
Zn 206.200†	4704.2	0.141	mg/L	0.0004	0.141	mg/L	0.0004	0.28%
K 766.490†	7200.3	2.82	mg/L	0.043	2.82	mg/L	0.043	1.52%
Na 589.592†	903117.1	70.6	mg/L	0.78	70.6	mg/L	0.78	1.10%
Sr 407.771†	13722.1	0.0123	mg/L	0.00112	0.0123	mg/L	0.00112	9.09%
Li 670.784†	339.6	0.00293	mg/L	0.001391	0.00293	mg/L	0.001391	47.45%

Sequence No.: 18 **Autosampler Location: 44**
Sample ID: L1102052203 **Date Collected: 2/23/2011 11:06:33 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:24 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

Pierre Morris

Nebulizer Parameters: L1102052203

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102052203

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4794795.8						37940.48	0.79%
YRADIAL	291084.2						6350.98	2.18%
Ga 417.206	1321514.3						23912.96	1.81%
GaRADIAL	62848.4						128.47	0.20%
Ag 328.068†	118.3	-0.00015	mg/L	0.000697	-0.00015	mg/L	0.000697	474.02%
Al 396.153†	15534.6	3.30	mg/L	0.014	3.30	mg/L	0.014	0.41%
As 188.979†	1.0	0.00111	mg/L	0.002290	0.00111	mg/L	0.002290	205.98%
Ba 233.527†	9.1	-0.00037	mg/L	0.000054	-0.00037	mg/L	0.000054	14.61%
Be 234.861†	65.1	-0.00003	mg/L	0.000047	-0.00003	mg/L	0.000047	164.40%
B 249.677†	39204.3	0.745	mg/L	0.0245	0.745	mg/L	0.0245	3.29%
Ca 227.546†	72.1	0.662	mg/L	0.0448	0.662	mg/L	0.0448	6.76%
Cd 228.802†	27.3	0.00162	mg/L	0.000169	0.00162	mg/L	0.000169	10.41%
Co 228.616†	26.2	0.00172	mg/L	0.000223	0.00172	mg/L	0.000223	12.97%
Cr 267.716†	188.6	0.00132	mg/L	0.000053	0.00132	mg/L	0.000053	4.02%
Cu 327.393†	1178.4	0.00821	mg/L	0.000359	0.00821	mg/L	0.000359	4.37%
Fe 239.562†	333.9	0.788	mg/L	0.0116	0.788	mg/L	0.0116	1.47%
Mg 279.077†	311.5	0.392	mg/L	0.0058	0.392	mg/L	0.0058	1.48%
Mn 257.610†	3770.0	0.00988	mg/L	0.000074	0.00988	mg/L	0.000074	0.74%
Mo 202.031†	205.3	0.0144	mg/L	0.00019	0.0144	mg/L	0.00019	1.35%
Ni 231.604†	647.4	0.0186	mg/L	0.00023	0.0186	mg/L	0.00023	1.25%
Pb 220.353†	43.0	0.00663	mg/L	0.001114	0.00663	mg/L	0.001114	16.81%
Sb 206.836†	7.9	0.00489	mg/L	0.001352	0.00489	mg/L	0.001352	27.66%
Se 196.026†	-0.9	0.00365	mg/L	0.003222	0.00365	mg/L	0.003222	88.32%
Si 251.611†	79204.0	2.30	mg/L	0.070	2.30	mg/L	0.070	3.06%
Sn 189.927†	-44.3	-0.00589	mg/L	0.000742	-0.00589	mg/L	0.000742	12.61%
Ti 334.940†	629.6	0.00071	mg/L	0.000825	0.00071	mg/L	0.000825	116.23%
Tl 190.801†	-4.3	-0.00552	mg/L	0.002193	-0.00552	mg/L	0.002193	39.73%
V 290.880†	628.3	0.00293	mg/L	0.000256	0.00293	mg/L	0.000256	8.75%
Zn 206.200†	1379.2	0.0409	mg/L	0.00032	0.0409	mg/L	0.00032	0.78%
K 766.490†	3460.9	1.26	mg/L	0.028	1.26	mg/L	0.028	2.20%
Na 589.592†	1713914.1	139	mg/L	1.4	139	mg/L	1.4	0.98%
Sr 407.771†	526.2	-0.00021	mg/L	0.000244	-0.00021	mg/L	0.000244	117.03%
Li 670.784†	170.6	0.00071	mg/L	0.001076	0.00071	mg/L	0.001076	152.27%

Sequence No.: 19 **Autosampler Location: 45**
Sample ID: L1102052203PS WG357234-01 **Date Collected: 2/23/2011 11:13:29 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:29 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102052203PS WG357234-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052203PS WG357234-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4823652.3						18877.69	0.39%
YRADIAL	288438.8						5593.78	1.94%
Ga 417.206	1306220.8						19705.30	1.51%
GaRADIAL	62413.5						105.38	0.17%
Ag 328.068†	39108.8	0.197	mg/L	0.0021	0.197	mg/L	0.0021	1.08%
Al 396.153†	36972.8	7.86	mg/L	0.013	7.86	mg/L	0.013	0.17%
As 188.979†	207.0	0.187	mg/L	0.0067	0.187	mg/L	0.0067	3.58%
Ba 233.527†	29397.3	0.498	mg/L	0.0011	0.498	mg/L	0.0011	0.22%
Be 234.861†	14229.3	0.0249	mg/L	0.00039	0.0249	mg/L	0.00039	1.55%
B 249.677†	87161.6	1.66	mg/L	0.014	1.66	mg/L	0.014	0.86%
Ca 227.546†	568.1	5.52	mg/L	0.071	5.52	mg/L	0.071	1.29%
Cd 228.802†	444.4	0.0250	mg/L	0.00042	0.0250	mg/L	0.00042	1.68%
Co 228.616†	1967.7	0.0981	mg/L	0.00040	0.0981	mg/L	0.00040	0.40%
Cr 267.716†	28733.3	0.248	mg/L	0.0007	0.248	mg/L	0.0007	0.27%

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Cu 327.393†	36373.1	0.249	mg/L	0.0022	0.249	mg/L	0.0022	0.89%
Fe 239.562†	1126.9	2.66	mg/L	0.009	2.66	mg/L	0.009	0.33%
Mg 279.077†	4148.2	5.32	mg/L	0.036	5.32	mg/L	0.036	0.68%
Mn 257.610†	117994.2	0.266	mg/L	0.0011	0.266	mg/L	0.0011	0.42%
Mo 202.031†	6865.5	0.507	mg/L	0.0044	0.507	mg/L	0.0044	0.86%
Ni 231.604†	9256.7	0.267	mg/L	0.0015	0.267	mg/L	0.0015	0.55%
Pb 220.353†	1504.6	0.251	mg/L	0.0013	0.251	mg/L	0.0013	0.50%
Sb 206.836†	914.1	0.571	mg/L	0.0076	0.571	mg/L	0.0076	1.33%
Se 196.026†	266.1	0.191	mg/L	0.0025	0.191	mg/L	0.0025	1.31%
Si 251.611†	155054.4	4.49	mg/L	0.058	4.49	mg/L	0.058	1.28%
Sn 189.927†	-56.1	-0.00790	mg/L	0.000439	-0.00790	mg/L	0.000439	5.56%
Ti 334.940†	358872.7	0.495	mg/L	0.0024	0.495	mg/L	0.0024	0.48%
Tl 190.801†	427.4	0.251	mg/L	0.0055	0.251	mg/L	0.0055	2.18%
V 290.880†	74993.1	0.500	mg/L	0.0022	0.500	mg/L	0.0022	0.44%
Zn 206.200†	17980.0	0.540	mg/L	0.0023	0.540	mg/L	0.0023	0.43%
K 766.490†	63962.1	25.5	mg/L	0.23	25.5	mg/L	0.23	0.90%
Na 589.592†	1826043.6	149	mg/L	2.5	149	mg/L	2.5	1.69%
Sr 407.771†	505778.5	0.499	mg/L	0.0461	0.499	mg/L	0.0461	9.25%
Li 670.784†	38672.2	0.508	mg/L	0.0050	0.508	mg/L	0.0050	0.98%

Sequence No.: 20 **Autosampler Location: 46**
Sample ID: L1102052203DL WG357234-02 **Date Collected: 2/23/2011 11:20:14 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:30 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102052203DL WG357234-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052203DL WG357234-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5040551.0						86376.43	1.71%
YRADIAL	294804.0						7592.97	2.58%
Ga 417.206	1365858.9						39989.75	2.93%
GaRADIAL	63539.0						2342.00	3.69%
Ag 328.068†	247.9	0.00054	mg/L	0.000331	0.00054	mg/L	0.000331	61.89%
Al 396.153†	3188.2	0.667	mg/L	0.0085	0.667	mg/L	0.0085	1.27%
As 188.979†	2.1	0.00228	mg/L	0.002890	0.00228	mg/L	0.002890	126.60%
Ba 233.527†	1.2	-0.00050	mg/L	0.000078	-0.00050	mg/L	0.000078	15.69%
Be 234.861†	63.3	0.00008	mg/L	0.000037	0.00008	mg/L	0.000037	44.67%
B 249.677†	8910.8	0.172	mg/L	0.0059	0.172	mg/L	0.0059	3.44%
Ca 227.546†	22.7	0.184	mg/L	0.0179	0.184	mg/L	0.0179	9.71%
Cd 228.802†	3.9	0.00028	mg/L	0.000062	0.00028	mg/L	0.000062	22.30%
Co 228.616†	3.0	0.00058	mg/L	0.000168	0.00058	mg/L	0.000168	29.13%
Cr 267.716†	29.6	0.00002	mg/L	0.000064	0.00002	mg/L	0.000064	415.06%
Cu 327.393†	358.4	0.00253	mg/L	0.001036	0.00253	mg/L	0.001036	40.90%
Fe 239.562†	67.8	0.158	mg/L	0.0069	0.158	mg/L	0.0069	4.36%
Mg 279.077†	61.0	0.0711	mg/L	0.00108	0.0711	mg/L	0.00108	1.52%
Mn 257.610†	757.9	0.00169	mg/L	0.000035	0.00169	mg/L	0.000035	2.07%
Mo 202.031†	46.7	0.00268	mg/L	0.000432	0.00268	mg/L	0.000432	16.12%
Ni 231.604†	127.0	0.00352	mg/L	0.000150	0.00352	mg/L	0.000150	4.26%
Pb 220.353†	13.6	0.00163	mg/L	0.000660	0.00163	mg/L	0.000660	40.49%
Sb 206.836†	0.6	0.00029	mg/L	0.001550	0.00029	mg/L	0.001550	532.39%
Se 196.026†	0.8	0.00479	mg/L	0.005273	0.00479	mg/L	0.005273	110.13%
Si 251.611†	15469.9	0.448	mg/L	0.0157	0.448	mg/L	0.0157	3.51%
Sn 189.927†	-54.4	-0.00762	mg/L	0.000744	-0.00762	mg/L	0.000744	9.77%
Ti 334.940†	-1.8	-0.00017	mg/L	0.000063	-0.00017	mg/L	0.000063	38.11%
Tl 190.801†	0.2	-0.00285	mg/L	0.000833	-0.00285	mg/L	0.000833	29.19%
V 290.880†	204.0	0.00005	mg/L	0.000849	0.00005	mg/L	0.000849	>999.9%
Zn 206.200†	243.4	0.00686	mg/L	0.000431	0.00686	mg/L	0.000431	6.29%
K 766.490†	656.0	0.256	mg/L	0.0080	0.256	mg/L	0.0080	3.13%
Na 589.592†	342158.3	26.2	mg/L	0.36	26.2	mg/L	0.36	1.36%
Sr 407.771†	164.9	-0.00049	mg/L	0.000160	-0.00049	mg/L	0.000160	32.66%
Li 670.784†	266.1	0.00196	mg/L	0.000584	0.00196	mg/L	0.000584	29.74%

Sequence No.: 21 **Autosampler Location: 47**

Approved: February 24, 2011

Pierre Morris

Sample ID: L1102052311 Date Collected: 2/23/2011 11:26:56 AM
Analyst: PDM Data Type: Reprocessed on 2/23/2011 2:46:31 PM
Logged In Analyst (Original) : peicp2
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: L1102052311

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052311

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4590256.6						47698.43	1.04%
YRADIAL	275467.0						4300.81	1.56%
Ga 417.206	1238689.4						30260.80	2.44%
GaRADIAL	60814.9						731.54	1.20%
Ag 328.068†	299.9	-0.00033	mg/L	0.000141	-0.00033	mg/L	0.000141	42.87%
Al 396.153†	662.7	0.131	mg/L	0.0027	0.131	mg/L	0.0027	2.03%
As 188.979†	0.5	0.00374	mg/L	0.003504	0.00374	mg/L	0.003504	93.81%
Ba 233.527†	3997.3	0.0672	mg/L	0.00069	0.0672	mg/L	0.00069	1.03%
Be 234.861†	2517.2	-0.00020	mg/L	0.000151	-0.00020	mg/L	0.000151	76.07%
B 249.677†	6818.4	0.233	mg/L	0.0023	0.233	mg/L	0.0023	0.97%
Ca 227.546†	801.9	7.69	mg/L	0.221	7.69	mg/L	0.221	2.87%
Cd 228.802†	-0.3	0.00008	mg/L	0.000104	0.00008	mg/L	0.000104	126.07%
Co 228.616†	20.8	0.00086	mg/L	0.000379	0.00086	mg/L	0.000379	43.93%
Cr 267.716†	2295.9	0.0195	mg/L	0.00051	0.0195	mg/L	0.00051	2.63%
Cu 327.393†	25271.0	0.175	mg/L	0.0014	0.175	mg/L	0.0014	0.82%
Fe 239.562†	9139.5	21.6	mg/L	0.36	21.6	mg/L	0.36	1.69%
Mg 279.077†	216.5	0.259	mg/L	0.0006	0.259	mg/L	0.0006	0.25%
Mn 257.610†	155755.6	0.359	mg/L	0.0028	0.359	mg/L	0.0028	0.79%
Mo 202.031†	114.6	0.00881	mg/L	0.000251	0.00881	mg/L	0.000251	2.85%
Ni 231.604†	4492.1	0.130	mg/L	0.0015	0.130	mg/L	0.0015	1.14%
Pb 220.353†	30.9	0.00374	mg/L	0.000325	0.00374	mg/L	0.000325	8.67%
Sb 206.836†	10.0	0.00603	mg/L	0.001226	0.00603	mg/L	0.001226	20.35%
Se 196.026†	-18.9	0.00075	mg/L	0.004760	0.00075	mg/L	0.004760	630.80%
Si 251.611†	1022204.3	29.7	mg/L	0.32	29.7	mg/L	0.32	1.09%
Sn 189.927†	-39.5	-0.00508	mg/L	0.000822	-0.00508	mg/L	0.000822	16.20%
Ti 334.940†	4381.1	0.00595	mg/L	0.000125	0.00595	mg/L	0.000125	2.11%
Tl 190.801†	13.7	0.00492	mg/L	0.003706	0.00492	mg/L	0.003706	75.31%
V 290.880†	1121.7	0.00783	mg/L	0.000424	0.00783	mg/L	0.000424	5.41%
Zn 206.200†	72479.7	2.17	mg/L	0.033	2.17	mg/L	0.033	1.50%
K 766.490†	460819.8	191	mg/L	5.0	191	mg/L	5.0	2.65%
Na 589.592†	3375683.3	299	mg/L	12.9	299	mg/L	12.9	4.32%
Sr 407.771†	54159.0	0.0503	mg/L	0.00359	0.0503	mg/L	0.00359	7.14%
Li 670.784†	1691.0	0.0207	mg/L	0.00169	0.0207	mg/L	0.00169	8.18%

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Sequence No.: 22 Autosampler Location: 6
Sample ID: CCV Date Collected: 2/23/2011 11:33:46 AM
Analyst: Data Type: Reprocessed on 2/23/2011 2:46:32 PM
Logged In Analyst (Original) : peicp2
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4906306.7						64414.16	1.31%
YRADIAL	285669.2						4891.25	1.71%
Ga 417.206	1284026.5						31158.29	2.43%
GaRADIAL	61159.0						2033.40	3.32%
Ag 328.068†	77565.5	0.392	mg/L	0.0113	0.392	mg/L	0.0113	2.90%
QC value within limits for Ag 328.068 Recovery = 97.93%								
Al 396.153†	46915.7	9.97	mg/L	0.266	9.97	mg/L	0.266	2.67%

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QC value within limits for Al 396.153 Recovery = 99.70%

As 188.979†	421.1	0.381 mg/L	0.0104	0.381 mg/L	0.0104	2.73%
QC value within limits for As 188.979 Recovery = 95.34%							
Ba 233.527†	57296.8	0.972 mg/L	0.0245	0.972 mg/L	0.0245	2.52%
QC value within limits for Ba 233.527 Recovery = 97.18%							
Be 234.861†	28092.7	0.0493 mg/L	0.00135	0.0493 mg/L	0.00135	2.74%
QC value within limits for Be 234.861 Recovery = 98.65%							
B 249.677†	26449.0	0.510 mg/L	0.0156	0.510 mg/L	0.0156	3.06%
QC value within limits for B 249.677 Recovery = 102.00%							
Ca 227.546†	1012.6	9.87 mg/L	0.187	9.87 mg/L	0.187	1.90%
QC value within limits for Ca 227.546 Recovery = 98.70%							
Cd 228.802†	859.8	0.0482 mg/L	0.00108	0.0482 mg/L	0.00108	2.23%
QC value within limits for Cd 228.802 Recovery = 96.31%							
Co 228.616†	3760.9	0.187 mg/L	0.0019	0.187 mg/L	0.0019	1.00%
QC value within limits for Co 228.616 Recovery = 93.52%							
Cr 267.716†	55607.1	0.479 mg/L	0.0102	0.479 mg/L	0.0102	2.13%
QC value within limits for Cr 267.716 Recovery = 95.88%							
Cu 327.393†	69648.5	0.478 mg/L	0.0124	0.478 mg/L	0.0124	2.60%
QC value within limits for Cu 327.393 Recovery = 95.51%							
Fe 239.562†	1638.6	3.87 mg/L	0.139	3.87 mg/L	0.139	3.59%
QC value within limits for Fe 239.562 Recovery = 96.83%							
Mg 279.077†	7602.0	9.76 mg/L	0.319	9.76 mg/L	0.319	3.27%
QC value within limits for Mg 279.077 Recovery = 97.56%							
Mn 257.610†	217802.5	0.489 mg/L	0.0111	0.489 mg/L	0.0111	2.28%
QC value within limits for Mn 257.610 Recovery = 97.83%							
Mo 202.031†	13114.5	0.968 mg/L	0.0229	0.968 mg/L	0.0229	2.37%
QC value within limits for Mo 202.031 Recovery = 96.83%							
Ni 231.604†	16752.9	0.483 mg/L	0.0127	0.483 mg/L	0.0127	2.63%
QC value within limits for Ni 231.604 Recovery = 96.70%							
Pb 220.353†	2895.4	0.483 mg/L	0.0061	0.483 mg/L	0.0061	1.26%
QC value within limits for Pb 220.353 Recovery = 96.66%							
Sb 206.836†	1847.1	1.15 mg/L	0.027	1.15 mg/L	0.027	2.38%
QC value within limits for Sb 206.836 Recovery = 96.13%							
Se 196.026†	542.0	0.385 mg/L	0.0114	0.385 mg/L	0.0114	2.97%
QC value within limits for Se 196.026 Recovery = 96.17%							
Si 251.611†	165995.0	4.80 mg/L	0.140	4.80 mg/L	0.140	2.92%
QC value within limits for Si 251.611 Recovery = 96.06%							
Sn 189.927†	5651.4	0.966 mg/L	0.0100	0.966 mg/L	0.0100	1.04%
QC value within limits for Sn 189.927 Recovery = 96.63%							
Ti 334.940†	706082.2	0.973 mg/L	0.0040	0.973 mg/L	0.0040	0.42%
QC value within limits for Ti 334.940 Recovery = 97.33%							
Tl 190.801†	828.5	0.490 mg/L	0.0072	0.490 mg/L	0.0072	1.47%
QC value within limits for Tl 190.801 Recovery = 98.09%							
V 290.880†	144176.3	0.962 mg/L	0.0208	0.962 mg/L	0.0208	2.16%
QC value within limits for V 290.880 Recovery = 96.24%							
Zn 206.200†	32556.7	0.979 mg/L	0.0231	0.979 mg/L	0.0231	2.36%
QC value within limits for Zn 206.200 Recovery = 97.88%							
K 766.490†	122689.2	49.4 mg/L	0.88	49.4 mg/L	0.88	1.78%
QC value within limits for K 766.490 Recovery = 98.82%							
Na 589.592†	637621.1	49.3 mg/L	1.69	49.3 mg/L	1.69	3.42%
QC value within limits for Na 589.592 Recovery = 98.65%							
Sr 407.771†	992430.3	0.979 mg/L	0.0456	0.979 mg/L	0.0456	4.66%
QC value within limits for Sr 407.771 Recovery = 97.91%							
Li 670.784†	75230.9	0.989 mg/L	0.0237	0.989 mg/L	0.0237	2.39%
QC value within limits for Li 670.784 Recovery = 98.90%							

All analyte(s) passed QC.

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Sequence No.: 23 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 11:40:29 AM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:46:38 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

	Mean Corrected	Calib.	Sample

Approved: February 24, 2011

Pierre Morris

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	4995746.6						36544.78	0.73%
YRADIAL	295033.5						3714.68	1.26%
Ga 417.206	1291232.7						7104.85	0.55%
GaRADIAL	63176.0						1719.10	2.72%
Ag 328.068†	16.5	-0.00063	mg/L	0.000958	-0.00063	mg/L	0.000958	153.27%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-6.3	-0.0132	mg/L	0.00280	-0.0132	mg/L	0.00280	21.26%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.5	0.00174	mg/L	0.001097	0.00174	mg/L	0.001097	63.00%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.8	-0.00045	mg/L	0.000111	-0.00045	mg/L	0.000111	24.74%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	3.6	0.00001	mg/L	0.000019	0.00001	mg/L	0.000019	208.76%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	1186.9	0.0260	mg/L	0.00067	0.0260	mg/L	0.00067	2.58%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	6.4	0.0278	mg/L	0.05449	0.0278	mg/L	0.05449	196.33%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-0.8	0.00001	mg/L	0.000218	0.00001	mg/L	0.000218	>999.9%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.1	0.00043	mg/L	0.000251	0.00043	mg/L	0.000251	57.90%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-1.2	-0.00023	mg/L	0.000100	-0.00023	mg/L	0.000100	42.73%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-49.1	-0.00027	mg/L	0.001029	-0.00027	mg/L	0.001029	384.94%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	2.2	0.00309	mg/L	0.003037	0.00309	mg/L	0.003037	98.24%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	4.5	-0.00142	mg/L	0.004709	-0.00142	mg/L	0.004709	331.49%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	39.1	-0.00025	mg/L	0.000035	-0.00025	mg/L	0.000035	13.63%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	7.9	-0.00019	mg/L	0.000392	-0.00019	mg/L	0.000392	209.33%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	11.4	0.00019	mg/L	0.000092	0.00019	mg/L	0.000092	49.57%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	3.0	-0.00016	mg/L	0.000895	-0.00016	mg/L	0.000895	575.56%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.6	0.00022	mg/L	0.002055	0.00022	mg/L	0.002055	935.65%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-6.9	-0.00062	mg/L	0.002162	-0.00062	mg/L	0.002162	347.78%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	112.6	0.00181	mg/L	0.000637	0.00181	mg/L	0.000637	35.15%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-49.1	-0.00672	mg/L	0.000340	-0.00672	mg/L	0.000340	5.06%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-37.9	-0.00022	mg/L	0.000059	-0.00022	mg/L	0.000059	27.41%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-3.1	-0.00475	mg/L	0.004356	-0.00475	mg/L	0.004356	91.65%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	42.8	-0.00104	mg/L	0.000739	-0.00104	mg/L	0.000739	70.93%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-57.2	-0.00215	mg/L	0.000085	-0.00215	mg/L	0.000085	3.92%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	176.7	0.0903	mg/L	0.01687	0.0903	mg/L	0.01687	18.67%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	486.4	0.0375	mg/L	0.02225	0.0375	mg/L	0.02225	59.34%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	428.6	-0.00021	mg/L	0.000475	-0.00021	mg/L	0.000475	224.85%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	148.8	0.00042	mg/L	0.000996	0.00042	mg/L	0.000996	237.47%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 48**
Sample ID: L1102052401 **Date Collected: 2/23/2011 11:47:06 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:43 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

Pierre Morris

Nebulizer Parameters: L1102052401

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052401

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4921268.1						8547.06	0.17%
YRADIAL	295981.8						3871.60	1.31%
Ga 417.206	1336222.1						3099.40	0.23%
GaRADIAL	63344.4						998.86	1.58%
Ag 328.068†	210.3	0.00000	mg/L	0.000695	0.00000	mg/L	0.000695	>999.9%
Al 396.153†	73501.2	15.6	mg/L	0.07	15.6	mg/L	0.07	0.44%
As 188.979†	6.2	0.00569	mg/L	0.001808	0.00569	mg/L	0.001808	31.79%
Ba 233.527†	1330.8	0.0219	mg/L	0.00009	0.0219	mg/L	0.00009	0.39%
Be 234.861†	801.0	0.00015	mg/L	0.000063	0.00015	mg/L	0.000063	40.73%
B 249.677†	823.0	0.0296	mg/L	0.00148	0.0296	mg/L	0.00148	5.00%
Ca 227.546†	660.3	6.24	mg/L	0.035	6.24	mg/L	0.035	0.57%
Cd 228.802†	-1.8	-0.00007	mg/L	0.000185	-0.00007	mg/L	0.000185	259.72%
Co 228.616†	12.1	0.00087	mg/L	0.000230	0.00087	mg/L	0.000230	26.50%
Cr 267.716†	510.5	0.00364	mg/L	0.000020	0.00364	mg/L	0.000020	0.55%
Cu 327.393†	5784.5	0.0403	mg/L	0.00087	0.0403	mg/L	0.00087	2.16%
Fe 239.562†	2547.5	6.02	mg/L	0.095	6.02	mg/L	0.095	1.58%
Mg 279.077†	1071.6	1.37	mg/L	0.020	1.37	mg/L	0.020	1.45%
Mn 257.610†	166946.0	0.373	mg/L	0.0038	0.373	mg/L	0.0038	1.03%
Mo 202.031†	28.8	0.00172	mg/L	0.000106	0.00172	mg/L	0.000106	6.17%
Ni 231.604†	444.1	0.0127	mg/L	0.00026	0.0127	mg/L	0.00026	2.08%
Pb 220.353†	1.7	0.00011	mg/L	0.001592	0.00011	mg/L	0.001592	>999.9%
Sb 206.836†	2.8	0.00157	mg/L	0.000337	0.00157	mg/L	0.000337	21.46%
Se 196.026†	-13.1	-0.00303	mg/L	0.006985	-0.00303	mg/L	0.006985	230.31%
Si 251.611†	129244.7	3.75	mg/L	0.023	3.75	mg/L	0.023	0.61%
Sn 189.927†	-47.5	-0.00643	mg/L	0.000471	-0.00643	mg/L	0.000471	7.32%
Ti 334.940†	1847.1	0.00244	mg/L	0.000661	0.00244	mg/L	0.000661	27.07%
Tl 190.801†	13.0	0.00464	mg/L	0.002959	0.00464	mg/L	0.002959	63.81%
V 290.880†	450.5	0.00214	mg/L	0.001093	0.00214	mg/L	0.001093	50.97%
Zn 206.200†	3480.2	0.104	mg/L	0.0003	0.104	mg/L	0.0003	0.28%
K 766.490†	25239.2	10.1	mg/L	0.06	10.1	mg/L	0.06	0.62%
Na 589.592†	754942.2	58.7	mg/L	0.59	58.7	mg/L	0.59	1.00%
Sr 407.771†	28916.5	0.0272	mg/L	0.00263	0.0272	mg/L	0.00263	9.68%
Li 670.784†	345.4	0.00301	mg/L	0.001340	0.00301	mg/L	0.001340	44.55%

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Sequence No.: 25 **Autosampler Location: 49**
Sample ID: L1102052402 **Date Collected: 2/23/2011 11:53:52 AM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:44 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102052402

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052402

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5044156.8						92253.57	1.83%
YRADIAL	294032.9						3815.28	1.30%
Ga 417.206	1375713.5						34305.23	2.49%
GaRADIAL	64074.8						1651.13	2.58%
Ag 328.068†	168.8	0.00013	mg/L	0.000312	0.00013	mg/L	0.000312	242.85%
Al 396.153†	98.8	0.00922	mg/L	0.012636	0.00922	mg/L	0.012636	137.05%
As 188.979†	0.8	0.00118	mg/L	0.001276	0.00118	mg/L	0.001276	108.52%
Ba 233.527†	643.5	0.0104	mg/L	0.00016	0.0104	mg/L	0.00016	1.58%
Be 234.861†	60.0	0.00008	mg/L	0.000020	0.00008	mg/L	0.000020	23.59%
B 249.677†	940.4	0.0217	mg/L	0.00173	0.0217	mg/L	0.00173	7.94%
Ca 227.546†	659.3	6.20	mg/L	0.176	6.20	mg/L	0.176	2.83%
Cd 228.802†	-2.6	0.00002	mg/L	0.000041	0.00002	mg/L	0.000041	236.42%
Co 228.616†	184.5	0.00970	mg/L	0.000161	0.00970	mg/L	0.000161	1.66%

Approved: February 24, 2011

Pierre Morris

Cr 267.716†	2900.1	0.0248	mg/L	0.00047	0.0248	mg/L	0.00047 1.91%
Cu 327.393†	7384.7	0.0505	mg/L	0.00068	0.0505	mg/L	0.00068 1.36%
Fe 239.562†	52.5	0.122	mg/L	0.0012	0.122	mg/L	0.0012 1.01%
Mg 279.077†	1071.6	1.37	mg/L	0.036	1.37	mg/L	0.036 2.60%
Mn 257.610†	838.2	0.00242	mg/L	0.000059	0.00242	mg/L	0.000059 2.45%
Mo 202.031†	2.2	-0.00061	mg/L	0.000288	-0.00061	mg/L	0.000288 47.17%
Ni 231.604†	519.3	0.0148	mg/L	0.00033	0.0148	mg/L	0.00033 2.22%
Pb 220.353†	17.0	0.00241	mg/L	0.001005	0.00241	mg/L	0.001005 41.77%
Sb 206.836†	0.6	0.00010	mg/L	0.002288	0.00010	mg/L	0.002288 >999.9%
Se 196.026†	-6.6	0.00118	mg/L	0.009183	0.00118	mg/L	0.009183 776.18%
Si 251.611†	130645.7	3.79	mg/L	0.084	3.79	mg/L	0.084 2.23%
Sn 189.927†	-49.0	-0.00669	mg/L	0.001243	-0.00669	mg/L	0.001243 18.58%
Ti 334.940†	112.4	0.00005	mg/L	0.000061	0.00005	mg/L	0.000061 134.49%
Tl 190.801†	16.7	0.00617	mg/L	0.000439	0.00617	mg/L	0.000439 7.11%
V 290.880†	116.5	-0.00054	mg/L	0.000162	-0.00054	mg/L	0.000162 29.98%
Zn 206.200†	10450.7	0.313	mg/L	0.0074	0.313	mg/L	0.0074 2.36%
K 766.490†	4346.8	1.74	mg/L	0.058	1.74	mg/L	0.058 3.35%
Na 589.592†	190558.2	14.5	mg/L	0.27	14.5	mg/L	0.27 1.84%
Sr 407.771†	30082.9	0.0291	mg/L	0.00194	0.0291	mg/L	0.00194 6.67%
Li 670.784†	207.0	0.00119	mg/L	0.001849	0.00119	mg/L	0.001849 156.06%

Sequence No.: 26 **Autosampler Location: 50**
Sample ID: L1102052404 **Date Collected: 2/23/2011 12:00:34 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:45 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102052404

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102052404

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5048777.2						94738.60	1.88%
YRADIAL	301932.8						8081.70	2.68%
Ga 417.206	1363877.2						42990.08	3.15%
GaRADIAL	65960.7						2152.58	3.26%
Ag 328.068†	538.9	0.00191	mg/L	0.000282	0.00191	mg/L	0.000282	14.79%
Al 396.153†	277.9	0.0474	mg/L	0.00423	0.0474	mg/L	0.00423	8.93%
As 188.979†	-0.4	0.00142	mg/L	0.000483	0.00142	mg/L	0.000483	33.93%
Ba 233.527†	1118.0	0.0184	mg/L	0.00032	0.0184	mg/L	0.00032	1.74%
Be 234.861†	289.4	0.00032	mg/L	0.000039	0.00032	mg/L	0.000039	12.14%
B 249.677†	865.1	0.0233	mg/L	0.00243	0.0233	mg/L	0.00243	10.41%
Ca 227.546†	678.3	6.41	mg/L	0.213	6.41	mg/L	0.213	3.32%
Cd 228.802†	5.0	0.00154	mg/L	0.000185	0.00154	mg/L	0.000185	12.06%
Co 228.616†	2146.1	0.108	mg/L	0.0021	0.108	mg/L	0.0021	1.93%
Cr 267.716†	27487.1	0.237	mg/L	0.0028	0.237	mg/L	0.0028	1.19%
Cu 327.393†	92402.7	0.631	mg/L	0.0177	0.631	mg/L	0.0177	2.81%
Fe 239.562†	412.5	0.973	mg/L	0.0428	0.973	mg/L	0.0428	4.39%
Mg 279.077†	1065.4	1.36	mg/L	0.053	1.36	mg/L	0.053	3.88%
Mn 257.610†	7597.1	0.0179	mg/L	0.00039	0.0179	mg/L	0.00039	2.19%
Mo 202.031†	24.6	0.00108	mg/L	0.000231	0.00108	mg/L	0.000231	21.34%
Ni 231.604†	2567.0	0.0740	mg/L	0.00136	0.0740	mg/L	0.00136	1.84%
Pb 220.353†	53.1	0.00792	mg/L	0.001083	0.00792	mg/L	0.001083	13.67%
Sb 206.836†	6.8	0.00258	mg/L	0.001162	0.00258	mg/L	0.001162	45.03%
Se 196.026†	-7.8	0.00084	mg/L	0.002106	0.00084	mg/L	0.002106	250.49%
Si 251.611†	138661.3	4.02	mg/L	0.067	4.02	mg/L	0.067	1.67%
Sn 189.927†	54.7	0.0110	mg/L	0.00107	0.0110	mg/L	0.00107	9.70%
Ti 334.940†	136.3	0.00002	mg/L	0.000239	0.00002	mg/L	0.000239	>999.9%
Tl 190.801†	16.3	0.00561	mg/L	0.004683	0.00561	mg/L	0.004683	83.50%
V 290.880†	100.3	-0.00058	mg/L	0.001145	-0.00058	mg/L	0.001145	196.21%
Zn 206.200†	138754.6	4.16	mg/L	0.049	4.16	mg/L	0.049	1.19%
K 766.490†	4842.3	1.93	mg/L	0.041	1.93	mg/L	0.041	2.14%
Na 589.592†	250496.7	19.1	mg/L	0.04	19.1	mg/L	0.04	0.19%
Sr 407.771†	30833.1	0.0297	mg/L	0.00233	0.0297	mg/L	0.00233	7.85%
Li 670.784†	-75.9	-0.00254	mg/L	0.001881	-0.00254	mg/L	0.001881	74.05%

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Sequence No.: 27
Sample ID: CCV
Analyst:
Logged In Analyst (Original) : peicp2
Initial Sample Wt:
Dilution:

Autosampler Location: 6
Date Collected: 2/23/2011 12:07:12 PM
Data Type: Reprocessed on 2/23/2011 2:46:46 PM
Initial Sample Vol:
Sample Prep Vol:

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4732896.9						67308.68	1.42%
YRADIAL	285686.2						6460.15	2.26%
Ga 417.206	1247004.0						25806.84	2.07%
GaRADIAL	61411.4						1457.20	2.37%
Ag 328.068†	79667.3	0.402	mg/L	0.0069	0.402	mg/L	0.0069	1.72%
QC value within limits for Ag 328.068 Recovery = 100.60%								
Al 396.153†	46684.1	9.92	mg/L	0.084	9.92	mg/L	0.084	0.85%
QC value within limits for Al 396.153 Recovery = 99.20%								
As 188.979†	431.1	0.390	mg/L	0.0086	0.390	mg/L	0.0086	2.19%
QC value within limits for As 188.979 Recovery = 97.60%								
Ba 233.527†	59327.3	1.01	mg/L	0.011	1.01	mg/L	0.011	1.12%
QC value within limits for Ba 233.527 Recovery = 100.62%								
Be 234.861†	28725.3	0.0505	mg/L	0.00114	0.0505	mg/L	0.00114	2.26%
QC value within limits for Be 234.861 Recovery = 100.95%								
B 249.677†	26252.5	0.506	mg/L	0.0065	0.506	mg/L	0.0065	1.28%
QC value within limits for B 249.677 Recovery = 101.25%								
Ca 227.546†	1040.4	10.1	mg/L	0.18	10.1	mg/L	0.18	1.79%
QC value within limits for Ca 227.546 Recovery = 101.44%								
Cd 228.802†	884.3	0.0496	mg/L	0.00109	0.0496	mg/L	0.00109	2.19%
QC value within limits for Cd 228.802 Recovery = 99.12%								
Co 228.616†	3902.5	0.194	mg/L	0.0030	0.194	mg/L	0.0030	1.57%
QC value within limits for Co 228.616 Recovery = 97.06%								
Cr 267.716†	57673.3	0.497	mg/L	0.0074	0.497	mg/L	0.0074	1.49%
QC value within limits for Cr 267.716 Recovery = 99.45%								
Cu 327.393†	71902.3	0.493	mg/L	0.0091	0.493	mg/L	0.0091	1.84%
QC value within limits for Cu 327.393 Recovery = 98.60%								
Fe 239.562†	1633.4	3.86	mg/L	0.104	3.86	mg/L	0.104	2.70%
QC value within limits for Fe 239.562 Recovery = 96.53%								
Mg 279.077†	7606.6	9.76	mg/L	0.248	9.76	mg/L	0.248	2.54%
QC value within limits for Mg 279.077 Recovery = 97.62%								
Mn 257.610†	225907.9	0.507	mg/L	0.0063	0.507	mg/L	0.0063	1.25%
QC value within limits for Mn 257.610 Recovery = 101.44%								
Mo 202.031†	13543.7	1.000	mg/L	0.0154	1.000	mg/L	0.0154	1.54%
QC value within limits for Mo 202.031 Recovery = 100.00%								
Ni 231.604†	17373.0	0.501	mg/L	0.0075	0.501	mg/L	0.0075	1.49%
QC value within limits for Ni 231.604 Recovery = 100.28%								
Pb 220.353†	2995.4	0.500	mg/L	0.0069	0.500	mg/L	0.0069	1.38%
QC value within limits for Pb 220.353 Recovery = 100.00%								
Sb 206.836†	1892.9	1.18	mg/L	0.024	1.18	mg/L	0.024	2.01%
QC value within limits for Sb 206.836 Recovery = 98.52%								
Se 196.026†	557.9	0.396	mg/L	0.0029	0.396	mg/L	0.0029	0.73%
QC value within limits for Se 196.026 Recovery = 98.97%								
Si 251.611†	170652.1	4.94	mg/L	0.074	4.94	mg/L	0.074	1.49%
QC value within limits for Si 251.611 Recovery = 98.76%								
Sn 189.927†	5877.3	1.00	mg/L	0.014	1.00	mg/L	0.014	1.38%
QC value within limits for Sn 189.927 Recovery = 100.48%								
Ti 334.940†	720712.2	0.993	mg/L	0.0047	0.993	mg/L	0.0047	0.47%
QC value within limits for Ti 334.940 Recovery = 99.35%								
Tl 190.801†	863.7	0.511	mg/L	0.0071	0.511	mg/L	0.0071	1.39%
QC value within limits for Tl 190.801 Recovery = 102.22%								
V 290.880†	149829.6	1.00	mg/L	0.015	1.00	mg/L	0.015	1.51%
QC value within limits for V 290.880 Recovery = 100.02%								
Zn 206.200†	33613.8	1.01	mg/L	0.009	1.01	mg/L	0.009	0.88%
QC value within limits for Zn 206.200 Recovery = 101.06%								
K 766.490†	121462.4	48.9	mg/L	0.33	48.9	mg/L	0.33	0.67%
QC value within limits for K 766.490 Recovery = 97.82%								
Na 589.592†	630927.8	48.8	mg/L	0.29	48.8	mg/L	0.29	0.58%

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QC value within limits for Na 589.592 Recovery = 97.58%
Sr 407.771† 993579.9 0.980 mg/L 0.0753 0.980 mg/L 0.0753 7.68%
QC value within limits for Sr 407.771 Recovery = 98.03%
Li 670.784† 74638.9 0.981 mg/L 0.0024 0.981 mg/L 0.0024 0.24%
QC value within limits for Li 670.784 Recovery = 98.12%
All analyte(s) passed QC.

Sequence No.: 28 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 12:13:57 PM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:46:47 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4962538.4						43656.59	0.88%
YRADIAL	291584.4						2445.59	0.84%
Ga 417.206	1281967.3						16854.46	1.31%
GaRADIAL	62441.9						738.37	1.18%
Ag 328.068†	15.0	-0.00063	mg/L	0.000247	-0.00063	mg/L	0.000247	39.03%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	2.0	-0.0114	mg/L	0.01543	-0.0114	mg/L	0.01543	135.35%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.9	-0.00049	mg/L	0.002725	-0.00049	mg/L	0.002725	554.61%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.0	-0.00051	mg/L	0.000078	-0.00051	mg/L	0.000078	15.24%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	15.1	0.00003	mg/L	0.000043	0.00003	mg/L	0.000043	144.71%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	325.0	0.00965	mg/L	0.001577	0.00965	mg/L	0.001577	16.35%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	4.5	0.00933	mg/L	0.081867	0.00933	mg/L	0.081867	877.62%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	0.2	0.00008	mg/L	0.000150	0.00008	mg/L	0.000150	189.50%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-5.5	0.00015	mg/L	0.000185	0.00015	mg/L	0.000185	119.79%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-18.0	-0.00038	mg/L	0.000040	-0.00038	mg/L	0.000040	10.70%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	5.9	0.00011	mg/L	0.001245	0.00011	mg/L	0.001245	>999.9%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.6	-0.00075	mg/L	0.001929	-0.00075	mg/L	0.001929	257.70%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	4.6	-0.00122	mg/L	0.006715	-0.00122	mg/L	0.006715	550.13%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	1.1	-0.00034	mg/L	0.000015	-0.00034	mg/L	0.000015	4.29%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.8	-0.00028	mg/L	0.000178	-0.00028	mg/L	0.000178	64.53%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-2.0	-0.00020	mg/L	0.000255	-0.00020	mg/L	0.000255	125.33%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	1.9	-0.00033	mg/L	0.000894	-0.00033	mg/L	0.000894	267.17%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-0.2	-0.00028	mg/L	0.001304	-0.00028	mg/L	0.001304	471.74%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.5	0.00385	mg/L	0.002177	0.00385	mg/L	0.002177	56.50%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	7.9	-0.00123	mg/L	0.000088	-0.00123	mg/L	0.000088	7.15%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-53.8	-0.00752	mg/L	0.000299	-0.00752	mg/L	0.000299	3.97%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	3.9	-0.00016	mg/L	0.000139	-0.00016	mg/L	0.000139	87.27%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.1	-0.00230	mg/L	0.001226	-0.00230	mg/L	0.001226	53.26%

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QC value within limits for Tl 190.801 Recovery = Not calculated

V 290.880†	70.5	-0.00086	mg/L	0.000395	-0.00086	mg/L	0.000395 46.14%

QC value within limits for V 290.880 Recovery = Not calculated

Zn 206.200†	-105.6	-0.00361	mg/L	0.000057	-0.00361	mg/L	0.000057 1.59%

QC value within limits for Zn 206.200 Recovery = Not calculated

K 766.490†	9.7	0.0237	mg/L	0.01109	0.0237	mg/L	0.01109 46.81%

QC value within limits for K 766.490 Recovery = Not calculated

Na 589.592†	40.9	0.00389	mg/L	0.009553	0.00389	mg/L	0.009553 245.66%

QC value within limits for Na 589.592 Recovery = Not calculated

Sr 407.771†	48.9	-0.00059	mg/L	0.000103	-0.00059	mg/L	0.000103 17.59%

QC value within limits for Sr 407.771 Recovery = Not calculated

Li 670.784†	74.8	-0.00056	mg/L	0.002025	-0.00056	mg/L	0.002025 364.30%

QC value within limits for Li 670.784 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 29 **Autosampler Location: 51**
Sample ID: PBW 47 WG357322-02 **Date Collected: 2/23/2011 12:56:22 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:58 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 47 WG357322-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: PBW 47 WG357322-02

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5185189.9						43324.78	0.84%
YRADIAL	300158.9						3623.28	1.21%
Ga 417.206	1319495.9						6296.12	0.48%
GaRADIAL	65027.9						1793.40	2.76%
Ag 328.068†	-40.2	-0.00091	mg/L	0.000721	-0.00091	mg/L	0.000721	78.91%
Al 396.153†	49.8	-0.00121	mg/L	0.004853	-0.00121	mg/L	0.004853	400.46%
As 188.979†	-1.0	-0.00053	mg/L	0.001430	-0.00053	mg/L	0.001430	269.85%
Ba 233.527†	-9.3	-0.00067	mg/L	0.000068	-0.00067	mg/L	0.000068	10.05%
Be 234.861†	-80.0	-0.00014	mg/L	0.000007	-0.00014	mg/L	0.000007	5.41%
B 249.677†	-315.3	-0.00244	mg/L	0.000325	-0.00244	mg/L	0.000325	13.29%
Ca 227.546†	2.5	-0.00921	mg/L	0.055685	-0.00921	mg/L	0.055685	604.73%
Cd 228.802†	1.3	0.00014	mg/L	0.000059	0.00014	mg/L	0.000059	40.95%
Co 228.616†	-2.3	0.00032	mg/L	0.000338	0.00032	mg/L	0.000338	107.03%
Cr 267.716†	13.2	-0.00011	mg/L	0.000067	-0.00011	mg/L	0.000067	60.53%
Cu 327.393†	496.8	0.00346	mg/L	0.000626	0.00346	mg/L	0.000626	18.09%
Fe 239.562†	4.4	0.00830	mg/L	0.005513	0.00830	mg/L	0.005513	66.39%
Mg 279.077†	13.1	0.00965	mg/L	0.004165	0.00965	mg/L	0.004165	43.17%
Mn 257.610†	-9.9	-0.00037	mg/L	0.000016	-0.00037	mg/L	0.000016	4.20%
Mo 202.031†	1.7	-0.00065	mg/L	0.000302	-0.00065	mg/L	0.000302	46.72%
Ni 231.604†	12.1	0.00020	mg/L	0.000199	0.00020	mg/L	0.000199	99.28%
Pb 220.353†	3.1	-0.00015	mg/L	0.001094	-0.00015	mg/L	0.001094	747.78%
Sb 206.836†	0.8	0.00034	mg/L	0.004300	0.00034	mg/L	0.004300	>999.9%
Se 196.026†	1.0	0.00494	mg/L	0.002546	0.00494	mg/L	0.002546	51.55%
Si 251.611†	-11.9	-0.00180	mg/L	0.000709	-0.00180	mg/L	0.000709	39.48%
Sn 189.927†	-17.6	-0.00134	mg/L	0.002305	-0.00134	mg/L	0.002305	172.19%
Ti 334.940†	-185.8	-0.00042	mg/L	0.000179	-0.00042	mg/L	0.000179	42.61%
Tl 190.801†	6.4	0.00079	mg/L	0.001946	0.00079	mg/L	0.001946	247.17%
V 290.880†	-146.4	-0.00231	mg/L	0.000113	-0.00231	mg/L	0.000113	4.92%
Zn 206.200†	47.5	0.00099	mg/L	0.000380	0.00099	mg/L	0.000380	38.49%
K 766.490†	-82.5	-0.0131	mg/L	0.02676	-0.0131	mg/L	0.02676	204.04%
Na 589.592†	-60.7	-0.00378	mg/L	0.006460	-0.00378	mg/L	0.006460	170.92%
Sr 407.771†	9.1	-0.00063	mg/L	0.000047	-0.00063	mg/L	0.000047	7.48%
Li 670.784†	-82.8	-0.00263	mg/L	0.001299	-0.00263	mg/L	0.001299	49.38%

Sequence No.: 30 **Autosampler Location: 52**
Sample ID: LCSW 47 WG357322-03 **Date Collected: 2/23/2011 1:03:00 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:46:59 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

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Nebulizer Parameters: LCSW 47 WG357322-03

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: LCSW 47 WG357322-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5047538.3						92333.39	1.83%
YRADIAL	289907.5						7166.48	2.47%
Ga 417.206	1303117.3						43564.28	3.34%
GaRADIAL	62676.3						811.56	1.29%
Ag 328.068†	37818.7	0.191	mg/L	0.0073	0.191	mg/L	0.0073	3.85%
Al 396.153†	22764.5	4.83	mg/L	0.118	4.83	mg/L	0.118	2.43%
As 188.979†	194.8	0.177	mg/L	0.0045	0.177	mg/L	0.0045	2.55%
Ba 233.527†	28013.9	0.475	mg/L	0.0103	0.475	mg/L	0.0103	2.17%
Be 234.861†	13103.0	0.0230	mg/L	0.00095	0.0230	mg/L	0.00095	4.11%
B 249.677†	47289.6	0.901	mg/L	0.0393	0.901	mg/L	0.0393	4.36%
Ca 227.546†	478.4	4.65	mg/L	0.165	4.65	mg/L	0.165	3.54%
Cd 228.802†	409.4	0.0230	mg/L	0.00070	0.0230	mg/L	0.00070	3.03%
Co 228.616†	1818.5	0.0906	mg/L	0.00149	0.0906	mg/L	0.00149	1.64%
Cr 267.716†	27282.4	0.235	mg/L	0.0056	0.235	mg/L	0.0056	2.39%
Cu 327.393†	34836.8	0.239	mg/L	0.0104	0.239	mg/L	0.0104	4.34%
Fe 239.562†	791.3	1.87	mg/L	0.040	1.87	mg/L	0.040	2.14%
Mg 279.077†	3740.7	4.80	mg/L	0.111	4.80	mg/L	0.111	2.31%
Mn 257.610†	107687.4	0.242	mg/L	0.0057	0.242	mg/L	0.0057	2.38%
Mo 202.031†	6425.2	0.474	mg/L	0.0126	0.474	mg/L	0.0126	2.67%
Ni 231.604†	8132.9	0.235	mg/L	0.0048	0.235	mg/L	0.0048	2.05%
Pb 220.353†	1388.4	0.231	mg/L	0.0048	0.231	mg/L	0.0048	2.09%
Sb 206.836†	886.7	0.554	mg/L	0.0188	0.554	mg/L	0.0188	3.39%
Se 196.026†	247.3	0.178	mg/L	0.0040	0.178	mg/L	0.0040	2.22%
Si 251.611†	82365.0	2.38	mg/L	0.095	2.38	mg/L	0.095	4.00%
Sn 189.927†	-18.9	-0.00156	mg/L	0.000370	-0.00156	mg/L	0.000370	23.70%
Ti 334.940†	347090.7	0.478	mg/L	0.0057	0.478	mg/L	0.0057	1.18%
Tl 190.801†	400.7	0.236	mg/L	0.0015	0.236	mg/L	0.0015	0.62%
V 290.880†	70698.7	0.471	mg/L	0.0116	0.471	mg/L	0.0116	2.47%
Zn 206.200†	15302.7	0.460	mg/L	0.0108	0.460	mg/L	0.0108	2.35%
K 766.490†	58353.3	23.4	mg/L	0.58	23.4	mg/L	0.58	2.46%
Na 589.592†	308458.1	23.6	mg/L	0.29	23.6	mg/L	0.29	1.23%
Sr 407.771†	490880.7	0.484	mg/L	0.0329	0.484	mg/L	0.0329	6.79%
Li 670.784†	36271.2	0.476	mg/L	0.0104	0.476	mg/L	0.0104	2.19%

Sequence No.: 31 **Autosampler Location: 53**
Sample ID: FBLK WG357257-01 **Date Collected: 2/23/2011 1:09:38 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:47:00 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG357257-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: FBLK WG357257-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5032587.5						1368.43	0.03%
YRADIAL	283639.8						10566.97	3.73%
Ga 417.206	1311688.7						10022.44	0.76%
GaRADIAL	61375.0						1332.89	2.17%
Ag 328.068†	104.4	-0.00022	mg/L	0.000383	-0.00022	mg/L	0.000383	173.64%
Al 396.153†	1854.2	0.383	mg/L	0.0109	0.383	mg/L	0.0109	2.86%
As 188.979†	-1.0	-0.00044	mg/L	0.000926	-0.00044	mg/L	0.000926	209.17%
Ba 233.527†	161.8	0.00222	mg/L	0.000049	0.00222	mg/L	0.000049	2.20%
Be 234.861†	-9.1	-0.00017	mg/L	0.000127	-0.00017	mg/L	0.000127	73.06%
B 249.677†	-81.0	0.00509	mg/L	0.000780	0.00509	mg/L	0.000780	15.33%
Ca 227.546†	18.9	0.149	mg/L	0.0740	0.149	mg/L	0.0740	49.65%
Cd 228.802†	-0.2	0.00006	mg/L	0.000253	0.00006	mg/L	0.000253	460.36%

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Co 228.616†	-3.7	0.00020	mg/L	0.000086	0.00020	mg/L	0.000086 43.27%
Cr 267.716†	76.6	0.00042	mg/L	0.000119	0.00042	mg/L	0.000119 28.05%
Cu 327.393†	707.4	0.00500	mg/L	0.000240	0.00500	mg/L	0.000240 4.80%
Fe 239.562†	324.7	0.766	mg/L	0.0154	0.766	mg/L	0.0154 2.01%
Mg 279.077†	108.7	0.132	mg/L	0.0038	0.132	mg/L	0.0038 2.91%
Mn 257.610†	6478.7	0.0155	mg/L	0.00013	0.0155	mg/L	0.00013 0.87%
Mo 202.031†	5.9	-0.00030	mg/L	0.000263	-0.00030	mg/L	0.000263 89.13%
Ni 231.604†	26.7	0.00062	mg/L	0.000133	0.00062	mg/L	0.000133 21.24%
Pb 220.353†	21.0	0.00280	mg/L	0.001631	0.00280	mg/L	0.001631 58.26%
Sb 206.836†	1.5	0.00077	mg/L	0.002677	0.00077	mg/L	0.002677 346.95%
Se 196.026†	-2.1	0.00301	mg/L	0.001732	0.00301	mg/L	0.001732 57.56%
Si 251.611†	11729.7	0.339	mg/L	0.0029	0.339	mg/L	0.0029 0.87%
Sn 189.927†	-52.4	-0.00728	mg/L	0.000310	-0.00728	mg/L	0.000310 4.26%
Ti 334.940†	6931.4	0.00939	mg/L	0.001627	0.00939	mg/L	0.001627 17.33%
Tl 190.801†	1.6	-0.00188	mg/L	0.002102	-0.00188	mg/L	0.002102 112.02%
V 290.880†	205.1	0.00010	mg/L	0.000242	0.00010	mg/L	0.000242 237.27%
Zn 206.200†	272.4	0.00772	mg/L	0.000413	0.00772	mg/L	0.000413 5.35%
K 766.490†	806.3	0.203	mg/L	0.0258	0.203	mg/L	0.0258 12.73%
Na 589.592†	1712642.5	139	mg/L	4.4	139	mg/L	4.4 3.17%
Sr 407.771†	1847.3	0.00110	mg/L	0.000616	0.00110	mg/L	0.000616 56.03%
Li 670.784†	160.9	0.00058	mg/L	0.001100	0.00058	mg/L	0.001100 190.39%

Sequence No.: 32 **Autosampler Location: 54**
Sample ID: L1102054201 WG357322-01 **Date Collected: 2/23/2011 1:16:21 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:47:02 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102054201 WG357322-01

Analyte	Back Pressure	Flow
All	165.0 kPa	0.50 L/min

Mean Data: L1102054201 WG357322-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4952155.5						77004.75	1.55%
YRADIAL	291361.6						12069.52	4.14%
Ga 417.206	1284228.1						29130.96	2.27%
GaRADIAL	62075.5						1200.91	1.93%
Ag 328.068†	248.9	0.00053	mg/L	0.000290	0.00053	mg/L	0.000290	55.26%
Al 396.153†	241.8	0.0397	mg/L	0.01746	0.0397	mg/L	0.01746	43.99%
As 188.979†	6.6	0.00500	mg/L	0.003631	0.00500	mg/L	0.003631	72.56%
Ba 233.527†	3181.1	0.0533	mg/L	0.00095	0.0533	mg/L	0.00095	1.78%
Be 234.861†	-53.8	-0.00010	mg/L	0.000056	-0.00010	mg/L	0.000056	56.07%
B 249.677†	1516.3	0.0323	mg/L	0.00134	0.0323	mg/L	0.00134	4.15%
Ca 227.546†	7592.0	71.8	mg/L	1.76	71.8	mg/L	1.76	2.45%
Cd 228.802†	5.8	0.00034	mg/L	0.000219	0.00034	mg/L	0.000219	63.97%
Co 228.616†	-12.9	-0.00024	mg/L	0.000330	-0.00024	mg/L	0.000330	136.24%
Cr 267.716†	63.7	0.00032	mg/L	0.000063	0.00032	mg/L	0.000063	19.36%
Cu 327.393†	1077.7	0.00744	mg/L	0.000242	0.00744	mg/L	0.000242	3.26%
Fe 239.562†	19.2	0.0434	mg/L	0.00666	0.0434	mg/L	0.00666	15.34%
Mg 279.077†	1290.0	1.65	mg/L	0.057	1.65	mg/L	0.057	3.44%
Mn 257.610†	2213.7	0.00609	mg/L	0.000114	0.00609	mg/L	0.000114	1.87%
Mo 202.031†	-7.0	-0.00129	mg/L	0.000190	-0.00129	mg/L	0.000190	14.78%
Ni 231.604†	-4.3	-0.00031	mg/L	0.000060	-0.00031	mg/L	0.000060	19.56%
Pb 220.353†	-5.9	0.00180	mg/L	0.001398	0.00180	mg/L	0.001398	77.53%
Sb 206.836†	15.3	0.00937	mg/L	0.002029	0.00937	mg/L	0.002029	21.65%
Se 196.026†	-32.2	-0.00031	mg/L	0.004211	-0.00031	mg/L	0.004211	>999.9%
Si 251.611†	28277.1	0.819	mg/L	0.0194	0.819	mg/L	0.0194	2.37%
Sn 189.927†	-47.6	-0.00645	mg/L	0.001207	-0.00645	mg/L	0.001207	18.72%
Ti 334.940†	382.7	0.00108	mg/L	0.000073	0.00108	mg/L	0.000073	6.79%
Tl 190.801†	106.7	0.0527	mg/L	0.00231	0.0527	mg/L	0.00231	4.38%
V 290.880†	82.1	-0.00078	mg/L	0.000519	-0.00078	mg/L	0.000519	66.66%
Zn 206.200†	828.5	0.0244	mg/L	0.00037	0.0244	mg/L	0.00037	1.52%
K 766.490†	4402.7	1.64	mg/L	0.098	1.64	mg/L	0.098	5.98%
Na 589.592†	1698071.0	138	mg/L	2.4	138	mg/L	2.4	1.71%
Sr 407.771†	100182.0	0.0983	mg/L	0.00568	0.0983	mg/L	0.00568	5.77%
Li 670.784†	164.8	0.00063	mg/L	0.000691	0.00063	mg/L	0.000691	109.68%

Approved: February 24, 2011

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Sequence No.: 33 **Autosampler Location: 55**
Sample ID: L1102054201PS WG357379-01 **Date Collected: 2/23/2011 1:23:02 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:47:03 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102054201PS WG357379-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102054201PS WG357379-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4836882.7						17055.37	0.35%
YRADIAL	293027.2						4584.13	1.56%
Ga 417.206	1267283.3						6954.12	0.55%
GaRADIAL	63843.6						729.69	1.14%
Ag 328.068†	39056.8	0.197	mg/L	0.0035	0.197	mg/L	0.0035	1.76%
Al 396.153†	23137.0	4.91	mg/L	0.025	4.91	mg/L	0.025	0.51%
As 188.979†	217.5	0.196	mg/L	0.0018	0.196	mg/L	0.0018	0.94%
Ba 233.527†	30935.3	0.524	mg/L	0.0042	0.524	mg/L	0.0042	0.80%
Be 234.861†	13711.7	0.0241	mg/L	0.00026	0.0241	mg/L	0.00026	1.08%
B 249.677†	51262.3	0.977	mg/L	0.0144	0.977	mg/L	0.0144	1.48%
Ca 227.546†	7464.9	70.7	mg/L	0.35	70.7	mg/L	0.35	0.50%
Cd 228.802†	429.4	0.0240	mg/L	0.00017	0.0240	mg/L	0.00017	0.70%
Co 228.616†	1869.8	0.0932	mg/L	0.00045	0.0932	mg/L	0.00045	0.48%
Cr 267.716†	27909.9	0.241	mg/L	0.0028	0.241	mg/L	0.0028	1.14%
Cu 327.393†	36173.8	0.248	mg/L	0.0043	0.248	mg/L	0.0043	1.74%
Fe 239.562†	812.3	1.92	mg/L	0.025	1.92	mg/L	0.025	1.30%
Mg 279.077†	4856.1	6.23	mg/L	0.093	6.23	mg/L	0.093	1.50%
Mn 257.610†	110448.7	0.249	mg/L	0.0029	0.249	mg/L	0.0029	1.18%
Mo 202.031†	6797.8	0.502	mg/L	0.0016	0.502	mg/L	0.0016	0.32%
Ni 231.604†	8365.6	0.241	mg/L	0.0007	0.241	mg/L	0.0007	0.29%
Pb 220.353†	1421.6	0.240	mg/L	0.0018	0.240	mg/L	0.0018	0.74%
Sb 206.836†	935.4	0.584	mg/L	0.0036	0.584	mg/L	0.0036	0.61%
Se 196.026†	244.9	0.193	mg/L	0.0082	0.193	mg/L	0.0082	4.23%
Si 251.611†	110895.1	3.21	mg/L	0.050	3.21	mg/L	0.050	1.56%
Sn 189.927†	-43.3	-0.00572	mg/L	0.000486	-0.00572	mg/L	0.000486	8.49%
Ti 334.940†	357003.2	0.493	mg/L	0.0084	0.493	mg/L	0.0084	1.71%
Tl 190.801†	492.3	0.283	mg/L	0.0033	0.283	mg/L	0.0033	1.16%
V 290.880†	73703.6	0.491	mg/L	0.0077	0.491	mg/L	0.0077	1.56%
Zn 206.200†	16636.4	0.500	mg/L	0.0026	0.500	mg/L	0.0026	0.52%
K 766.490†	64603.6	25.8	mg/L	0.13	25.8	mg/L	0.13	0.52%
Na 589.592†	1800065.5	147	mg/L	1.8	147	mg/L	1.8	1.25%
Sr 407.771†	582169.2	0.574	mg/L	0.0513	0.574	mg/L	0.0513	8.93%
Li 670.784†	37141.1	0.487	mg/L	0.0029	0.487	mg/L	0.0029	0.59%

Sequence No.: 34 **Autosampler Location: 56**
Sample ID: L1102054201DL WG357379-02 **Date Collected: 2/23/2011 1:29:45 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:47:09 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102054201DL WG357379-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102054201DL WG357379-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4899234.2						50380.86	1.03%
YRADIAL	286806.0						2216.65	0.77%
Ga 417.206	1300832.7						39279.20	3.02%
GaRADIAL	61586.9						722.27	1.17%
Ag 328.068†	23.0	-0.00059	mg/L	0.000421	-0.00059	mg/L	0.000421	70.76%

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Al 396.153†	67.4	0.00253 mg/L	0.011756	0.00253 mg/L	0.011756	464.62%
As 188.979†	1.9	0.00182 mg/L	0.002985	0.00182 mg/L	0.002985	164.31%
Ba 233.527†	656.6	0.0106 mg/L	0.00049	0.0106 mg/L	0.00049	4.65%
Be 234.861†	12.5	0.00002 mg/L	0.000030	0.00002 mg/L	0.000030	132.48%
B 249.677†	419.2	0.0115 mg/L	0.00148	0.0115 mg/L	0.00148	12.89%
Ca 227.546†	1484.3	14.0 mg/L	0.69	14.0 mg/L	0.69	4.96%
Cd 228.802†	-2.3	-0.00008 mg/L	0.000100	-0.00008 mg/L	0.000100	123.45%
Co 228.616†	-5.6	0.00014 mg/L	0.000071	0.00014 mg/L	0.000071	49.95%
Cr 267.716†	24.5	-0.00001 mg/L	0.000065	-0.00001 mg/L	0.000065	568.67%
Cu 327.393†	98.4	0.00074 mg/L	0.000109	0.00074 mg/L	0.000109	14.67%
Fe 239.562†	4.7	0.00898 mg/L	0.007590	0.00898 mg/L	0.007590	84.55%
Mg 279.077†	289.1	0.364 mg/L	0.0078	0.364 mg/L	0.0078	2.13%
Mn 257.610†	583.9	0.00127 mg/L	0.000065	0.00127 mg/L	0.000065	5.14%
Mo 202.031†	3.5	-0.00051 mg/L	0.000127	-0.00051 mg/L	0.000127	24.61%
Ni 231.604†	-4.2	-0.00028 mg/L	0.000261	-0.00028 mg/L	0.000261	93.36%
Pb 220.353†	-1.5	-0.00024 mg/L	0.001073	-0.00024 mg/L	0.001073	453.52%
Sb 206.836†	6.3	0.00380 mg/L	0.002147	0.00380 mg/L	0.002147	56.44%
Se 196.026†	-10.3	0.00055 mg/L	0.003553	0.00055 mg/L	0.003553	650.41%
Si 251.611†	5755.2	0.166 mg/L	0.0110	0.166 mg/L	0.0110	6.62%
Sn 189.927†	-50.7	-0.00698 mg/L	0.000264	-0.00698 mg/L	0.000264	3.78%
Ti 334.940†	10.6	-0.00001 mg/L	0.000258	-0.00001 mg/L	0.000258	>999.9%
Tl 190.801†	33.2	0.0151 mg/L	0.00167	0.0151 mg/L	0.00167	11.03%
V 290.880†	288.1	0.00060 mg/L	0.001131	0.00060 mg/L	0.001131	189.08%
Zn 206.200†	241.9	0.00682 mg/L	0.000291	0.00682 mg/L	0.000291	4.26%
K 766.490†	994.1	0.388 mg/L	0.0582	0.388 mg/L	0.0582	15.01%
Na 589.592†	378488.7	29.0 mg/L	0.53	29.0 mg/L	0.53	1.82%
Sr 407.771†	22646.2	0.0217 mg/L	0.00165	0.0217 mg/L	0.00165	7.60%
Li 670.784†	289.2	0.00227 mg/L	0.000528	0.00227 mg/L	0.000528	23.29%

Sequence No.: 35 **Autosampler Location: 57**
Sample ID: L1102054201S WG357322-04 **Date Collected: 2/23/2011 1:36:28 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:47:15 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102054201S WG357322-04

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102054201S WG357322-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4787566.4						23404.67	0.49%
YRADIAL	283176.2						4370.64	1.54%
Ga 417.206	1270252.8						21931.60	1.73%
GaRADIAL	62059.0						639.60	1.03%
Ag 328.068†	36851.5	0.186	mg/L	0.0034	0.186	mg/L	0.0034	1.83%
Al 396.153†	24658.2	5.23	mg/L	0.019	5.23	mg/L	0.019	0.35%
As 188.979†	209.7	0.189	mg/L	0.0036	0.189	mg/L	0.0036	1.91%
Ba 233.527†	30480.6	0.517	mg/L	0.0103	0.517	mg/L	0.0103	1.99%
Be 234.861†	13180.3	0.0229	mg/L	0.00038	0.0229	mg/L	0.00038	1.65%
B 249.677†	49143.7	0.942	mg/L	0.0176	0.942	mg/L	0.0176	1.87%
Ca 227.546†	8010.2	75.9	mg/L	1.05	75.9	mg/L	1.05	1.38%
Cd 228.802†	409.1	0.0229	mg/L	0.00029	0.0229	mg/L	0.00029	1.27%
Co 228.616†	1790.7	0.0892	mg/L	0.00042	0.0892	mg/L	0.00042	0.47%
Cr 267.716†	26843.1	0.231	mg/L	0.0043	0.231	mg/L	0.0043	1.85%
Cu 327.393†	34857.5	0.239	mg/L	0.0033	0.239	mg/L	0.0033	1.39%
Fe 239.562†	1303.3	3.08	mg/L	0.011	3.08	mg/L	0.011	0.35%
Mg 279.077†	5149.4	6.61	mg/L	0.039	6.61	mg/L	0.039	0.60%
Mn 257.610†	113282.9	0.256	mg/L	0.0053	0.256	mg/L	0.0053	2.07%
Mo 202.031†	6506.8	0.480	mg/L	0.0023	0.480	mg/L	0.0023	0.47%
Ni 231.604†	8010.5	0.231	mg/L	0.0011	0.231	mg/L	0.0011	0.48%
Pb 220.353†	1383.1	0.234	mg/L	0.0007	0.234	mg/L	0.0007	0.29%
Sb 206.836†	887.5	0.554	mg/L	0.0089	0.554	mg/L	0.0089	1.60%
Se 196.026†	232.3	0.186	mg/L	0.0007	0.186	mg/L	0.0007	0.36%
Si 251.611†	114592.8	3.32	mg/L	0.060	3.32	mg/L	0.060	1.79%
Sn 189.927†	-34.0	-0.00413	mg/L	0.000957	-0.00413	mg/L	0.000957	23.16%
Ti 334.940†	350837.8	0.484	mg/L	0.0081	0.484	mg/L	0.0081	1.68%
Tl 190.801†	481.8	0.277	mg/L	0.0060	0.277	mg/L	0.0060	2.17%

Approved: February 24, 2011

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V 290.880†	70939.7	0.473	mg/L	0.0095	0.473	mg/L	0.0095 2.00%
Zn 206.200†	16277.4	0.489	mg/L	0.0093	0.489	mg/L	0.0093 1.89%
K 766.490†	61029.2	24.3	mg/L	0.06	24.3	mg/L	0.06 0.24%
Na 589.592†	1948762.1	160	mg/L	0.5	160	mg/L	0.5 0.30%
Sr 407.771†	581172.1	0.573	mg/L	0.0471	0.573	mg/L	0.0471 8.21%
Li 670.784†	34254.6	0.449	mg/L	0.0026	0.449	mg/L	0.0026 0.57%

Sequence No.: 36 **Autosampler Location: 58**
Sample ID: L1102054201SD WG357322-05 **Date Collected: 2/23/2011 1:43:10 PM**
Analyst: PDM **Data Type: Reprocessed on 2/23/2011 2:47:16 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102054201SD WG357322-05

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102054201SD WG357322-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4823986.5						52728.40	1.09%
YRADIAL	284324.6						3475.87	1.22%
Ga 417.206	1270806.2						4960.62	0.39%
GaRADIAL	62488.5						1414.28	2.26%
Ag 328.068†	37531.9	0.189	mg/L	0.0017	0.189	mg/L	0.0017	0.92%
Al 396.153†	22464.4	4.77	mg/L	0.013	4.77	mg/L	0.013	0.28%
As 188.979†	210.4	0.189	mg/L	0.0027	0.189	mg/L	0.0027	1.42%
Ba 233.527†	30312.8	0.514	mg/L	0.0059	0.514	mg/L	0.0059	1.15%
Be 234.861†	13240.2	0.0233	mg/L	0.00021	0.0233	mg/L	0.00021	0.90%
B 249.677†	50337.8	0.959	mg/L	0.0114	0.959	mg/L	0.0114	1.19%
Ca 227.546†	8158.1	77.3	mg/L	0.33	77.3	mg/L	0.33	0.43%
Cd 228.802†	412.1	0.0231	mg/L	0.00037	0.0231	mg/L	0.00037	1.61%
Co 228.616†	1796.4	0.0895	mg/L	0.00145	0.0895	mg/L	0.00145	1.62%
Cr 267.716†	27120.7	0.234	mg/L	0.0047	0.234	mg/L	0.0047	2.01%
Cu 327.393†	34811.5	0.239	mg/L	0.0032	0.239	mg/L	0.0032	1.32%
Fe 239.562†	799.1	1.89	mg/L	0.039	1.89	mg/L	0.039	2.04%
Mg 279.077†	4930.9	6.33	mg/L	0.119	6.33	mg/L	0.119	1.88%
Mn 257.610†	107167.9	0.242	mg/L	0.0028	0.242	mg/L	0.0028	1.15%
Mo 202.031†	6548.0	0.483	mg/L	0.0066	0.483	mg/L	0.0066	1.36%
Ni 231.604†	8035.5	0.232	mg/L	0.0030	0.232	mg/L	0.0030	1.27%
Pb 220.353†	1368.3	0.232	mg/L	0.0045	0.232	mg/L	0.0045	1.93%
Sb 206.836†	903.8	0.564	mg/L	0.0060	0.564	mg/L	0.0060	1.06%
Se 196.026†	232.8	0.186	mg/L	0.0070	0.186	mg/L	0.0070	3.74%
Si 251.611†	142061.5	4.12	mg/L	0.033	4.12	mg/L	0.033	0.81%
Sn 189.927†	-33.0	-0.00395	mg/L	0.001739	-0.00395	mg/L	0.001739	43.99%
Ti 334.940†	363165.6	0.501	mg/L	0.0053	0.501	mg/L	0.0053	1.05%
Tl 190.801†	478.1	0.275	mg/L	0.0020	0.275	mg/L	0.0020	0.72%
V 290.880†	71521.7	0.477	mg/L	0.0084	0.477	mg/L	0.0084	1.76%
Zn 206.200†	16209.2	0.487	mg/L	0.0025	0.487	mg/L	0.0025	0.51%
K 766.490†	62181.4	24.8	mg/L	0.12	24.8	mg/L	0.12	0.47%
Na 589.592†	1974225.7	162	mg/L	4.1	162	mg/L	4.1	2.51%
Sr 407.771†	586428.6	0.578	mg/L	0.0502	0.578	mg/L	0.0502	8.69%
Li 670.784†	35203.5	0.462	mg/L	0.0033	0.462	mg/L	0.0033	0.72%

Sequence No.: 37 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 1:49:54 PM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:47:17 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Approved: February 24, 2011
Pierre Morris

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4730135.6						31735.17	0.67%
YRADIAL	285045.7						791.24	0.28%
Ga 417.206	1249978.4						17104.13	1.37%
GaRADIAL	61724.7						1080.14	1.75%
Ag 328.068†	79674.1	0.402	mg/L	0.0025	0.402	mg/L	0.0025	0.62%
QC value within limits for Ag 328.068 Recovery = 100.61%								
Al 396.153†	47052.5	10.00	mg/L	0.026	10.00	mg/L	0.026	0.26%
QC value within limits for Al 396.153 Recovery = 99.99%								
As 188.979†	435.4	0.394	mg/L	0.0063	0.394	mg/L	0.0063	1.59%
QC value within limits for As 188.979 Recovery = 98.57%								
Ba 233.527†	59386.6	1.01	mg/L	0.002	1.01	mg/L	0.002	0.23%
QC value within limits for Ba 233.527 Recovery = 100.73%								
Be 234.861†	28650.7	0.0504	mg/L	0.00018	0.0504	mg/L	0.00018	0.35%
QC value within limits for Be 234.861 Recovery = 100.70%								
B 249.677†	26664.2	0.514	mg/L	0.0034	0.514	mg/L	0.0034	0.67%
QC value within limits for B 249.677 Recovery = 102.80%								
Ca 227.546†	1048.0	10.2	mg/L	0.15	10.2	mg/L	0.15	1.50%
QC value within limits for Ca 227.546 Recovery = 102.16%								
Cd 228.802†	889.4	0.0498	mg/L	0.00065	0.0498	mg/L	0.00065	1.31%
QC value within limits for Cd 228.802 Recovery = 99.68%								
Co 228.616†	3932.2	0.196	mg/L	0.0015	0.196	mg/L	0.0015	0.76%
QC value within limits for Co 228.616 Recovery = 97.81%								
Cr 267.716†	57956.6	0.500	mg/L	0.0012	0.500	mg/L	0.0012	0.24%
QC value within limits for Cr 267.716 Recovery = 99.94%								
Cu 327.393†	71885.1	0.493	mg/L	0.0025	0.493	mg/L	0.0025	0.50%
QC value within limits for Cu 327.393 Recovery = 98.57%								
Fe 239.562†	1636.3	3.87	mg/L	0.059	3.87	mg/L	0.059	1.52%
QC value within limits for Fe 239.562 Recovery = 96.70%								
Mg 279.077†	7622.7	9.78	mg/L	0.114	9.78	mg/L	0.114	1.17%
QC value within limits for Mg 279.077 Recovery = 97.83%								
Mn 257.610†	226282.5	0.508	mg/L	0.0021	0.508	mg/L	0.0021	0.41%
QC value within limits for Mn 257.610 Recovery = 101.62%								
Mo 202.031†	13614.5	1.01	mg/L	0.005	1.01	mg/L	0.005	0.49%
QC value within limits for Mo 202.031 Recovery = 100.52%								
Ni 231.604†	17399.3	0.502	mg/L	0.0018	0.502	mg/L	0.0018	0.37%
QC value within limits for Ni 231.604 Recovery = 100.43%								
Pb 220.353†	3034.7	0.507	mg/L	0.0034	0.507	mg/L	0.0034	0.67%
QC value within limits for Pb 220.353 Recovery = 101.31%								
Sb 206.836†	1900.7	1.19	mg/L	0.020	1.19	mg/L	0.020	1.67%
QC value within limits for Sb 206.836 Recovery = 98.93%								
Se 196.026†	557.7	0.396	mg/L	0.0046	0.396	mg/L	0.0046	1.17%
QC value within limits for Se 196.026 Recovery = 98.93%								
Si 251.611†	170284.6	4.93	mg/L	0.016	4.93	mg/L	0.016	0.32%
QC value within limits for Si 251.611 Recovery = 98.54%								
Sn 189.927†	5943.4	1.02	mg/L	0.006	1.02	mg/L	0.006	0.61%
QC value within limits for Sn 189.927 Recovery = 101.61%								
Ti 334.940†	718110.8	0.990	mg/L	0.0055	0.990	mg/L	0.0055	0.56%
QC value within limits for Ti 334.940 Recovery = 98.99%								
Tl 190.801†	869.8	0.515	mg/L	0.0028	0.515	mg/L	0.0028	0.55%
QC value within limits for Tl 190.801 Recovery = 102.93%								
V 290.880†	150470.1	1.00	mg/L	0.003	1.00	mg/L	0.003	0.34%
QC value within limits for V 290.880 Recovery = 100.45%								
Zn 206.200†	33560.1	1.01	mg/L	0.003	1.01	mg/L	0.003	0.30%
QC value within limits for Zn 206.200 Recovery = 100.90%								
K 766.490†	123197.5	49.6	mg/L	0.36	49.6	mg/L	0.36	0.73%
QC value within limits for K 766.490 Recovery = 99.23%								
Na 589.592†	637811.5	49.3	mg/L	0.33	49.3	mg/L	0.33	0.67%
QC value within limits for Na 589.592 Recovery = 98.68%								
Sr 407.771†	1026677.3	1.01	mg/L	0.069	1.01	mg/L	0.069	6.86%
QC value within limits for Sr 407.771 Recovery = 101.29%								
Li 670.784†	75989.7	0.999	mg/L	0.0027	0.999	mg/L	0.0027	0.27%
QC value within limits for Li 670.784 Recovery = 99.90%								

All analyte(s) passed QC.

Sequence No.: 38 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 1:56:33 PM**
Analyst: **Data Type: Reprocessed on 2/23/2011 2:47:18 PM**
Logged In Analyst (Original) : peicp2
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

Pierre Morris

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5065128.6						23258.24	0.46%
YRADIAL	294874.5						10720.74	3.64%
Ga 417.206	1325965.3						6320.12	0.48%
GaRADIAL	63297.9						1667.33	2.63%
Ag 328.068†	-88.0	-0.00115	mg/L	0.000743	-0.00115	mg/L	0.000743	64.49%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-44.5	-0.0213	mg/L	0.01139	-0.0213	mg/L	0.01139	53.47%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-2.5	-0.00192	mg/L	0.000793	-0.00192	mg/L	0.000793	41.35%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.2	-0.00046	mg/L	0.000099	-0.00046	mg/L	0.000099	21.62%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	27.3	0.00005	mg/L	0.000015	0.00005	mg/L	0.000015	29.80%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	673.2	0.0162	mg/L	0.00065	0.0162	mg/L	0.00065	3.97%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	3.9	0.00410	mg/L	0.036008	0.00410	mg/L	0.036008	877.88%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-0.4	0.00005	mg/L	0.000162	0.00005	mg/L	0.000162	296.26%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-6.7	0.00009	mg/L	0.000171	0.00009	mg/L	0.000171	184.00%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-0.9	-0.00023	mg/L	0.000156	-0.00023	mg/L	0.000156	67.47%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	33.5	0.00030	mg/L	0.000440	0.00030	mg/L	0.000440	148.51%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.0	-0.00200	mg/L	0.000949	-0.00200	mg/L	0.000949	47.50%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	7.6	0.00262	mg/L	0.007432	0.00262	mg/L	0.007432	283.93%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-4.9	-0.00036	mg/L	0.000043	-0.00036	mg/L	0.000043	12.13%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.8	-0.00012	mg/L	0.000319	-0.00012	mg/L	0.000319	256.32%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	13.7	0.00025	mg/L	0.000154	0.00025	mg/L	0.000154	61.95%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	5.7	0.00028	mg/L	0.000631	0.00028	mg/L	0.000631	223.94%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.4	0.00011	mg/L	0.001364	0.00011	mg/L	0.001364	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-4.6	0.00098	mg/L	0.003729	0.00098	mg/L	0.003729	380.07%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-25.1	-0.00219	mg/L	0.000234	-0.00219	mg/L	0.000234	10.71%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-61.9	-0.00889	mg/L	0.000935	-0.00889	mg/L	0.000935	10.52%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	40.3	-0.00011	mg/L	0.000212	-0.00011	mg/L	0.000212	195.15%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	3.9	-0.00067	mg/L	0.001617	-0.00067	mg/L	0.001617	242.26%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	70.1	-0.00086	mg/L	0.000179	-0.00086	mg/L	0.000179	20.88%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-115.7	-0.00391	mg/L	0.000073	-0.00391	mg/L	0.000073	1.87%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	32.8	0.0328	mg/L	0.01178	0.0328	mg/L	0.01178	35.86%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	634.1	0.0486	mg/L	0.01568	0.0486	mg/L	0.01568	32.23%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	432.3	-0.00021	mg/L	0.000491	-0.00021	mg/L	0.000491	237.46%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	75.6	-0.00054	mg/L	0.002817	-0.00054	mg/L	0.002817	517.51%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Approved: February 24, 2011

Pierre Morris

Sequence No.: 39 Autosampler Location: 59
Sample ID: PBW 81 WG357296-02 Date Collected: 2/23/2011 2:35:00 PM
Analyst: PDM Data Type: Reprocessed on 2/23/2011 2:47:20 PM
Logged In Analyst (Original) : peicp2
Initial Sample Wt: Initial Sample Vol:
Dilution: Sample Prep Vol:

Nebulizer Parameters: PBW 81 WG357296-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: PBW 81 WG357296-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5150243.3						57428.53	1.12%
YRADIAL	300809.7						9507.11	3.16%
Ga 417.206	1389964.2						22390.64	1.61%
GaRADIAL	64722.3						1947.01	3.01%
Ag 328.068†	-93.2	-0.00118	mg/L	0.000855	-0.00118	mg/L	0.000855	72.45%
Al 396.153†	86.4	0.00658	mg/L	0.003706	0.00658	mg/L	0.003706	56.36%
As 188.979†	0.5	0.00087	mg/L	0.001699	0.00087	mg/L	0.001699	196.02%
Ba 233.527†	20.1	-0.00017	mg/L	0.000043	-0.00017	mg/L	0.000043	24.74%
Be 234.861†	39.5	0.00007	mg/L	0.000028	0.00007	mg/L	0.000028	39.57%
B 249.677†	-240.5	-0.00105	mg/L	0.000308	-0.00105	mg/L	0.000308	29.36%
Ca 227.546†	6.0	0.0244	mg/L	0.05571	0.0244	mg/L	0.05571	228.61%
Cd 228.802†	-2.0	-0.00005	mg/L	0.000059	-0.00005	mg/L	0.000059	112.15%
Co 228.616†	-6.8	0.00008	mg/L	0.000205	0.00008	mg/L	0.000205	243.80%
Cr 267.716†	-17.1	-0.00037	mg/L	0.000115	-0.00037	mg/L	0.000115	30.94%
Cu 327.393†	39.2	0.00034	mg/L	0.000357	0.00034	mg/L	0.000357	106.22%
Fe 239.562†	2.9	0.00475	mg/L	0.001944	0.00475	mg/L	0.001944	40.97%
Mg 279.077†	-1.8	-0.00951	mg/L	0.006026	-0.00951	mg/L	0.006026	63.34%
Mn 257.610†	31.3	-0.00028	mg/L	0.000025	-0.00028	mg/L	0.000025	8.88%
Mo 202.031†	1.5	-0.00067	mg/L	0.000128	-0.00067	mg/L	0.000128	19.24%
Ni 231.604†	4.0	-0.00003	mg/L	0.000220	-0.00003	mg/L	0.000220	679.93%
Pb 220.353†	6.8	0.00047	mg/L	0.001124	0.00047	mg/L	0.001124	237.38%
Sb 206.836†	-0.1	-0.00022	mg/L	0.001115	-0.00022	mg/L	0.001115	517.12%
Se 196.026†	-5.9	0.00012	mg/L	0.002698	0.00012	mg/L	0.002698	>999.9%
Si 251.611†	58.4	0.00025	mg/L	0.000350	0.00025	mg/L	0.000350	142.08%
Sn 189.927†	-77.0	-0.0115	mg/L	0.00068	-0.0115	mg/L	0.00068	5.93%
Ti 334.940†	39.7	-0.00011	mg/L	0.000074	-0.00011	mg/L	0.000074	67.88%
Tl 190.801†	1.5	-0.00211	mg/L	0.002843	-0.00211	mg/L	0.002843	134.99%
V 290.880†	-1.0	-0.00133	mg/L	0.001066	-0.00133	mg/L	0.001066	79.89%
Zn 206.200†	-118.6	-0.00400	mg/L	0.000116	-0.00400	mg/L	0.000116	2.91%
K 766.490†	-66.6	-0.00678	mg/L	0.008622	-0.00678	mg/L	0.008622	127.21%
Na 589.592†	-167.0	-0.0118	mg/L	0.00755	-0.0118	mg/L	0.00755	63.96%
Sr 407.771†	199.4	-0.00044	mg/L	0.000016	-0.00044	mg/L	0.000016	3.72%
Li 670.784†	-76.4	-0.00255	mg/L	0.001509	-0.00255	mg/L	0.001509	59.25%

Approved: February 24, 2011
Pierre Morris

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Analysis Begun

Start Time: 2/23/2011 2:48:10 PM **Plasma On Time: 2/23/2011 7:13:52 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\WEDNESDAY1.sif
Batch ID:
Results Data Set: 022311HR
Results Library: C:\pe\peicp2\Results\Results.mdb

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Method Loaded
Method Name: 200.7-6010 PE-ICP2.1 **Method Last Saved: 2/23/2011 2:45:44 PM**
IEC File: CA227 LiBeMOD.iec **MSF File:**
Method Description: STANDARD

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Sequence No.: 1 **Autosampler Location: 60**
Sample ID: LCSW 81 WG357296-03 **Date Collected: 2/23/2011 2:48:14 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 81 WG357296-03

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: LCSW 81 WG357296-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4922688.5						25059.86	0.51%
YRADIAL	291586.2						6718.74	2.30%
Ga 417.206	1320204.7						19755.77	1.50%
GaRADIAL	63655.7						737.96	1.16%
Ag 328.068†	37902.0	0.191	mg/L	0.0058	0.191	mg/L	0.0058	3.06%
Al 396.153†	22423.3	4.76	mg/L	0.017	4.76	mg/L	0.017	0.35%
As 188.979†	201.6	0.183	mg/L	0.0054	0.183	mg/L	0.0054	2.96%
Ba 233.527†	28639.2	0.485	mg/L	0.0077	0.485	mg/L	0.0077	1.59%
Be 234.861†	13529.2	0.0238	mg/L	0.00084	0.0238	mg/L	0.00084	3.54%
B 249.677†	50129.3	0.955	mg/L	0.0342	0.955	mg/L	0.0342	3.58%
Ca 227.546†	493.6	4.80	mg/L	0.062	4.80	mg/L	0.062	1.28%
Cd 228.802†	419.8	0.0236	mg/L	0.00031	0.0236	mg/L	0.00031	1.30%
Co 228.616†	1887.3	0.0941	mg/L	0.00051	0.0941	mg/L	0.00051	0.54%
Cr 267.716†	27625.8	0.238	mg/L	0.0045	0.238	mg/L	0.0045	1.90%
Cu 327.393†	33909.6	0.233	mg/L	0.0088	0.233	mg/L	0.0088	3.80%
Fe 239.562†	786.3	1.86	mg/L	0.026	1.86	mg/L	0.026	1.39%
Mg 279.077†	3722.5	4.77	mg/L	0.073	4.77	mg/L	0.073	1.54%
Mn 257.610†	108910.3	0.244	mg/L	0.0044	0.244	mg/L	0.0044	1.78%
Mo 202.031†	6513.9	0.481	mg/L	0.0125	0.481	mg/L	0.0125	2.59%
Ni 231.604†	8505.6	0.245	mg/L	0.0047	0.245	mg/L	0.0047	1.91%
Pb 220.353†	1445.3	0.241	mg/L	0.0018	0.241	mg/L	0.0018	0.74%
Sb 206.836†	899.2	0.562	mg/L	0.0090	0.562	mg/L	0.0090	1.60%
Se 196.026†	264.5	0.190	mg/L	0.0031	0.190	mg/L	0.0031	1.66%
Si 251.611†	82934.9	2.40	mg/L	0.080	2.40	mg/L	0.080	3.35%
Sn 189.927†	-71.9	-0.0106	mg/L	0.00135	-0.0106	mg/L	0.00135	12.72%
Ti 334.940†	349133.6	0.481	mg/L	0.0121	0.481	mg/L	0.0121	2.52%
Tl 190.801†	425.9	0.250	mg/L	0.0027	0.250	mg/L	0.0027	1.08%
V 290.880†	71937.8	0.480	mg/L	0.0097	0.480	mg/L	0.0097	2.02%
Zn 206.200†	15877.1	0.477	mg/L	0.0051	0.477	mg/L	0.0051	1.08%
K 766.490†	58604.7	23.5	mg/L	0.09	23.5	mg/L	0.09	0.39%
Na 589.592†	308038.3	23.5	mg/L	0.59	23.5	mg/L	0.59	2.52%
Sr 407.771†	513186.2	0.506	mg/L	0.0387	0.506	mg/L	0.0387	7.64%
Li 670.784†	35924.1	0.471	mg/L	0.0025	0.471	mg/L	0.0025	0.53%

User canceled analysis.

Approved: February 24, 2011
Pierre Morris

Analysis Begun

Start Time: 2/23/2011 2:54:25 PM **Plasma On Time: 2/23/2011 7:13:52 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\WEDNESDAY1.sif
Batch ID:
Results Data Set: 022311HR
Results Library: C:\pe\peicp2\Results\Results.mdb

Sequence No.: 1 **Autosampler Location: 61**
Sample ID: L1102056201 WG357296-01 **Date Collected: 2/23/2011 2:54:27 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056201 WG357296-01

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102056201 WG357296-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4825287.4						34186.56	0.71%
YRADIAL	291102.5						8239.11	2.83%
Ga 417.206	1347134.2						9746.16	0.72%
GaRADIAL	64135.1						1263.94	1.97%
Ag 328.068†	686.9	0.00263	mg/L	0.000526	0.00263	mg/L	0.000526	20.01%
Al 396.153†	1785.2	0.369	mg/L	0.0179	0.369	mg/L	0.0179	4.85%
As 188.979†	12.7	0.00899	mg/L	0.001367	0.00899	mg/L	0.001367	15.21%
Ba 233.527†	5957.6	0.100	mg/L	0.0005	0.100	mg/L	0.0005	0.52%
Be 234.861†	203.4	0.00017	mg/L	0.000086	0.00017	mg/L	0.000086	51.45%
B 249.677†	22950.3	0.441	mg/L	0.0099	0.441	mg/L	0.0099	2.25%
Ca 227.546†	16171.0	153	mg/L	0.6	153	mg/L	0.6	0.38%
Cd 228.802†	566.8	0.0320	mg/L	0.00018	0.0320	mg/L	0.00018	0.56%
Co 228.616†	2.1	0.00046	mg/L	0.000291	0.00046	mg/L	0.000291	63.07%
Cr 267.716†	155.5	0.00114	mg/L	0.000235	0.00114	mg/L	0.000235	20.69%
Cu 327.393†	72718.9	0.497	mg/L	0.0109	0.497	mg/L	0.0109	2.19%
Fe 239.562†	395.0	0.932	mg/L	0.0330	0.932	mg/L	0.0330	3.54%
Mg 279.077†	6340.4	8.13	mg/L	0.251	8.13	mg/L	0.251	3.08%
Mn 257.610†	32679.9	0.0748	mg/L	0.00186	0.0748	mg/L	0.00186	2.49%
Mo 202.031†	16.2	0.00048	mg/L	0.000330	0.00048	mg/L	0.000330	68.68%
Ni 231.604†	442.3	0.0126	mg/L	0.00012	0.0126	mg/L	0.00012	0.95%
Pb 220.353†	21.5	0.00984	mg/L	0.000536	0.00984	mg/L	0.000536	5.44%
Sb 206.836†	50.7	0.0314	mg/L	0.00186	0.0314	mg/L	0.00186	5.93%
Se 196.026†	-34.3	0.0188	mg/L	0.00201	0.0188	mg/L	0.00201	10.66%
Si 251.611†	343971.7	9.98	mg/L	0.153	9.98	mg/L	0.153	1.53%
Sn 189.927†	-4.2	0.00096	mg/L	0.001472	0.00096	mg/L	0.001472	152.84%
Ti 334.940†	4136.1	0.00707	mg/L	0.001588	0.00707	mg/L	0.001588	22.47%
Tl 190.801†	129.1	0.0586	mg/L	0.00274	0.0586	mg/L	0.00274	4.68%
V 290.880†	-26.9	-0.00144	mg/L	0.000460	-0.00144	mg/L	0.000460	31.89%
Zn 206.200†	50855.7	1.53	mg/L	0.026	1.53	mg/L	0.026	1.68%
K 766.490†	5847.6	2.33	mg/L	0.096	2.33	mg/L	0.096	4.11%
Na 589.592†	306012.2	23.4	mg/L	0.26	23.4	mg/L	0.26	1.11%
Sr 407.771†	186162.1	0.183	mg/L	0.0114	0.183	mg/L	0.0114	6.23%
Li 670.784†	999.1	0.0116	mg/L	0.00135	0.0116	mg/L	0.00135	11.64%

Sequence No.: 2 **Autosampler Location: 62**
Sample ID: L1102056201D WG357296-04 **Date Collected: 2/23/2011 3:01:16 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056201D WG357296-04

Analyte	Back Pressure	Flow

Approved: February 24, 2011

Pierre Morris

All	166.0 kPa	0.50 L/min

Mean Data: L1102056201D WG357296-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4846522.5						22413.65	0.46%
YRADIAL	286484.9						3532.29	1.23%
Ga 417.206	1337869.5						32004.21	2.39%
GaRADIAL	63764.9						662.53	1.04%
Ag 328.068†	595.4	0.00217	mg/L	0.000287	0.00217	mg/L	0.000287	13.25%
Al 396.153†	1804.4	0.373	mg/L	0.0243	0.373	mg/L	0.0243	6.53%
As 188.979†	13.4	0.00966	mg/L	0.001640	0.00966	mg/L	0.001640	16.99%
Ba 233.527†	5817.9	0.0979	mg/L	0.00054	0.0979	mg/L	0.00054	0.55%
Be 234.861†	180.0	0.00013	mg/L	0.000222	0.00013	mg/L	0.000222	174.46%
B 249.677†	22649.8	0.435	mg/L	0.0085	0.435	mg/L	0.0085	1.95%
Ca 227.546†	16039.8	152	mg/L	3.3	152	mg/L	3.3	2.18%
Cd 228.802†	543.5	0.0307	mg/L	0.00068	0.0307	mg/L	0.00068	2.23%
Co 228.616†	3.5	0.00054	mg/L	0.000115	0.00054	mg/L	0.000115	21.39%
Cr 267.716†	166.0	0.00123	mg/L	0.000063	0.00123	mg/L	0.000063	5.14%
Cu 327.393†	73398.8	0.502	mg/L	0.0122	0.502	mg/L	0.0122	2.43%
Fe 239.562†	391.8	0.925	mg/L	0.0070	0.925	mg/L	0.0070	0.76%
Mg 279.077†	6295.0	8.07	mg/L	0.071	8.07	mg/L	0.071	0.87%
Mn 257.610†	32219.0	0.0737	mg/L	0.00011	0.0737	mg/L	0.00011	0.15%
Mo 202.031†	10.7	0.00007	mg/L	0.000730	0.00007	mg/L	0.000730	978.41%
Ni 231.604†	432.6	0.0123	mg/L	0.00016	0.0123	mg/L	0.00016	1.29%
Pb 220.353†	30.8	0.0113	mg/L	0.00057	0.0113	mg/L	0.00057	5.05%
Sb 206.836†	44.2	0.0274	mg/L	0.00080	0.0274	mg/L	0.00080	2.93%
Se 196.026†	-31.2	0.0207	mg/L	0.00351	0.0207	mg/L	0.00351	16.99%
Si 251.611†	337070.3	9.78	mg/L	0.212	9.78	mg/L	0.212	2.17%
Sn 189.927†	-2.3	0.00128	mg/L	0.001155	0.00128	mg/L	0.001155	90.53%
Ti 334.940†	2540.0	0.00485	mg/L	0.000188	0.00485	mg/L	0.000188	3.86%
Tl 190.801†	128.0	0.0581	mg/L	0.00050	0.0581	mg/L	0.00050	0.86%
V 290.880†	50.4	-0.00093	mg/L	0.000662	-0.00093	mg/L	0.000662	71.48%
Zn 206.200†	48635.1	1.46	mg/L	0.007	1.46	mg/L	0.007	0.46%
K 766.490†	5664.8	2.26	mg/L	0.050	2.26	mg/L	0.050	2.19%
Na 589.592†	300641.7	22.9	mg/L	0.13	22.9	mg/L	0.13	0.59%
Sr 407.771†	183459.7	0.180	mg/L	0.0139	0.180	mg/L	0.0139	7.70%
Li 670.784†	726.4	0.00802	mg/L	0.001681	0.00802	mg/L	0.001681	20.95%

Sequence No.: 3 **Autosampler Location: 63**
Sample ID: L1102056201S WG357296-05 **Date Collected: 2/23/2011 3:07:55 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056201S WG357296-05

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102056201S WG357296-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4718697.2						35523.77	0.75%
YRADIAL	285145.7						9967.52	3.50%
Ga 417.206	1327042.9						16846.41	1.27%
GaRADIAL	63378.0						1180.49	1.86%
Ag 328.068†	38143.7	0.192	mg/L	0.0009	0.192	mg/L	0.0009	0.45%
Al 396.153†	24704.7	5.24	mg/L	0.037	5.24	mg/L	0.037	0.70%
As 188.979†	212.0	0.189	mg/L	0.0018	0.189	mg/L	0.0018	0.94%
Ba 233.527†	34708.3	0.588	mg/L	0.0042	0.588	mg/L	0.0042	0.72%
Be 234.861†	13778.6	0.0240	mg/L	0.00024	0.0240	mg/L	0.00024	1.01%
B 249.677†	74557.5	1.42	mg/L	0.008	1.42	mg/L	0.008	0.59%
Ca 227.546†	16753.4	159	mg/L	1.3	159	mg/L	1.3	0.84%
Cd 228.802†	975.0	0.0549	mg/L	0.00036	0.0549	mg/L	0.00036	0.65%
Co 228.616†	1865.3	0.0929	mg/L	0.00092	0.0929	mg/L	0.00092	1.00%
Cr 267.716†	28240.0	0.243	mg/L	0.0017	0.243	mg/L	0.0017	0.70%
Cu 327.393†	107822.7	0.738	mg/L	0.0068	0.738	mg/L	0.0068	0.92%
Fe 239.562†	1193.1	2.82	mg/L	0.071	2.82	mg/L	0.071	2.50%
Mg 279.077†	10143.9	13.0	mg/L	0.33	13.0	mg/L	0.33	2.56%

Approved: February 24, 2011

Pierce Morris

Mn 257.610†	143942.8	0.325	mg/L	0.0013	0.325	mg/L	0.0013	0.41%
Mo 202.031†	6746.1	0.498	mg/L	0.0034	0.498	mg/L	0.0034	0.69%
Ni 231.604†	8724.7	0.252	mg/L	0.0015	0.252	mg/L	0.0015	0.60%
Pb 220.353†	1473.7	0.253	mg/L	0.0033	0.253	mg/L	0.0033	1.31%
Sb 206.836†	941.9	0.588	mg/L	0.0057	0.588	mg/L	0.0057	0.97%
Se 196.026†	232.2	0.206	mg/L	0.0053	0.206	mg/L	0.0053	2.57%
Si 251.611†	444591.2	12.9	mg/L	0.09	12.9	mg/L	0.09	0.72%
Sn 189.927†	0.8	0.00182	mg/L	0.001204	0.00182	mg/L	0.001204	66.33%
Ti 334.940†	359201.8	0.497	mg/L	0.0021	0.497	mg/L	0.0021	0.43%
Tl 190.801†	531.2	0.298	mg/L	0.0085	0.298	mg/L	0.0085	2.84%
V 290.880†	74413.4	0.496	mg/L	0.0035	0.496	mg/L	0.0035	0.71%
Zn 206.200†	70831.0	2.13	mg/L	0.009	2.13	mg/L	0.009	0.44%
K 766.490†	66234.7	26.5	mg/L	0.11	26.5	mg/L	0.11	0.41%
Na 589.592†	624731.4	48.3	mg/L	1.36	48.3	mg/L	1.36	2.81%
Sr 407.771†	706272.9	0.697	mg/L	0.0495	0.697	mg/L	0.0495	7.11%
Li 670.784†	37531.0	0.493	mg/L	0.0018	0.493	mg/L	0.0018	0.37%

Sequence No.: 4 **Autosampler Location: 64**
Sample ID: L1102058601 **Date Collected: 2/23/2011 3:14:39 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102058601

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102058601

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4597427.7						62194.83	1.35%
YRADIAL	279812.2						6730.01	2.41%
Ga 417.206	1253639.4						18426.89	1.47%
GaRADIAL	62107.3						428.25	0.69%
Ag 328.068†	402.7	0.00048	mg/L	0.000262	0.00048	mg/L	0.000262	54.83%
Al 396.153†	4062.6	0.854	mg/L	0.0130	0.854	mg/L	0.0130	1.52%
As 188.979†	17.0	0.0142	mg/L	0.00518	0.0142	mg/L	0.00518	36.40%
Ba 233.527†	3421.6	0.0574	mg/L	0.00082	0.0574	mg/L	0.00082	1.44%
Be 234.861†	449.8	0.00119	mg/L	0.000005	0.00119	mg/L	0.000005	0.40%
B 249.677†	19439.9	0.374	mg/L	0.0084	0.374	mg/L	0.0084	2.24%
Ca 227.546†	9159.1	86.6	mg/L	1.57	86.6	mg/L	1.57	1.81%
Cd 228.802†	5.3	0.00060	mg/L	0.000281	0.00060	mg/L	0.000281	47.01%
Co 228.616†	586.9	0.0299	mg/L	0.00024	0.0299	mg/L	0.00024	0.82%
Cr 267.716†	1898.0	0.0143	mg/L	0.00052	0.0143	mg/L	0.00052	3.60%
Cu 327.393†	395.2	0.00283	mg/L	0.000399	0.00283	mg/L	0.000399	14.14%
Fe 239.562†	307.6	0.723	mg/L	0.0182	0.723	mg/L	0.0182	2.52%
Mg 279.077†	15281.1	19.6	mg/L	0.11	19.6	mg/L	0.11	0.55%
Mn 257.610†	1881257.5	4.20	mg/L	0.023	4.20	mg/L	0.023	0.54%
Mo 202.031†	182.6	0.0136	mg/L	0.00019	0.0136	mg/L	0.00019	1.39%
Ni 231.604†	1834.1	0.0528	mg/L	0.00096	0.0528	mg/L	0.00096	1.82%
Pb 220.353†	9.5	0.00471	mg/L	0.001099	0.00471	mg/L	0.001099	23.35%
Sb 206.836†	22.7	0.0140	mg/L	0.00229	0.0140	mg/L	0.00229	16.35%
Se 196.026†	-28.6	0.00425	mg/L	0.002436	0.00425	mg/L	0.002436	57.35%
Si 251.611†	155016.5	4.50	mg/L	0.074	4.50	mg/L	0.074	1.65%
Sn 189.927†	-74.9	-0.0111	mg/L	0.00123	-0.0111	mg/L	0.00123	11.04%
Ti 334.940†	9032.8	0.0132	mg/L	0.00145	0.0132	mg/L	0.00145	11.06%
Tl 190.801†	108.8	0.0589	mg/L	0.00295	0.0589	mg/L	0.00295	5.00%
V 290.880†	-42.6	-0.00157	mg/L	0.000293	-0.00157	mg/L	0.000293	18.68%
Zn 206.200†	1422.2	0.0423	mg/L	0.00077	0.0423	mg/L	0.00077	1.83%
K 766.490†	15451.2	5.43	mg/L	0.107	5.43	mg/L	0.107	1.98%
Na 589.592†	6266110.3	764	mg/L	23.2	764	mg/L	23.2	3.03%
Sr 407.771†	1337557.9	1.32	mg/L	0.122	1.32	mg/L	0.122	9.22%
Li 670.784†	11808.3	0.154	mg/L	0.0018	0.154	mg/L	0.0018	1.19%

Sequence No.: 5 **Autosampler Location: 65**
Sample ID: L1102058601PS WG357405-01 **Date Collected: 2/23/2011 3:21:23 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

Pierre Morris

Nebulizer Parameters: L1102058601PS WG357405-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102058601PS WG357405-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4521539.8						47126.38	1.04%
YRADIAL	280356.0						7262.01	2.59%
Ga 417.206	1223988.7						7151.96	0.58%
GaRADIAL	62274.7						1415.26	2.27%
Ag 328.068†	40501.7	0.203	mg/L	0.0040	0.203	mg/L	0.0040	1.95%
Al 396.153†	26764.4	5.68	mg/L	0.014	5.68	mg/L	0.014	0.24%
As 188.979†	233.9	0.210	mg/L	0.0057	0.210	mg/L	0.0057	2.69%
Ba 233.527†	32375.7	0.549	mg/L	0.0147	0.549	mg/L	0.0147	2.68%
Be 234.861†	14760.6	0.0263	mg/L	0.00043	0.0263	mg/L	0.00043	1.62%
B 249.677†	71287.0	1.36	mg/L	0.030	1.36	mg/L	0.030	2.21%
Ca 227.546†	8957.6	84.9	mg/L	0.56	84.9	mg/L	0.56	0.66%
Cd 228.802†	443.1	0.0251	mg/L	0.00037	0.0251	mg/L	0.00037	1.47%
Co 228.616†	2479.5	0.124	mg/L	0.0016	0.124	mg/L	0.0016	1.27%
Cr 267.716†	30130.7	0.258	mg/L	0.0061	0.258	mg/L	0.0061	2.36%
Cu 327.393†	36469.3	0.250	mg/L	0.0042	0.250	mg/L	0.0042	1.67%
Fe 239.562†	1091.2	2.58	mg/L	0.052	2.58	mg/L	0.052	2.04%
Mg 279.077†	17915.4	23.0	mg/L	0.17	23.0	mg/L	0.17	0.72%
Mn 257.610†	1838811.9	4.10	mg/L	0.019	4.10	mg/L	0.019	0.45%
Mo 202.031†	7086.4	0.524	mg/L	0.0064	0.524	mg/L	0.0064	1.23%
Ni 231.604†	10366.3	0.299	mg/L	0.0038	0.299	mg/L	0.0038	1.26%
Pb 220.353†	1474.9	0.249	mg/L	0.0032	0.249	mg/L	0.0032	1.29%
Sb 206.836†	979.5	0.612	mg/L	0.0058	0.612	mg/L	0.0058	0.96%
Se 196.026†	254.1	0.201	mg/L	0.0086	0.201	mg/L	0.0086	4.28%
Si 251.611†	232316.6	6.74	mg/L	0.149	6.74	mg/L	0.149	2.21%
Sn 189.927†	-80.4	-0.0120	mg/L	0.00036	-0.0120	mg/L	0.00036	2.99%
Ti 334.940†	375852.3	0.519	mg/L	0.0169	0.519	mg/L	0.0169	3.25%
Tl 190.801†	503.5	0.295	mg/L	0.0050	0.295	mg/L	0.0050	1.70%
V 290.880†	76302.6	0.509	mg/L	0.0128	0.509	mg/L	0.0128	2.51%
Zn 206.200†	17947.6	0.539	mg/L	0.0134	0.539	mg/L	0.0134	2.48%
K 766.490†	76461.2	30.1	mg/L	0.10	30.1	mg/L	0.10	0.32%
Na 589.592†	5835772.4	655	mg/L	41.6	655	mg/L	41.6	6.35%
Sr 407.771†	1681933.7	1.66	mg/L	0.136	1.66	mg/L	0.136	8.20%
Li 670.784†	48945.3	0.643	mg/L	0.0054	0.643	mg/L	0.0054	0.84%

Sequence No.: 6 **Autosampler Location: 66**
Sample ID: L1102058601DL WG357405-02 **Date Collected: 2/23/2011 3:28:08 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102058601DL WG357405-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102058601DL WG357405-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4958628.3						61000.19	1.23%
YRADIAL	288280.4						8412.24	2.92%
Ga 417.206	1333262.0						20623.79	1.55%
GaRADIAL	62749.1						654.85	1.04%
Ag 328.068†	-53.9	-0.00115	mg/L	0.001226	-0.00115	mg/L	0.001226	106.46%
Al 396.153†	715.1	0.140	mg/L	0.0133	0.140	mg/L	0.0133	9.46%
As 188.979†	5.5	0.00506	mg/L	0.001932	0.00506	mg/L	0.001932	38.16%
Ba 233.527†	681.7	0.0110	mg/L	0.00011	0.0110	mg/L	0.00011	1.03%
Be 234.861†	133.4	0.00032	mg/L	0.000030	0.00032	mg/L	0.000030	9.36%
B 249.677†	4612.6	0.0913	mg/L	0.00135	0.0913	mg/L	0.00135	1.48%
Ca 227.546†	1732.7	16.4	mg/L	0.23	16.4	mg/L	0.23	1.39%
Cd 228.802†	0.3	0.00012	mg/L	0.000131	0.00012	mg/L	0.000131	112.89%
Co 228.616†	116.2	0.00625	mg/L	0.000295	0.00625	mg/L	0.000295	4.72%

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Cr 267.716†	384.7	0.00272 mg/L	0.000071	0.00272 mg/L	0.000071	2.60%
Cu 327.393†	133.7	0.00099 mg/L	0.000447	0.00099 mg/L	0.000447	45.07%
Fe 239.562†	62.5	0.145 mg/L	0.0048	0.145 mg/L	0.0048	3.29%
Mg 279.077†	3132.9	4.02 mg/L	0.095	4.02 mg/L	0.095	2.36%
Mn 257.610†	382109.8	0.852 mg/L	0.0031	0.852 mg/L	0.0031	0.37%
Mo 202.031†	40.6	0.00241 mg/L	0.000322	0.00241 mg/L	0.000322	13.39%
Ni 231.604†	367.0	0.0104 mg/L	0.00017	0.0104 mg/L	0.00017	1.63%
Pb 220.353†	6.9	0.00120 mg/L	0.001458	0.00120 mg/L	0.001458	121.32%
Sb 206.836†	4.1	0.00242 mg/L	0.002347	0.00242 mg/L	0.002347	97.14%
Se 196.026†	-10.5	0.00061 mg/L	0.002983	0.00061 mg/L	0.002983	487.06%
Si 251.611†	30283.1	0.878 mg/L	0.0092	0.878 mg/L	0.0092	1.05%
Sn 189.927†	-75.2	-0.0112 mg/L	0.00095	-0.0112 mg/L	0.00095	8.53%
Ti 334.940†	1528.3	0.00211 mg/L	0.000385	0.00211 mg/L	0.000385	18.27%
Tl 190.801†	39.5	0.0198 mg/L	0.00408	0.0198 mg/L	0.00408	20.61%
V 290.880†	-153.9	-0.00235 mg/L	0.000659	-0.00235 mg/L	0.000659	28.05%
Zn 206.200†	182.7	0.00506 mg/L	0.000305	0.00506 mg/L	0.000305	6.04%
K 766.490†	3050.1	1.14 mg/L	0.033	1.14 mg/L	0.033	2.93%
Na 589.592†	1288911.6	102 mg/L	2.2	102 mg/L	2.2	2.15%
Sr 407.771†	259982.4	0.256 mg/L	0.0175	0.256 mg/L	0.0175	6.83%
Li 670.784†	2582.7	0.0325 mg/L	0.00217	0.0325 mg/L	0.00217	6.69%

Sequence No.: 7 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 3:35:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4804069.1						21123.30	0.44%
YRADIAL	287791.5						8606.65	2.99%
Ga 417.206	1261436.1						13287.82	1.05%
GaRADIAL	62127.4						1106.72	1.78%
Ag 328.068†	80055.2	0.404	mg/L	0.0071	0.404	mg/L	0.0071	1.77%
QC value within limits for Ag 328.068 Recovery = 101.09%								
Al 396.153†	46544.0	9.89	mg/L	0.214	9.89	mg/L	0.214	2.16%
QC value within limits for Al 396.153 Recovery = 98.90%								
As 188.979†	424.8	0.385	mg/L	0.0036	0.385	mg/L	0.0036	0.92%
QC value within limits for As 188.979 Recovery = 96.16%								
Ba 233.527†	58988.4	1.00	mg/L	0.012	1.00	mg/L	0.012	1.22%
QC value within limits for Ba 233.527 Recovery = 100.05%								
Be 234.861†	28674.9	0.0504	mg/L	0.00082	0.0504	mg/L	0.00082	1.64%
QC value within limits for Be 234.861 Recovery = 100.76%								
B 249.677†	26940.5	0.519	mg/L	0.0100	0.519	mg/L	0.0100	1.92%
QC value within limits for B 249.677 Recovery = 103.87%								
Ca 227.546†	1039.3	10.1	mg/L	0.12	10.1	mg/L	0.12	1.18%
QC value within limits for Ca 227.546 Recovery = 101.31%								
Cd 228.802†	876.3	0.0491	mg/L	0.00066	0.0491	mg/L	0.00066	1.34%
QC value within limits for Cd 228.802 Recovery = 98.23%								
Co 228.616†	3845.3	0.191	mg/L	0.0006	0.191	mg/L	0.0006	0.33%
QC value within limits for Co 228.616 Recovery = 95.62%								
Cr 267.716†	57366.9	0.495	mg/L	0.0048	0.495	mg/L	0.0048	0.97%
QC value within limits for Cr 267.716 Recovery = 98.92%								
Cu 327.393†	72146.3	0.495	mg/L	0.0102	0.495	mg/L	0.0102	2.06%
QC value within limits for Cu 327.393 Recovery = 98.93%								
Fe 239.562†	1633.6	3.86	mg/L	0.121	3.86	mg/L	0.121	3.15%
QC value within limits for Fe 239.562 Recovery = 96.54%								
Mg 279.077†	7591.5	9.74	mg/L	0.293	9.74	mg/L	0.293	3.01%
QC value within limits for Mg 279.077 Recovery = 97.43%								
Mn 257.610†	225213.1	0.506	mg/L	0.0067	0.506	mg/L	0.0067	1.32%
QC value within limits for Mn 257.610 Recovery = 101.13%								
Mo 202.031†	13478.1	0.995	mg/L	0.0079	0.995	mg/L	0.0079	0.79%
QC value within limits for Mo 202.031 Recovery = 99.51%								
Ni 231.604†	17257.2	0.498	mg/L	0.0064	0.498	mg/L	0.0064	1.28%
QC value within limits for Ni 231.604 Recovery = 99.61%								

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Pb 220.353†	2942.4	0.491 mg/L	0.0046	0.491 mg/L	0.0046	0.93%
QC value within limits for Pb 220.353 Recovery = 98.24%						
Sb 206.836†	1866.7	1.17 mg/L	0.014	1.17 mg/L	0.014	1.21%
QC value within limits for Sb 206.836 Recovery = 97.16%						
Se 196.026†	553.7	0.393 mg/L	0.0069	0.393 mg/L	0.0069	1.76%
QC value within limits for Se 196.026 Recovery = 98.23%						
Si 251.611†	171250.6	4.96 mg/L	0.082	4.96 mg/L	0.082	1.65%
QC value within limits for Si 251.611 Recovery = 99.11%						
Sn 189.927†	5769.0	0.986 mg/L	0.0032	0.986 mg/L	0.0032	0.33%
QC value within limits for Sn 189.927 Recovery = 98.63%						
Ti 334.940†	717813.8	0.989 mg/L	0.0034	0.989 mg/L	0.0034	0.35%
QC value within limits for Ti 334.940 Recovery = 98.95%						
Tl 190.801†	848.2	0.502 mg/L	0.0018	0.502 mg/L	0.0018	0.36%
QC value within limits for Tl 190.801 Recovery = 100.42%						
V 290.880†	149813.3	1.00 mg/L	0.017	1.00 mg/L	0.017	1.68%
QC value within limits for V 290.880 Recovery = 100.01%						
Zn 206.200†	33025.4	0.993 mg/L	0.0053	0.993 mg/L	0.0053	0.54%
QC value within limits for Zn 206.200 Recovery = 99.29%						
K 766.490†	121167.5	48.8 mg/L	1.14	48.8 mg/L	1.14	2.34%
QC value within limits for K 766.490 Recovery = 97.58%						
Na 589.592†	629253.8	48.7 mg/L	0.37	48.7 mg/L	0.37	0.77%
QC value within limits for Na 589.592 Recovery = 97.32%						
Sr 407.771†	1000778.1	0.987 mg/L	0.0913	0.987 mg/L	0.0913	9.25%
QC value within limits for Sr 407.771 Recovery = 98.74%						
Li 670.784†	74595.7	0.981 mg/L	0.0163	0.981 mg/L	0.0163	1.66%
QC value within limits for Li 670.784 Recovery = 98.06%						

All analyte(s) passed QC.

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Sequence No.: 8 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 3:42:24 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5036856.9						65527.94	1.30%
YRADIAL	294191.5						6503.68	2.21%
Ga 417.206	1337863.4						18603.36	1.39%
GaRADIAL	63126.5						1679.36	2.66%
Ag 328.068†	-66.9	-0.00105	mg/L	0.000789	-0.00105	mg/L	0.000789	75.41%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	2.5	-0.0113	mg/L	0.00804	-0.0113	mg/L	0.00804	71.22%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.8	0.00114	mg/L	0.001669	0.00114	mg/L	0.001669	146.41%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.8	-0.00053	mg/L	0.000081	-0.00053	mg/L	0.000081	15.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	43.1	0.00008	mg/L	0.000035	0.00008	mg/L	0.000035	45.40%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	677.9	0.0163	mg/L	0.00027	0.0163	mg/L	0.00027	1.64%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	1.3	-0.0205	mg/L	0.03696	-0.0205	mg/L	0.03696	180.44%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-4.3	-0.00018	mg/L	0.000028	-0.00018	mg/L	0.000028	15.26%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-0.8	0.00039	mg/L	0.000254	0.00039	mg/L	0.000254	65.61%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	6.7	-0.00017	mg/L	0.000055	-0.00017	mg/L	0.000055	33.30%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	9.0	0.00013	mg/L	0.000330	0.00013	mg/L	0.000330	258.13%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.0	-0.00198	mg/L	0.006814	-0.00198	mg/L	0.006814	344.53%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	1.7	-0.00490	mg/L	0.002425	-0.00490	mg/L	0.002425	49.47%



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QC value within limits for Mg 279.077 Recovery = Not calculated
Mn 257.610† 77.0 -0.00017 mg/L 0.000032 -0.00017 mg/L 0.000032 18.72%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† -2.5 -0.00096 mg/L 0.000308 -0.00096 mg/L 0.000308 32.15%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† 2.6 -0.00007 mg/L 0.000113 -0.00007 mg/L 0.000113 163.16%
QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† 5.4 0.00023 mg/L 0.001010 0.00023 mg/L 0.001010 438.62%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 0.1 -0.00005 mg/L 0.000974 -0.00005 mg/L 0.000974 >999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -1.9 0.00285 mg/L 0.002729 0.00285 mg/L 0.002729 95.72%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 1.4 -0.00140 mg/L 0.000551 -0.00140 mg/L 0.000551 39.27%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -74.3 -0.0110 mg/L 0.00060 -0.0110 mg/L 0.00060 5.44%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -149.2 -0.00037 mg/L 0.000156 -0.00037 mg/L 0.000156 42.28%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -2.9 -0.00466 mg/L 0.001343 -0.00466 mg/L 0.001343 28.81%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† 29.8 -0.00113 mg/L 0.000479 -0.00113 mg/L 0.000479 42.39%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† -176.0 -0.00572 mg/L 0.000192 -0.00572 mg/L 0.000192 3.36%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 46.4 0.0383 mg/L 0.03406 0.0383 mg/L 0.03406 89.01%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 1026.6 0.0783 mg/L 0.01201 0.0783 mg/L 0.01201 15.34%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -40.1 -0.00067 mg/L 0.000059 -0.00067 mg/L 0.000059 8.71%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 38.4 -0.00103 mg/L 0.001054 -0.00103 mg/L 0.001054 101.89%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 9 **Autosampler Location: 67**
Sample ID: PBW 66 WG357295-01 **Date Collected: 2/23/2011 3:49:00 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 66 WG357295-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: PBW 66 WG357295-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5192781.5						76332.10	1.47%
YRADIAL	289656.5						4449.52	1.54%
Ga 417.206	1318692.4						30381.65	2.30%
GaRADIAL	62821.1						250.30	0.40%
Ag 328.068†	-172.6	-0.00158	mg/L	0.000366	-0.00158	mg/L	0.000366	23.19%
Al 396.153†	87.4	0.00679	mg/L	0.006496	0.00679	mg/L	0.006496	95.61%
As 188.979†	-0.4	0.00004	mg/L	0.001173	0.00004	mg/L	0.001173	>999.9%
Ba 233.527†	-2.8	-0.00056	mg/L	0.000037	-0.00056	mg/L	0.000037	6.61%
Be 234.861†	-49.0	-0.00008	mg/L	0.000041	-0.00008	mg/L	0.000041	49.19%
B 249.677†	730.9	0.0173	mg/L	0.00060	0.0173	mg/L	0.00060	3.48%
Ca 227.546†	4.6	0.0112	mg/L	0.02317	0.0112	mg/L	0.02317	206.62%
Cd 228.802†	1.5	0.00015	mg/L	0.000229	0.00015	mg/L	0.000229	153.50%
Co 228.616†	-5.1	0.00018	mg/L	0.000137	0.00018	mg/L	0.000137	78.02%
Cr 267.716†	33.1	0.00006	mg/L	0.000074	0.00006	mg/L	0.000074	121.28%
Cu 327.393†	194.5	0.00140	mg/L	0.000642	0.00140	mg/L	0.000642	46.03%
Fe 239.562†	2.3	0.00349	mg/L	0.005511	0.00349	mg/L	0.005511	157.92%
Mg 279.077†	41.9	0.0466	mg/L	0.00207	0.0466	mg/L	0.00207	4.43%
Mn 257.610†	53.4	-0.00022	mg/L	0.000114	-0.00022	mg/L	0.000114	50.98%
Mo 202.031†	2.7	-0.00057	mg/L	0.000287	-0.00057	mg/L	0.000287	50.06%
Ni 231.604†	9.4	0.00012	mg/L	0.000295	0.00012	mg/L	0.000295	236.82%
Pb 220.353†	5.5	0.00025	mg/L	0.001285	0.00025	mg/L	0.001285	524.54%
Sb 206.836†	3.6	0.00208	mg/L	0.000592	0.00208	mg/L	0.000592	28.50%

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Se 196.026†	0.6	0.00463 mg/L	0.001354	0.00463 mg/L	0.001354	29.27%
Si 251.611†	87.4	0.00109 mg/L	0.000372	0.00109 mg/L	0.000372	34.28%
Sn 189.927†	-47.5	-0.00643 mg/L	0.000380	-0.00643 mg/L	0.000380	5.91%
Ti 334.940†	-128.7	-0.00034 mg/L	0.000123	-0.00034 mg/L	0.000123	35.92%
Tl 190.801†	1.7	-0.00196 mg/L	0.005035	-0.00196 mg/L	0.005035	257.25%
V 290.880†	22.7	-0.00118 mg/L	0.000955	-0.00118 mg/L	0.000955	81.19%
Zn 206.200†	-87.3	-0.00306 mg/L	0.000046	-0.00306 mg/L	0.000046	1.51%
K 766.490†	92.6	0.0566 mg/L	0.02188	0.0566 mg/L	0.02188	38.62%
Na 589.592†	1643.5	0.125 mg/L	0.0126	0.125 mg/L	0.0126	10.06%
Sr 407.771†	829.1	0.00018 mg/L	0.000179	0.00018 mg/L	0.000179	97.08%
Li 670.784†	32.5	-0.00111 mg/L	0.001092	-0.00111 mg/L	0.001092	98.09%

Sequence No.: 10 **Autosampler Location: 68**
Sample ID: LCSW 66 WG357295-02 **Date Collected: 2/23/2011 3:55:45 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 66 WG357295-02

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: LCSW 66 WG357295-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5070838.2						65599.52	1.29%
YRADIAL	299934.6						2512.91	0.84%
Ga 417.206	1333057.0						24677.72	1.85%
GaRADIAL	64779.7						551.16	0.85%
Ag 328.068†	36651.9	0.185	mg/L	0.0040	0.185	mg/L	0.0040	2.17%
Al 396.153†	22378.3	4.75	mg/L	0.014	4.75	mg/L	0.014	0.30%
As 188.979†	191.0	0.173	mg/L	0.0031	0.173	mg/L	0.0031	1.81%
Ba 233.527†	27648.9	0.469	mg/L	0.0063	0.469	mg/L	0.0063	1.34%
Be 234.861†	12627.6	0.0222	mg/L	0.00035	0.0222	mg/L	0.00035	1.56%
B 249.677†	46922.3	0.894	mg/L	0.0121	0.894	mg/L	0.0121	1.35%
Ca 227.546†	469.8	4.57	mg/L	0.137	4.57	mg/L	0.137	3.01%
Cd 228.802†	399.3	0.0225	mg/L	0.00033	0.0225	mg/L	0.00033	1.47%
Co 228.616†	1806.3	0.0901	mg/L	0.00109	0.0901	mg/L	0.00109	1.21%
Cr 267.716†	26854.6	0.231	mg/L	0.0024	0.231	mg/L	0.0024	1.02%
Cu 327.393†	33488.3	0.230	mg/L	0.0025	0.230	mg/L	0.0025	1.07%
Fe 239.562†	760.9	1.80	mg/L	0.025	1.80	mg/L	0.025	1.38%
Mg 279.077†	3632.2	4.66	mg/L	0.027	4.66	mg/L	0.027	0.58%
Mn 257.610†	105445.3	0.237	mg/L	0.0031	0.237	mg/L	0.0031	1.32%
Mo 202.031†	6339.3	0.468	mg/L	0.0030	0.468	mg/L	0.0030	0.64%
Ni 231.604†	8044.0	0.232	mg/L	0.0028	0.232	mg/L	0.0028	1.23%
Pb 220.353†	1382.6	0.230	mg/L	0.0037	0.230	mg/L	0.0037	1.60%
Sb 206.836†	861.0	0.538	mg/L	0.0112	0.538	mg/L	0.0112	2.08%
Se 196.026†	252.0	0.181	mg/L	0.0058	0.181	mg/L	0.0058	3.18%
Si 251.611†	79866.9	2.31	mg/L	0.035	2.31	mg/L	0.035	1.53%
Sn 189.927†	-47.0	-0.00635	mg/L	0.000158	-0.00635	mg/L	0.000158	2.49%
Ti 334.940†	340939.2	0.470	mg/L	0.0067	0.470	mg/L	0.0067	1.43%
Tl 190.801†	394.0	0.232	mg/L	0.0048	0.232	mg/L	0.0048	2.05%
V 290.880†	69799.5	0.465	mg/L	0.0038	0.465	mg/L	0.0038	0.83%
Zn 206.200†	15016.4	0.451	mg/L	0.0075	0.451	mg/L	0.0075	1.66%
K 766.490†	57157.9	22.9	mg/L	0.08	22.9	mg/L	0.08	0.37%
Na 589.592†	300283.8	22.9	mg/L	0.22	22.9	mg/L	0.22	0.95%
Sr 407.771†	488788.8	0.482	mg/L	0.0378	0.482	mg/L	0.0378	7.84%
Li 670.784†	35543.2	0.466	mg/L	0.0009	0.466	mg/L	0.0009	0.19%

Sequence No.: 11 **Autosampler Location: 69**
Sample ID: LCSW DUP WG357295-03 **Date Collected: 2/23/2011 4:02:24 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW DUP WG357295-03

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Approved: February 24, 2011

Pierre Morris

Mean Data: LCSW DUP WG357295-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4976413.7						64403.47	1.29%
YRADIAL	292984.8						3041.93	1.04%
Ga 417.206	1283952.9						16170.88	1.26%
GaRADIAL	63386.8						1547.48	2.44%
Ag 328.068†	37546.7	0.189	mg/L	0.0048	0.189	mg/L	0.0048	2.53%
Al 396.153†	22381.5	4.75	mg/L	0.016	4.75	mg/L	0.016	0.34%
As 188.979†	199.0	0.180	mg/L	0.0049	0.180	mg/L	0.0049	2.71%
Ba 233.527†	27856.9	0.472	mg/L	0.0113	0.472	mg/L	0.0113	2.39%
Be 234.861†	13172.7	0.0232	mg/L	0.00038	0.0232	mg/L	0.00038	1.63%
B 249.677†	48315.2	0.921	mg/L	0.0216	0.921	mg/L	0.0216	2.35%
Ca 227.546†	481.7	4.68	mg/L	0.057	4.68	mg/L	0.057	1.21%
Cd 228.802†	414.0	0.0233	mg/L	0.00020	0.0233	mg/L	0.00020	0.86%
Co 228.616†	1838.7	0.0917	mg/L	0.00100	0.0917	mg/L	0.00100	1.09%
Cr 267.716†	27182.2	0.234	mg/L	0.0054	0.234	mg/L	0.0054	2.32%
Cu 327.393†	34161.5	0.234	mg/L	0.0044	0.234	mg/L	0.0044	1.86%
Fe 239.562†	777.7	1.84	mg/L	0.045	1.84	mg/L	0.045	2.44%
Mg 279.077†	3701.1	4.75	mg/L	0.091	4.75	mg/L	0.091	1.91%
Mn 257.610†	107281.7	0.241	mg/L	0.0058	0.241	mg/L	0.0058	2.41%
Mo 202.031†	6372.2	0.470	mg/L	0.0114	0.470	mg/L	0.0114	2.42%
Ni 231.604†	8153.3	0.235	mg/L	0.0068	0.235	mg/L	0.0068	2.91%
Pb 220.353†	1408.5	0.235	mg/L	0.0028	0.235	mg/L	0.0028	1.19%
Sb 206.836†	893.0	0.558	mg/L	0.0063	0.558	mg/L	0.0063	1.13%
Se 196.026†	259.9	0.187	mg/L	0.0014	0.187	mg/L	0.0014	0.77%
Si 251.611†	82332.1	2.38	mg/L	0.054	2.38	mg/L	0.054	2.26%
Sn 189.927†	-48.9	-0.00668	mg/L	0.000427	-0.00668	mg/L	0.000427	6.39%
Ti 334.940†	340057.6	0.469	mg/L	0.0032	0.469	mg/L	0.0032	0.67%
Tl 190.801†	400.6	0.236	mg/L	0.0020	0.236	mg/L	0.0020	0.86%
V 290.880†	70552.6	0.470	mg/L	0.0122	0.470	mg/L	0.0122	2.59%
Zn 206.200†	15297.3	0.460	mg/L	0.0092	0.460	mg/L	0.0092	2.01%
K 766.490†	57406.1	23.0	mg/L	0.19	23.0	mg/L	0.19	0.82%
Na 589.592†	301666.8	23.0	mg/L	0.22	23.0	mg/L	0.22	0.94%
Sr 407.771†	484518.7	0.478	mg/L	0.0311	0.478	mg/L	0.0311	6.52%
Li 670.784†	35319.7	0.463	mg/L	0.0044	0.463	mg/L	0.0044	0.95%

Sequence No.: 12 **Autosampler Location: 70**
Sample ID: L1102043901 **Date Collected: 2/23/2011 4:09:02 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102043901

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102043901

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4914553.5						32838.27	0.67%
YRADIAL	293188.4						7152.09	2.44%
Ga 417.206	1354748.8						12040.72	0.89%
GaRADIAL	64402.8						670.86	1.04%
Ag 328.068†	1081.5	0.00349	mg/L	0.000508	0.00349	mg/L	0.000508	14.57%
Al 396.153†	18382.6	3.90	mg/L	0.014	3.90	mg/L	0.014	0.36%
As 188.979†	12.3	0.00864	mg/L	0.003597	0.00864	mg/L	0.003597	41.64%
Ba 233.527†	20328.6	0.344	mg/L	0.0050	0.344	mg/L	0.0050	1.46%
Be 234.861†	1064.7	0.00141	mg/L	0.000187	0.00141	mg/L	0.000187	13.27%
B 249.677†	544.7	0.0374	mg/L	0.00044	0.0374	mg/L	0.00044	1.18%
Ca 227.546†	19757.8	187	mg/L	4.6	187	mg/L	4.6	2.44%
Cd 228.802†	2.2	0.00018	mg/L	0.000105	0.00018	mg/L	0.000105	58.77%
Co 228.616†	81.9	0.00402	mg/L	0.000206	0.00402	mg/L	0.000206	5.12%
Cr 267.716†	5817.3	0.0471	mg/L	0.00017	0.0471	mg/L	0.00017	0.36%
Cu 327.393†	18918.9	0.130	mg/L	0.0034	0.130	mg/L	0.0034	2.58%
Fe 239.562†	2542.8	6.01	mg/L	0.072	6.01	mg/L	0.072	1.20%
Mg 279.077†	6839.9	8.77	mg/L	0.133	8.77	mg/L	0.133	1.52%
Mn 257.610†	2837680.0	6.32	mg/L	0.010	6.32	mg/L	0.010	0.15%

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Mo 202.031†	159.6	0.0126 mg/L	0.00058	0.0126 mg/L	0.00058	4.57%
Ni 231.604†	2586.5	0.0745 mg/L	0.00022	0.0745 mg/L	0.00022	0.29%
Pb 220.353†	26.0	0.0118 mg/L	0.00067	0.0118 mg/L	0.00067	5.67%
Sb 206.836†	20.4	0.0123 mg/L	0.00200	0.0123 mg/L	0.00200	16.28%
Se 196.026†	-44.6	0.0188 mg/L	0.00208	0.0188 mg/L	0.00208	11.05%
Si 251.611†	223680.7	6.49 mg/L	0.132	6.49 mg/L	0.132	2.04%
Sn 189.927†	12.2	0.00376 mg/L	0.000833	0.00376 mg/L	0.000833	22.17%
Ti 334.940†	85164.2	0.119 mg/L	0.0024	0.119 mg/L	0.0024	2.01%
Tl 190.801†	131.0	0.0674 mg/L	0.00497	0.0674 mg/L	0.00497	7.38%
V 290.880†	2030.9	0.0127 mg/L	0.00070	0.0127 mg/L	0.00070	5.52%
Zn 206.200†	12531.3	0.376 mg/L	0.0044	0.376 mg/L	0.0044	1.17%
K 766.490†	1533.4	0.626 mg/L	0.0301	0.626 mg/L	0.0301	4.81%
Na 589.592†	79309.0	6.00 mg/L	0.090	6.00 mg/L	0.090	1.49%
Sr 407.771†	775812.7	0.765 mg/L	0.0613	0.765 mg/L	0.0613	8.01%
Li 670.784†	647.1	0.00698 mg/L	0.001010	0.00698 mg/L	0.001010	14.47%

Sequence No.: 13 **Autosampler Location: 71**
Sample ID: L1102043901PS WG357406-01 **Date Collected: 2/23/2011 4:15:46 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102043901PS WG357406-01

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102043901PS WG357406-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4852614.8						51212.95	1.06%
YRADIAL	296936.9						2085.35	0.70%
Ga 417.206	1333298.4						16120.14	1.21%
GaRADIAL	65783.0						945.86	1.44%
Ag 328.068†	38753.2	0.194	mg/L	0.0035	0.194	mg/L	0.0035	1.79%
Al 396.153†	39071.9	8.31	mg/L	0.017	8.31	mg/L	0.017	0.20%
As 188.979†	208.0	0.186	mg/L	0.0033	0.186	mg/L	0.0033	1.78%
Ba 233.527†	46600.9	0.789	mg/L	0.0087	0.789	mg/L	0.0087	1.11%
Be 234.861†	14466.8	0.0250	mg/L	0.00044	0.0250	mg/L	0.00044	1.75%
B 249.677†	49044.3	0.956	mg/L	0.0163	0.956	mg/L	0.0163	1.71%
Ca 227.546†	18569.6	176	mg/L	2.9	176	mg/L	2.9	1.65%
Cd 228.802†	402.8	0.0226	mg/L	0.00026	0.0226	mg/L	0.00026	1.14%
Co 228.616†	1940.1	0.0963	mg/L	0.00175	0.0963	mg/L	0.00175	1.82%
Cr 267.716†	33362.3	0.285	mg/L	0.0015	0.285	mg/L	0.0015	0.54%
Cu 327.393†	51201.9	0.351	mg/L	0.0056	0.351	mg/L	0.0056	1.58%
Fe 239.562†	3074.4	7.27	mg/L	0.067	7.27	mg/L	0.067	0.93%
Mg 279.077†	9790.7	12.6	mg/L	0.06	12.6	mg/L	0.06	0.49%
Mn 257.610†	2682058.1	5.97	mg/L	0.004	5.97	mg/L	0.004	0.07%
Mo 202.031†	6915.7	0.512	mg/L	0.0086	0.512	mg/L	0.0086	1.69%
Ni 231.604†	10741.4	0.310	mg/L	0.0045	0.310	mg/L	0.0045	1.47%
Pb 220.353†	1441.6	0.248	mg/L	0.0058	0.248	mg/L	0.0058	2.34%
Sb 206.836†	911.0	0.569	mg/L	0.0090	0.569	mg/L	0.0090	1.58%
Se 196.026†	213.8	0.196	mg/L	0.0026	0.196	mg/L	0.0026	1.34%
Si 251.611†	315946.5	9.16	mg/L	0.144	9.16	mg/L	0.144	1.57%
Sn 189.927†	1.3	0.00189	mg/L	0.001053	0.00189	mg/L	0.001053	55.83%
Ti 334.940†	432269.2	0.597	mg/L	0.0022	0.597	mg/L	0.0022	0.36%
Tl 190.801†	527.4	0.304	mg/L	0.0081	0.304	mg/L	0.0081	2.68%
V 290.880†	76334.0	0.509	mg/L	0.0039	0.509	mg/L	0.0039	0.77%
Zn 206.200†	27308.8	0.820	mg/L	0.0090	0.820	mg/L	0.0090	1.10%
K 766.490†	61239.6	24.6	mg/L	0.09	24.6	mg/L	0.09	0.36%
Na 589.592†	379428.6	29.0	mg/L	0.46	29.0	mg/L	0.46	1.59%
Sr 407.771†	1199934.6	1.18	mg/L	0.064	1.18	mg/L	0.064	5.44%
Li 670.784†	37096.7	0.487	mg/L	0.0008	0.487	mg/L	0.0008	0.15%

Sequence No.: 14 **Autosampler Location: 72**
Sample ID: L1102043901DL WG357406-02 **Date Collected: 2/23/2011 4:22:30 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

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Nebulizer Parameters: L1102043901DL WG357406-02

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: L1102043901DL WG357406-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5000980.7						50257.53	1.00%
YRADIAL	296420.2						546.87	0.18%
Ga 417.206	1380249.7						32580.08	2.36%
GaRADIAL	64876.5						1231.59	1.90%
Ag 328.068†	254.2	0.00030	mg/L	0.000213	0.00030	mg/L	0.000213	70.50%
Al 396.153†	4301.5	0.905	mg/L	0.0112	0.905	mg/L	0.0112	1.24%
As 188.979†	4.2	0.00370	mg/L	0.001913	0.00370	mg/L	0.001913	51.72%
Ba 233.527†	4072.1	0.0684	mg/L	0.00299	0.0684	mg/L	0.00299	4.38%
Be 234.861†	241.9	0.00030	mg/L	0.000054	0.00030	mg/L	0.000054	17.74%
B 249.677†	651.0	0.0212	mg/L	0.00079	0.0212	mg/L	0.00079	3.72%
Ca 227.546†	3802.4	35.9	mg/L	2.02	35.9	mg/L	2.02	5.62%
Cd 228.802†	-2.5	-0.00009	mg/L	0.000144	-0.00009	mg/L	0.000144	155.34%
Co 228.616†	14.0	0.00102	mg/L	0.000074	0.00102	mg/L	0.000074	7.24%
Cr 267.716†	1193.0	0.00947	mg/L	0.000418	0.00947	mg/L	0.000418	4.42%
Cu 327.393†	3836.5	0.0265	mg/L	0.00214	0.0265	mg/L	0.00214	8.07%
Fe 239.562†	583.8	1.38	mg/L	0.043	1.38	mg/L	0.043	3.09%
Mg 279.077†	1573.1	2.01	mg/L	0.064	2.01	mg/L	0.064	3.17%
Mn 257.610†	593256.1	1.32	mg/L	0.069	1.32	mg/L	0.069	5.24%
Mo 202.031†	34.6	0.00212	mg/L	0.000244	0.00212	mg/L	0.000244	11.51%
Ni 231.604†	521.9	0.0149	mg/L	0.00059	0.0149	mg/L	0.00059	3.97%
Pb 220.353†	4.7	0.00167	mg/L	0.000738	0.00167	mg/L	0.000738	44.07%
Sb 206.836†	9.4	0.00564	mg/L	0.001682	0.00564	mg/L	0.001682	29.82%
Se 196.026†	-28.2	-0.00664	mg/L	0.004418	-0.00664	mg/L	0.004418	66.49%
Si 251.611†	44552.2	1.29	mg/L	0.080	1.29	mg/L	0.080	6.23%
Sn 189.927†	-50.6	-0.00696	mg/L	0.000380	-0.00696	mg/L	0.000380	5.45%
Ti 334.940†	16747.5	0.0233	mg/L	0.00111	0.0233	mg/L	0.00111	4.75%
Tl 190.801†	69.7	0.0366	mg/L	0.00128	0.0366	mg/L	0.00128	3.51%
V 290.880†	503.1	0.00214	mg/L	0.000798	0.00214	mg/L	0.000798	37.36%
Zn 206.200†	2471.6	0.0738	mg/L	0.00363	0.0738	mg/L	0.00363	4.92%
K 766.490†	334.8	0.152	mg/L	0.0236	0.152	mg/L	0.0236	15.49%
Na 589.592†	17873.9	1.35	mg/L	0.014	1.35	mg/L	0.014	1.02%
Sr 407.771†	178929.6	0.176	mg/L	0.0113	0.176	mg/L	0.0113	6.45%
Li 670.784†	79.6	-0.00049	mg/L	0.000685	-0.00049	mg/L	0.000685	138.96%

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Sequence No.: 15 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 4:29:10 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4823512.2						87760.11	1.82%
YRADIAL	282431.0						6018.78	2.13%
Ga 417.206	1297310.9						32622.34	2.51%
GaRADIAL	62353.4						589.78	0.95%
Ag 328.068†	76773.3	0.388	mg/L	0.0140	0.388	mg/L	0.0140	3.62%
QC value within limits for Ag 328.068 Recovery = 96.94%								
Al 396.153†	46433.0	9.87	mg/L	0.055	9.87	mg/L	0.055	0.55%
QC value within limits for Al 396.153 Recovery = 98.67%								
As 188.979†	412.1	0.373	mg/L	0.0060	0.373	mg/L	0.0060	1.62%
QC value within limits for As 188.979 Recovery = 93.28%								
Ba 233.527†	58397.2	0.990	mg/L	0.0295	0.990	mg/L	0.0295	2.98%
QC value within limits for Ba 233.527 Recovery = 99.05%								
Be 234.861†	27664.6	0.0486	mg/L	0.00191	0.0486	mg/L	0.00191	3.92%
QC value within limits for Be 234.861 Recovery = 97.26%								

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B 249.677†	25735.0	0.496 mg/L	0.0195	0.496 mg/L	0.0195	3.93%
QC value within limits for B 249.677 Recovery = 99.27%						
Ca 227.546†	998.7	9.75 mg/L	0.239	9.75 mg/L	0.239	2.45%
QC value within limits for Ca 227.546 Recovery = 97.46%						
Cd 228.802†	849.0	0.0476 mg/L	0.00117	0.0476 mg/L	0.00117	2.46%
QC value within limits for Cd 228.802 Recovery = 95.26%						
Co 228.616†	3808.8	0.189 mg/L	0.0036	0.189 mg/L	0.0036	1.88%
QC value within limits for Co 228.616 Recovery = 94.72%						
Cr 267.716†	56661.3	0.489 mg/L	0.0137	0.489 mg/L	0.0137	2.81%
QC value within limits for Cr 267.716 Recovery = 97.70%						
Cu 327.393†	69085.1	0.474 mg/L	0.0198	0.474 mg/L	0.0198	4.17%
QC value within limits for Cu 327.393 Recovery = 94.74%						
Fe 239.562†	1612.8	3.81 mg/L	0.058	3.81 mg/L	0.058	1.53%
QC value within limits for Fe 239.562 Recovery = 95.31%						
Mg 279.077†	7565.8	9.71 mg/L	0.165	9.71 mg/L	0.165	1.69%
QC value within limits for Mg 279.077 Recovery = 97.10%						
Mn 257.610†	222455.6	0.499 mg/L	0.0149	0.499 mg/L	0.0149	2.99%
QC value within limits for Mn 257.610 Recovery = 99.90%						
Mo 202.031†	13362.6	0.987 mg/L	0.0350	0.987 mg/L	0.0350	3.55%
QC value within limits for Mo 202.031 Recovery = 98.66%						
Ni 231.604†	17132.5	0.494 mg/L	0.0144	0.494 mg/L	0.0144	2.91%
QC value within limits for Ni 231.604 Recovery = 98.89%						
Pb 220.353†	2933.6	0.490 mg/L	0.0090	0.490 mg/L	0.0090	1.83%
QC value within limits for Pb 220.353 Recovery = 97.94%						
Sb 206.836†	1815.5	1.13 mg/L	0.025	1.13 mg/L	0.025	2.21%
QC value within limits for Sb 206.836 Recovery = 94.50%						
Se 196.026†	533.0	0.378 mg/L	0.0130	0.378 mg/L	0.0130	3.43%
QC value within limits for Se 196.026 Recovery = 94.59%						
Si 251.611†	165068.9	4.78 mg/L	0.187	4.78 mg/L	0.187	3.91%
QC value within limits for Si 251.611 Recovery = 95.52%						
Sn 189.927†	5749.6	0.983 mg/L	0.0187	0.983 mg/L	0.0187	1.90%
QC value within limits for Sn 189.927 Recovery = 98.30%						
Ti 334.940†	709324.9	0.978 mg/L	0.0079	0.978 mg/L	0.0079	0.80%
QC value within limits for Ti 334.940 Recovery = 97.78%						
Tl 190.801†	840.8	0.498 mg/L	0.0140	0.498 mg/L	0.0140	2.81%
QC value within limits for Tl 190.801 Recovery = 99.53%						
V 290.880†	147656.2	0.986 mg/L	0.0308	0.986 mg/L	0.0308	3.13%
QC value within limits for V 290.880 Recovery = 98.57%						
Zn 206.200†	33021.6	0.993 mg/L	0.0284	0.993 mg/L	0.0284	2.86%
QC value within limits for Zn 206.200 Recovery = 99.28%						
K 766.490†	120973.6	48.7 mg/L	0.15	48.7 mg/L	0.15	0.31%
QC value within limits for K 766.490 Recovery = 97.43%						
Na 589.592†	618655.2	47.8 mg/L	0.21	47.8 mg/L	0.21	0.43%
QC value within limits for Na 589.592 Recovery = 95.64%						
Sr 407.771†	1081106.6	1.07 mg/L	0.033	1.07 mg/L	0.033	3.10%
QC value within limits for Sr 407.771 Recovery = 106.67%						
Li 670.784†	73790.9	0.970 mg/L	0.0076	0.970 mg/L	0.0076	0.78%
QC value within limits for Li 670.784 Recovery = 97.00%						

All analyte(s) passed QC.

Sequence No.: 16 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 4:36:16 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5006151.0						58998.73	1.18%
YRADIAL	294310.9						10925.99	3.71%
Ga 417.206	1312933.2						20201.97	1.54%
GaRADIAL	63347.9						1748.38	2.76%
Ag 328.068†	-34.0	-0.00088	mg/L	0.000527	-0.00088	mg/L	0.000527	60.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-23.3	-0.0168	mg/L	0.00095	-0.0168	mg/L	0.00095	5.64%

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	QC value within limits for Al 396.153 Recovery = Not calculated							
As	188.979†	-1.4	-0.00087	mg/L	0.003795	-0.00087	mg/L	0.003795 436.46%
	QC value within limits for As 188.979 Recovery = Not calculated							
Ba	233.527†	0.0	-0.00051	mg/L	0.000043	-0.00051	mg/L	0.000043 8.47%
	QC value within limits for Ba 233.527 Recovery = Not calculated							
Be	234.861†	26.7	0.00005	mg/L	0.000025	0.00005	mg/L	0.000025 49.72%
	QC value within limits for Be 234.861 Recovery = Not calculated							
B	249.677†	636.5	0.0156	mg/L	0.00144	0.0156	mg/L	0.00144 9.23%
	QC value within limits for B 249.677 Recovery = Not calculated							
Ca	227.546†	2.6	-0.00858	mg/L	0.018478	-0.00858	mg/L	0.018478 215.39%
	QC value within limits for Ca 227.546 Recovery = Not calculated							
Cd	228.802†	-2.4	-0.00006	mg/L	0.000228	-0.00006	mg/L	0.000228 353.70%
	QC value within limits for Cd 228.802 Recovery = Not calculated							
Co	228.616†	-6.5	0.00010	mg/L	0.000134	0.00010	mg/L	0.000134 133.26%
	QC value within limits for Co 228.616 Recovery = Not calculated							
Cr	267.716†	3.0	-0.00020	mg/L	0.000129	-0.00020	mg/L	0.000129 65.32%
	QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu	327.393†	58.5	0.00047	mg/L	0.000266	0.00047	mg/L	0.000266 56.85%
	QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe	239.562†	1.3	0.00096	mg/L	0.003108	0.00096	mg/L	0.003108 324.46%
	QC value within limits for Fe 239.562 Recovery = Not calculated							
Mg	279.077†	3.0	-0.00333	mg/L	0.004882	-0.00333	mg/L	0.004882 146.50%
	QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn	257.610†	141.7	-0.00003	mg/L	0.000020	-0.00003	mg/L	0.000020 67.50%
	QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo	202.031†	6.1	-0.00032	mg/L	0.000205	-0.00032	mg/L	0.000205 63.31%
	QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni	231.604†	8.6	0.00010	mg/L	0.000382	0.00010	mg/L	0.000382 368.15%
	QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb	220.353†	4.8	0.00013	mg/L	0.000608	0.00013	mg/L	0.000608 475.61%
	QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb	206.836†	3.5	0.00203	mg/L	0.001492	0.00203	mg/L	0.001492 73.43%
	QC value within limits for Sb 206.836 Recovery = Not calculated							
Se	196.026†	-4.1	0.00137	mg/L	0.003845	0.00137	mg/L	0.003845 280.29%
	QC value within limits for Se 196.026 Recovery = Not calculated							
Si	251.611†	69.1	0.00055	mg/L	0.000298	0.00055	mg/L	0.000298 54.12%
	QC value within limits for Si 251.611 Recovery = Not calculated							
Sn	189.927†	-70.8	-0.0104	mg/L	0.00064	-0.0104	mg/L	0.00064 6.16%
	QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti	334.940†	41.4	-0.00011	mg/L	0.000135	-0.00011	mg/L	0.000135 125.94%
	QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl	190.801†	-0.1	-0.00302	mg/L	0.003606	-0.00302	mg/L	0.003606 119.47%
	QC value within limits for Tl 190.801 Recovery = Not calculated							
V	290.880†	209.3	0.00007	mg/L	0.000841	0.00007	mg/L	0.000841 >999.9%
	QC value within limits for V 290.880 Recovery = Not calculated							
Zn	206.200†	-165.2	-0.00540	mg/L	0.000130	-0.00540	mg/L	0.000130 2.40%
	QC value within limits for Zn 206.200 Recovery = Not calculated							
K	766.490†	44.1	0.0374	mg/L	0.02014	0.0374	mg/L	0.02014 53.86%
	QC value within limits for K 766.490 Recovery = Not calculated							
Na	589.592†	215.0	0.0170	mg/L	0.00510	0.0170	mg/L	0.00510 29.94%
	QC value within limits for Na 589.592 Recovery = Not calculated							
Sr	407.771†	245.4	-0.00039	mg/L	0.000140	-0.00039	mg/L	0.000140 35.85%
	QC value within limits for Sr 407.771 Recovery = Not calculated							
Li	670.784†	-3.8	-0.00159	mg/L	0.001218	-0.00159	mg/L	0.001218 76.58%
	QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

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Sequence No.: 17 **Autosampler Location: 73**
Sample ID: PBW 4A WG357312-03 **Date Collected: 2/23/2011 4:42:59 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 4A WG357312-03

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: PBW 4A WG357312-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Approved: February 24, 2011

Pierre Morris

Y 371.029	5126879.2					7964.65	0.16%
YRADIAL	296688.6					9655.47	3.25%
Ga 417.206	1360909.8					11482.92	0.84%
GaRADIAL	64212.5					950.71	1.48%
Ag 328.068†	-96.9	-0.00120 mg/L	0.000404	-0.00120 mg/L	0.000404	33.76%	
Al 396.153†	16.7	-0.00827 mg/L	0.005327	-0.00827 mg/L	0.005327	64.40%	
As 188.979†	-1.3	-0.00078 mg/L	0.000725	-0.00078 mg/L	0.000725	93.28%	
Ba 233.527†	-2.4	-0.00055 mg/L	0.000051	-0.00055 mg/L	0.000051	9.14%	
Be 234.861†	42.8	0.00008 mg/L	0.000008	0.00008 mg/L	0.000008	10.20%	
B 249.677†	359.6	0.0103 mg/L	0.00084	0.0103 mg/L	0.00084	8.18%	
Ca 227.546†	3.1	-0.00320 mg/L	0.028608	-0.00320 mg/L	0.028608	894.69%	
Cd 228.802†	-1.1	0.00001 mg/L	0.000135	0.00001 mg/L	0.000135	>999.9%	
Co 228.616†	-4.4	0.00021 mg/L	0.000298	0.00021 mg/L	0.000298	143.84%	
Cr 267.716†	-2.0	-0.00024 mg/L	0.000090	-0.00024 mg/L	0.000090	37.55%	
Cu 327.393†	-7.2	0.00002 mg/L	0.001150	0.00002 mg/L	0.001150	>999.9%	
Fe 239.562†	1.0	0.00033 mg/L	0.004228	0.00033 mg/L	0.004228	>999.9%	
Mg 279.077†	4.2	-0.00172 mg/L	0.002827	-0.00172 mg/L	0.002827	164.64%	
Mn 257.610†	44.9	-0.00025 mg/L	0.000013	-0.00025 mg/L	0.000013	5.16%	
Mo 202.031†	3.3	-0.00053 mg/L	0.000175	-0.00053 mg/L	0.000175	32.95%	
Ni 231.604†	2.6	-0.00007 mg/L	0.000034	-0.00007 mg/L	0.000034	48.42%	
Pb 220.353†	3.4	-0.00010 mg/L	0.001444	-0.00010 mg/L	0.001444	>999.9%	
Sb 206.836†	-2.2	-0.00152 mg/L	0.001315	-0.00152 mg/L	0.001315	86.27%	
Se 196.026†	1.0	0.00493 mg/L	0.002204	0.00493 mg/L	0.002204	44.70%	
Si 251.611†	38.4	-0.00034 mg/L	0.000373	-0.00034 mg/L	0.000373	111.03%	
Sn 189.927†	-78.7	-0.0118 mg/L	0.00077	-0.0118 mg/L	0.00077	6.53%	
Ti 334.940†	-126.3	-0.00034 mg/L	0.000102	-0.00034 mg/L	0.000102	30.20%	
Tl 190.801†	2.5	-0.00153 mg/L	0.000885	-0.00153 mg/L	0.000885	57.99%	
V 290.880†	29.3	-0.00113 mg/L	0.000481	-0.00113 mg/L	0.000481	42.50%	
Zn 206.200†	-128.0	-0.00428 mg/L	0.000068	-0.00428 mg/L	0.000068	1.58%	
K 766.490†	-33.4	0.00647 mg/L	0.004952	0.00647 mg/L	0.004952	76.52%	
Na 589.592†	153.0	0.0123 mg/L	0.00907	0.0123 mg/L	0.00907	73.48%	
Sr 407.771†	148.9	-0.00049 mg/L	0.000113	-0.00049 mg/L	0.000113	23.14%	
Li 670.784†	26.9	-0.00119 mg/L	0.000476	-0.00119 mg/L	0.000476	40.15%	

Sequence No.: 18 **Autosampler Location: 74**
Sample ID: LCSW 4A WG357312-04 **Date Collected: 2/23/2011 4:49:40 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 4A WG357312-04

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: LCSW 4A WG357312-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4949399.7						17372.64	0.35%
YRADIAL	289335.0						4324.75	1.49%
Ga 417.206	1335570.8						19131.86	1.43%
GaRADIAL	62667.8						276.64	0.44%
Ag 328.068†	38123.3	0.192	mg/L	0.0016	0.192	mg/L	0.0016	0.82%
Al 396.153†	23297.3	4.94	mg/L	0.022	4.94	mg/L	0.022	0.44%
As 188.979†	200.8	0.182	mg/L	0.0049	0.182	mg/L	0.0049	2.68%
Ba 233.527†	28795.9	0.488	mg/L	0.0043	0.488	mg/L	0.0043	0.88%
Be 234.861†	13512.6	0.0237	mg/L	0.00017	0.0237	mg/L	0.00017	0.73%
B 249.677†	50059.2	0.954	mg/L	0.0159	0.954	mg/L	0.0159	1.67%
Ca 227.546†	500.1	4.86	mg/L	0.095	4.86	mg/L	0.095	1.96%
Cd 228.802†	416.0	0.0234	mg/L	0.00048	0.0234	mg/L	0.00048	2.06%
Co 228.616†	1890.1	0.0942	mg/L	0.00017	0.0942	mg/L	0.00017	0.19%
Cr 267.716†	27888.0	0.240	mg/L	0.0029	0.240	mg/L	0.0029	1.22%
Cu 327.393†	34250.3	0.235	mg/L	0.0025	0.235	mg/L	0.0025	1.05%
Fe 239.562†	811.0	1.92	mg/L	0.001	1.92	mg/L	0.001	0.06%
Mg 279.077†	3830.9	4.91	mg/L	0.029	4.91	mg/L	0.029	0.60%
Mn 257.610†	110246.9	0.247	mg/L	0.0031	0.247	mg/L	0.0031	1.23%
Mo 202.031†	6519.0	0.481	mg/L	0.0056	0.481	mg/L	0.0056	1.16%
Ni 231.604†	8504.5	0.245	mg/L	0.0033	0.245	mg/L	0.0033	1.33%
Pb 220.353†	1455.4	0.243	mg/L	0.0021	0.243	mg/L	0.0021	0.88%
Sb 206.836†	896.7	0.560	mg/L	0.0085	0.560	mg/L	0.0085	1.52%
Se 196.026†	266.0	0.191	mg/L	0.0036	0.191	mg/L	0.0036	1.88%

Approved: February 24, 2011

Pierce Morris

Si 251.611†	83197.5	2.41	mg/L	0.037	2.41	mg/L	0.037 1.52%
Sn 189.927†	2935.8	0.503	mg/L	0.0030	0.503	mg/L	0.0030 0.61%
Ti 334.940†	353521.5	0.487	mg/L	0.0060	0.487	mg/L	0.0060 1.24%
Tl 190.801†	416.8	0.245	mg/L	0.0066	0.245	mg/L	0.0066 2.68%
V 290.880†	72669.2	0.484	mg/L	0.0079	0.484	mg/L	0.0079 1.63%
Zn 206.200†	15880.4	0.477	mg/L	0.0013	0.477	mg/L	0.0013 0.27%
K 766.490†	59991.1	24.1	mg/L	0.09	24.1	mg/L	0.09 0.39%
Na 589.592†	313032.7	23.9	mg/L	0.24	23.9	mg/L	0.24 1.00%
Sr 407.771†	506948.9	0.500	mg/L	0.0342	0.500	mg/L	0.0342 6.83%
Li 670.784†	37017.4	0.486	mg/L	0.0020	0.486	mg/L	0.0020 0.42%

Sequence No.: 19 **Autosampler Location: 75**
Sample ID: L1102056801 WG357312-01 **Date Collected: 2/23/2011 4:56:21 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056801 WG357312-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102056801 WG357312-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4990911.6						38896.95	0.78%
YRADIAL	288983.1						5963.09	2.06%
Ga 417.206	1382126.5						22332.17	1.62%
GaRADIAL	63803.2						636.54	1.00%
Ag 328.068†	285.3	0.00064	mg/L	0.000509	0.00064	mg/L	0.000509	79.62%
Al 396.153†	384.0	0.0700	mg/L	0.01231	0.0700	mg/L	0.01231	17.58%
As 188.979†	6.5	0.00540	mg/L	0.000303	0.00540	mg/L	0.000303	5.61%
Ba 233.527†	1189.4	0.0196	mg/L	0.00008	0.0196	mg/L	0.00008	0.40%
Be 234.861†	132.3	0.00012	mg/L	0.000026	0.00012	mg/L	0.000026	21.51%
B 249.677†	1326.5	0.0314	mg/L	0.00066	0.0314	mg/L	0.00066	2.11%
Ca 227.546†	5419.7	51.2	mg/L	0.85	51.2	mg/L	0.85	1.66%
Cd 228.802†	1.5	0.00011	mg/L	0.000115	0.00011	mg/L	0.000115	103.54%
Co 228.616†	-1.9	0.00031	mg/L	0.000096	0.00031	mg/L	0.000096	31.06%
Cr 267.716†	56.1	0.00019	mg/L	0.000139	0.00019	mg/L	0.000139	74.78%
Cu 327.393†	-122.5	-0.00069	mg/L	0.000759	-0.00069	mg/L	0.000759	109.28%
Fe 239.562†	264.7	0.624	mg/L	0.0059	0.624	mg/L	0.0059	0.95%
Mg 279.077†	6889.8	8.84	mg/L	0.022	8.84	mg/L	0.022	0.24%
Mn 257.610†	75150.7	0.168	mg/L	0.0024	0.168	mg/L	0.0024	1.41%
Mo 202.031†	1.7	-0.00058	mg/L	0.000720	-0.00058	mg/L	0.000720	123.80%
Ni 231.604†	13.2	0.00020	mg/L	0.000481	0.00020	mg/L	0.000481	235.76%
Pb 220.353†	-5.2	0.00089	mg/L	0.000921	0.00089	mg/L	0.000921	103.26%
Sb 206.836†	12.8	0.00781	mg/L	0.000851	0.00781	mg/L	0.000851	10.90%
Se 196.026†	-29.8	-0.00361	mg/L	0.003522	-0.00361	mg/L	0.003522	97.51%
Si 251.611†	115661.1	3.36	mg/L	0.064	3.36	mg/L	0.064	1.92%
Sn 189.927†	-76.1	-0.0113	mg/L	0.00036	-0.0113	mg/L	0.00036	3.16%
Ti 334.940†	665.1	0.00126	mg/L	0.000105	0.00126	mg/L	0.000105	8.30%
Tl 190.801†	88.4	0.0442	mg/L	0.00272	0.0442	mg/L	0.00272	6.16%
V 290.880†	-228.3	-0.00281	mg/L	0.000707	-0.00281	mg/L	0.000707	25.16%
Zn 206.200†	71.9	0.00171	mg/L	0.000183	0.00171	mg/L	0.000183	10.70%
K 766.490†	6840.7	2.74	mg/L	0.023	2.74	mg/L	0.023	0.85%
Na 589.592†	111945.3	8.48	mg/L	0.051	8.48	mg/L	0.051	0.60%
Sr 407.771†	187411.7	0.184	mg/L	0.0111	0.184	mg/L	0.0111	6.01%
Li 670.784†	-67.8	-0.00243	mg/L	0.002816	-0.00243	mg/L	0.002816	115.72%

Sequence No.: 20 **Autosampler Location: 76**
Sample ID: L1102056802S WG357312-05 **Date Collected: 2/23/2011 5:03:00 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056802S WG357312-05

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Approved: February 24, 2011

Pierre Morris

Mean Data: L1102056802S WG357312-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4880679.2						34641.85	0.71%
YRADIAL	290259.5						453.20	0.16%
Ga 417.206	1324198.4						3529.56	0.27%
GaRADIAL	63739.6						1112.65	1.75%
Ag 328.068†	38795.8	0.196	mg/L	0.0028	0.196	mg/L	0.0028	1.44%
Al 396.153†	23090.5	4.90	mg/L	0.022	4.90	mg/L	0.022	0.44%
As 188.979†	209.1	0.189	mg/L	0.0015	0.189	mg/L	0.0015	0.80%
Ba 233.527†	29885.4	0.507	mg/L	0.0055	0.507	mg/L	0.0055	1.09%
Be 234.861†	13965.9	0.0244	mg/L	0.00021	0.0244	mg/L	0.00021	0.86%
B 249.677†	52239.9	0.998	mg/L	0.0140	0.998	mg/L	0.0140	1.40%
Ca 227.546†	6054.2	57.4	mg/L	0.12	57.4	mg/L	0.12	0.20%
Cd 228.802†	413.3	0.0232	mg/L	0.00005	0.0232	mg/L	0.00005	0.23%
Co 228.616†	1870.5	0.0932	mg/L	0.00063	0.0932	mg/L	0.00063	0.67%
Cr 267.716†	28289.0	0.244	mg/L	0.0037	0.244	mg/L	0.0037	1.52%
Cu 327.393†	34303.3	0.235	mg/L	0.0031	0.235	mg/L	0.0031	1.30%
Fe 239.562†	1053.9	2.49	mg/L	0.025	2.49	mg/L	0.025	1.02%
Mg 279.077†	10391.2	13.3	mg/L	0.10	13.3	mg/L	0.10	0.77%
Mn 257.610†	185735.7	0.416	mg/L	0.0065	0.416	mg/L	0.0065	1.55%
Mo 202.031†	6691.4	0.494	mg/L	0.0032	0.494	mg/L	0.0032	0.65%
Ni 231.604†	8339.8	0.241	mg/L	0.0014	0.241	mg/L	0.0014	0.56%
Pb 220.353†	1437.1	0.242	mg/L	0.0016	0.242	mg/L	0.0016	0.65%
Sb 206.836†	912.2	0.570	mg/L	0.0009	0.570	mg/L	0.0009	0.16%
Se 196.026†	240.8	0.187	mg/L	0.0038	0.187	mg/L	0.0038	2.01%
Si 251.611†	204492.9	5.93	mg/L	0.031	5.93	mg/L	0.031	0.53%
Sn 189.927†	2949.6	0.505	mg/L	0.0028	0.505	mg/L	0.0028	0.55%
Ti 334.940†	360689.7	0.498	mg/L	0.0086	0.498	mg/L	0.0086	1.72%
Tl 190.801†	496.2	0.287	mg/L	0.0019	0.287	mg/L	0.0019	0.65%
V 290.880†	73954.7	0.493	mg/L	0.0083	0.493	mg/L	0.0083	1.68%
Zn 206.200†	15881.9	0.477	mg/L	0.0051	0.477	mg/L	0.0051	1.06%
K 766.490†	66737.0	26.8	mg/L	0.05	26.8	mg/L	0.05	0.19%
Na 589.592†	422400.2	32.4	mg/L	1.05	32.4	mg/L	1.05	3.24%
Sr 407.771†	689762.9	0.680	mg/L	0.0330	0.680	mg/L	0.0330	4.85%
Li 670.784†	36996.9	0.486	mg/L	0.0012	0.486	mg/L	0.0012	0.24%

Sequence No.: 21 **Autosampler Location: 77**
Sample ID: L1102056803SD WG357312-06 **Date Collected: 2/23/2011 5:09:44 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056803SD WG357312-06

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102056803SD WG357312-06

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4839391.3						13039.95	0.27%
YRADIAL	287835.4						3914.32	1.36%
Ga 417.206	1334258.8						12656.34	0.95%
GaRADIAL	63185.9						1403.20	2.22%
Ag 328.068†	38353.9	0.193	mg/L	0.0019	0.193	mg/L	0.0019	0.99%
Al 396.153†	22964.3	4.87	mg/L	0.016	4.87	mg/L	0.016	0.34%
As 188.979†	207.3	0.187	mg/L	0.0006	0.187	mg/L	0.0006	0.31%
Ba 233.527†	29939.3	0.508	mg/L	0.0026	0.508	mg/L	0.0026	0.52%
Be 234.861†	13870.7	0.0243	mg/L	0.00022	0.0243	mg/L	0.00022	0.92%
B 249.677†	51734.9	0.988	mg/L	0.0090	0.988	mg/L	0.0090	0.91%
Ca 227.546†	5983.3	56.7	mg/L	0.65	56.7	mg/L	0.65	1.15%
Cd 228.802†	407.4	0.0229	mg/L	0.00034	0.0229	mg/L	0.00034	1.47%
Co 228.616†	1886.3	0.0940	mg/L	0.00026	0.0940	mg/L	0.00026	0.27%
Cr 267.716†	28371.7	0.244	mg/L	0.0024	0.244	mg/L	0.0024	0.97%
Cu 327.393†	33928.7	0.233	mg/L	0.0023	0.233	mg/L	0.0023	1.01%
Fe 239.562†	1064.5	2.52	mg/L	0.039	2.52	mg/L	0.039	1.56%
Mg 279.077†	10490.5	13.5	mg/L	0.24	13.5	mg/L	0.24	1.81%
Mn 257.610†	186046.1	0.417	mg/L	0.0027	0.417	mg/L	0.0027	0.64%
Mo 202.031†	6725.9	0.496	mg/L	0.0004	0.496	mg/L	0.0004	0.08%

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Ni 231.604†	8405.1	0.242 mg/L	0.0007	0.242 mg/L	0.0007	0.27%
Pb 220.353†	1438.6	0.242 mg/L	0.0011	0.242 mg/L	0.0011	0.44%
Sb 206.836†	908.1	0.567 mg/L	0.0038	0.567 mg/L	0.0038	0.67%
Se 196.026†	236.3	0.183 mg/L	0.0040	0.183 mg/L	0.0040	2.20%
Si 251.611†	201392.6	5.84 mg/L	0.068	5.84 mg/L	0.068	1.16%
Sn 189.927†	2999.7	0.514 mg/L	0.0014	0.514 mg/L	0.0014	0.28%
Ti 334.940†	363074.4	0.501 mg/L	0.0063	0.501 mg/L	0.0063	1.25%
Tl 190.801†	494.9	0.286 mg/L	0.0015	0.286 mg/L	0.0015	0.53%
V 290.880†	74180.5	0.495 mg/L	0.0044	0.495 mg/L	0.0044	0.89%
Zn 206.200†	15929.2	0.479 mg/L	0.0013	0.479 mg/L	0.0013	0.27%
K 766.490†	66731.6	26.8 mg/L	0.21	26.8 mg/L	0.21	0.79%
Na 589.592†	421937.9	32.4 mg/L	1.11	32.4 mg/L	1.11	3.43%
Sr 407.771†	704344.8	0.695 mg/L	0.0544	0.695 mg/L	0.0544	7.84%
Li 670.784†	36965.4	0.485 mg/L	0.0016	0.485 mg/L	0.0016	0.33%

Sequence No.: 22 **Autosampler Location: 78**
Sample ID: L1102056901 WG357312-02 **Date Collected: 2/23/2011 5:16:33 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056901 WG357312-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102056901 WG357312-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4988939.6						109820.86	2.20%
YRADIAL	291912.7						6472.47	2.22%
Ga 417.206	1385090.8						30716.77	2.22%
GaRADIAL	64273.1						714.22	1.11%
Ag 328.068†	338.9	0.00092	mg/L	0.000170	0.00092	mg/L	0.000170	18.37%
Al 396.153†	180.6	0.0267	mg/L	0.00717	0.0267	mg/L	0.00717	26.90%
As 188.979†	6.2	0.00486	mg/L	0.002307	0.00486	mg/L	0.002307	47.43%
Ba 233.527†	427.2	0.00670	mg/L	0.000184	0.00670	mg/L	0.000184	2.75%
Be 234.861†	86.9	0.00012	mg/L	0.000033	0.00012	mg/L	0.000033	26.30%
B 249.677†	2281.6	0.0477	mg/L	0.00139	0.0477	mg/L	0.00139	2.91%
Ca 227.546†	6479.5	61.2	mg/L	1.09	61.2	mg/L	1.09	1.77%
Cd 228.802†	-6.0	-0.00031	mg/L	0.000055	-0.00031	mg/L	0.000055	17.55%
Co 228.616†	-6.0	0.00012	mg/L	0.000211	0.00012	mg/L	0.000211	175.97%
Cr 267.716†	88.9	0.00048	mg/L	0.000021	0.00048	mg/L	0.000021	4.43%
Cu 327.393†	-254.5	-0.00165	mg/L	0.000864	-0.00165	mg/L	0.000864	52.48%
Fe 239.562†	94.4	0.221	mg/L	0.0083	0.221	mg/L	0.0083	3.77%
Mg 279.077†	15037.2	19.3	mg/L	0.11	19.3	mg/L	0.11	0.56%
Mn 257.610†	61567.8	0.138	mg/L	0.0027	0.138	mg/L	0.0027	1.95%
Mo 202.031†	4.8	-0.00038	mg/L	0.000131	-0.00038	mg/L	0.000131	34.36%
Ni 231.604†	17.5	0.00032	mg/L	0.000118	0.00032	mg/L	0.000118	36.18%
Pb 220.353†	-9.4	0.00071	mg/L	0.000503	0.00071	mg/L	0.000503	71.33%
Sb 206.836†	13.9	0.00853	mg/L	0.001503	0.00853	mg/L	0.001503	17.62%
Se 196.026†	-32.0	-0.00273	mg/L	0.003850	-0.00273	mg/L	0.003850	141.08%
Si 251.611†	201223.4	5.84	mg/L	0.103	5.84	mg/L	0.103	1.76%
Sn 189.927†	-87.5	-0.0133	mg/L	0.00089	-0.0133	mg/L	0.00089	6.75%
Ti 334.940†	-712.8	-0.00053	mg/L	0.000128	-0.00053	mg/L	0.000128	23.93%
Tl 190.801†	97.9	0.0487	mg/L	0.00252	0.0487	mg/L	0.00252	5.18%
V 290.880†	-656.6	-0.00570	mg/L	0.000527	-0.00570	mg/L	0.000527	9.24%
Zn 206.200†	36.4	0.00065	mg/L	0.000462	0.00065	mg/L	0.000462	70.70%
K 766.490†	3598.3	1.44	mg/L	0.035	1.44	mg/L	0.035	2.41%
Na 589.592†	173550.2	13.2	mg/L	0.10	13.2	mg/L	0.10	0.75%
Sr 407.771†	208429.2	0.205	mg/L	0.0135	0.205	mg/L	0.0135	6.59%
Li 670.784†	81.6	-0.00047	mg/L	0.001742	-0.00047	mg/L	0.001742	373.65%

Sequence No.: 23 **Autosampler Location: 79**
Sample ID: L1102056902S WG357312-07 **Date Collected: 2/23/2011 5:23:12 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

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Nebulizer Parameters: L1102056902S WG357312-07

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102056902S WG357312-07

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4851830.1						63426.89	1.31%
YRADIAL	280933.0						5696.90	2.03%
Ga 417.206	1333061.5						37460.59	2.81%
GaRADIAL	62039.8						739.21	1.19%
Ag 328.068†	38092.4	0.192	mg/L	0.0059	0.192	mg/L	0.0059	3.07%
Al 396.153†	22821.2	4.84	mg/L	0.018	4.84	mg/L	0.018	0.38%
As 188.979†	210.4	0.189	mg/L	0.0061	0.189	mg/L	0.0061	3.22%
Ba 233.527†	28795.2	0.488	mg/L	0.0077	0.488	mg/L	0.0077	1.57%
Be 234.861†	13716.0	0.0241	mg/L	0.00073	0.0241	mg/L	0.00073	3.02%
B 249.677†	51917.7	0.990	mg/L	0.0266	0.990	mg/L	0.0266	2.69%
Ca 227.546†	7253.7	68.7	mg/L	1.65	68.7	mg/L	1.65	2.40%
Cd 228.802†	406.3	0.0228	mg/L	0.00044	0.0228	mg/L	0.00044	1.94%
Co 228.616†	1860.7	0.0927	mg/L	0.00116	0.0927	mg/L	0.00116	1.25%
Cr 267.716†	28077.6	0.242	mg/L	0.0022	0.242	mg/L	0.0022	0.92%
Cu 327.393†	33153.7	0.227	mg/L	0.0070	0.227	mg/L	0.0070	3.06%
Fe 239.562†	924.7	2.18	mg/L	0.026	2.18	mg/L	0.026	1.18%
Mg 279.077†	19010.2	24.4	mg/L	0.18	24.4	mg/L	0.18	0.76%
Mn 257.610†	173232.5	0.389	mg/L	0.0046	0.389	mg/L	0.0046	1.20%
Mo 202.031†	6740.3	0.497	mg/L	0.0062	0.497	mg/L	0.0062	1.24%
Ni 231.604†	8293.1	0.239	mg/L	0.0026	0.239	mg/L	0.0026	1.10%
Pb 220.353†	1433.3	0.242	mg/L	0.0040	0.242	mg/L	0.0040	1.66%
Sb 206.836†	903.8	0.565	mg/L	0.0134	0.565	mg/L	0.0134	2.37%
Se 196.026†	239.6	0.189	mg/L	0.0042	0.189	mg/L	0.0042	2.25%
Si 251.611†	293158.0	8.50	mg/L	0.244	8.50	mg/L	0.244	2.86%
Sn 189.927†	2955.6	0.506	mg/L	0.0076	0.506	mg/L	0.0076	1.50%
Ti 334.940†	356322.0	0.492	mg/L	0.0064	0.492	mg/L	0.0064	1.30%
Tl 190.801†	501.9	0.289	mg/L	0.0082	0.289	mg/L	0.0082	2.84%
V 290.880†	72808.8	0.485	mg/L	0.0062	0.485	mg/L	0.0062	1.28%
Zn 206.200†	15845.9	0.476	mg/L	0.0058	0.476	mg/L	0.0058	1.22%
K 766.490†	63967.1	25.6	mg/L	0.04	25.6	mg/L	0.04	0.15%
Na 589.592†	493250.7	37.9	mg/L	0.20	37.9	mg/L	0.20	0.53%
Sr 407.771†	714211.3	0.705	mg/L	0.0590	0.705	mg/L	0.0590	8.37%
Li 670.784†	37121.7	0.487	mg/L	0.0044	0.487	mg/L	0.0044	0.90%

Sequence No.: 24 **Autosampler Location: 80**
Sample ID: L1102056903SD WG357312-08 **Date Collected: 2/23/2011 5:29:55 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102056903SD WG357312-08

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102056903SD WG357312-08

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4947276.7						54958.39	1.11%
YRADIAL	290970.4						3371.89	1.16%
Ga 417.206	1344866.2						14998.59	1.12%
GaRADIAL	64126.5						1055.27	1.65%
Ag 328.068†	37767.4	0.190	mg/L	0.0025	0.190	mg/L	0.0025	1.32%
Al 396.153†	22346.4	4.74	mg/L	0.011	4.74	mg/L	0.011	0.24%
As 188.979†	208.2	0.188	mg/L	0.0017	0.188	mg/L	0.0017	0.92%
Ba 233.527†	28291.2	0.480	mg/L	0.0063	0.480	mg/L	0.0063	1.32%
Be 234.861†	13610.4	0.0239	mg/L	0.00028	0.0239	mg/L	0.00028	1.19%
B 249.677†	52065.9	0.993	mg/L	0.0174	0.993	mg/L	0.0174	1.75%
Ca 227.546†	7033.0	66.6	mg/L	0.70	66.6	mg/L	0.70	1.05%
Cd 228.802†	404.4	0.0226	mg/L	0.00024	0.0226	mg/L	0.00024	1.04%
Co 228.616†	1808.1	0.0901	mg/L	0.00083	0.0901	mg/L	0.00083	0.92%
Cr 267.716†	27416.9	0.236	mg/L	0.0037	0.236	mg/L	0.0037	1.56%
Cu 327.393†	33209.1	0.228	mg/L	0.0040	0.228	mg/L	0.0040	1.76%

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Fe 239.562†	884.8	2.09	mg/L	0.029	2.09	mg/L	0.029	1.38%
Mg 279.077†	18269.1	23.5	mg/L	0.36	23.5	mg/L	0.36	1.54%
Mn 257.610†	168703.1	0.379	mg/L	0.0063	0.379	mg/L	0.0063	1.66%
Mo 202.031†	6551.8	0.483	mg/L	0.0046	0.483	mg/L	0.0046	0.95%
Ni 231.604†	8072.9	0.233	mg/L	0.0021	0.233	mg/L	0.0021	0.91%
Pb 220.353†	1402.4	0.237	mg/L	0.0007	0.237	mg/L	0.0007	0.30%
Sb 206.836†	892.8	0.558	mg/L	0.0049	0.558	mg/L	0.0049	0.87%
Se 196.026†	230.3	0.182	mg/L	0.0069	0.182	mg/L	0.0069	3.80%
Si 251.611†	289283.7	8.39	mg/L	0.128	8.39	mg/L	0.128	1.53%
Sn 189.927†	2875.0	0.492	mg/L	0.0071	0.492	mg/L	0.0071	1.45%
Ti 334.940†	347551.6	0.480	mg/L	0.0046	0.480	mg/L	0.0046	0.97%
Tl 190.801†	495.3	0.285	mg/L	0.0007	0.285	mg/L	0.0007	0.25%
V 290.880†	71553.9	0.477	mg/L	0.0098	0.477	mg/L	0.0098	2.06%
Zn 206.200†	15511.5	0.466	mg/L	0.0081	0.466	mg/L	0.0081	1.74%
K 766.490†	62642.5	25.1	mg/L	0.11	25.1	mg/L	0.11	0.43%
Na 589.592†	484772.2	37.3	mg/L	1.25	37.3	mg/L	1.25	3.36%
Sr 407.771†	715112.6	0.705	mg/L	0.0361	0.705	mg/L	0.0361	5.11%
Li 670.784†	36372.4	0.477	mg/L	0.0041	0.477	mg/L	0.0041	0.85%

Sequence No.: 25 **Autosampler Location: 81**
Sample ID: L1102057101 **Date Collected: 2/23/2011 5:36:40 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057101

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102057101

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5062853.3						54018.57	1.07%
YRADIAL	289967.8						3358.53	1.16%
Ga 417.206	1361363.5						22628.30	1.66%
GaRADIAL	63003.0						123.11	0.20%
Ag 328.068†	28.7	-0.00056	mg/L	0.000482	-0.00056	mg/L	0.000482	85.67%
Al 396.153†	46.2	-0.00200	mg/L	0.015676	-0.00200	mg/L	0.015676	785.27%
As 188.979†	-1.6	-0.00113	mg/L	0.000989	-0.00113	mg/L	0.000989	87.56%
Ba 233.527†	0.6	-0.00050	mg/L	0.000018	-0.00050	mg/L	0.000018	3.67%
Be 234.861†	48.3	0.00008	mg/L	0.000005	0.00008	mg/L	0.000005	6.20%
B 249.677†	912.6	0.0208	mg/L	0.00074	0.0208	mg/L	0.00074	3.57%
Ca 227.546†	11.5	0.0776	mg/L	0.02201	0.0776	mg/L	0.02201	28.37%
Cd 228.802†	-3.7	-0.00014	mg/L	0.000106	-0.00014	mg/L	0.000106	77.61%
Co 228.616†	-2.9	0.00028	mg/L	0.000133	0.00028	mg/L	0.000133	47.07%
Cr 267.716†	41.0	0.00013	mg/L	0.000056	0.00013	mg/L	0.000056	42.95%
Cu 327.393†	108.2	0.00081	mg/L	0.000173	0.00081	mg/L	0.000173	21.47%
Fe 239.562†	5.0	0.00967	mg/L	0.002622	0.00967	mg/L	0.002622	27.12%
Mg 279.077†	6.9	0.00177	mg/L	0.003070	0.00177	mg/L	0.003070	173.19%
Mn 257.610†	401.8	0.00055	mg/L	0.000008	0.00055	mg/L	0.000008	1.39%
Mo 202.031†	4.8	-0.00042	mg/L	0.000456	-0.00042	mg/L	0.000456	108.35%
Ni 231.604†	75.1	0.00202	mg/L	0.000179	0.00202	mg/L	0.000179	8.86%
Pb 220.353†	2.9	-0.00017	mg/L	0.000485	-0.00017	mg/L	0.000485	278.98%
Sb 206.836†	-1.5	-0.00105	mg/L	0.002189	-0.00105	mg/L	0.002189	207.89%
Se 196.026†	-4.7	0.00094	mg/L	0.001371	0.00094	mg/L	0.001371	145.58%
Si 251.611†	140.9	0.00264	mg/L	0.000968	0.00264	mg/L	0.000968	36.67%
Sn 189.927†	-74.2	-0.0110	mg/L	0.00058	-0.0110	mg/L	0.00058	5.32%
Ti 334.940†	-56.7	-0.00024	mg/L	0.000167	-0.00024	mg/L	0.000167	69.22%
Tl 190.801†	2.3	-0.00161	mg/L	0.002648	-0.00161	mg/L	0.002648	164.26%
V 290.880†	185.8	-0.00008	mg/L	0.001341	-0.00008	mg/L	0.001341	>999.9%
Zn 206.200†	-88.1	-0.00308	mg/L	0.000193	-0.00308	mg/L	0.000193	6.26%
K 766.490†	3.4	0.0211	mg/L	0.02933	0.0211	mg/L	0.02933	138.75%
Na 589.592†	436.5	0.0337	mg/L	0.00751	0.0337	mg/L	0.00751	22.25%
Sr 407.771†	57.4	-0.00058	mg/L	0.000107	-0.00058	mg/L	0.000107	18.58%
Li 670.784†	23.8	-0.00123	mg/L	0.001739	-0.00123	mg/L	0.001739	141.73%

Sequence No.: 26 **Autosampler Location: 82**
Sample ID: L1102057102 **Date Collected: 2/23/2011 5:43:19 PM**
Analyst: PDM **Data Type: Original**

Approved: February 24, 2011

Pierre Morris

Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057102

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102057102

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5024887.9						73471.02	1.46%
YRADIAL	292768.3						1572.79	0.54%
Ga 417.206	1346747.1						21188.61	1.57%
GaRADIAL	63443.1						502.55	0.79%
Ag 328.068†	9.5	-0.00066	mg/L	0.000765	-0.00066	mg/L	0.000765	115.95%
Al 396.153†	53.9	-0.00035	mg/L	0.013571	-0.00035	mg/L	0.013571	>999.9%
As 188.979†	-1.4	-0.00088	mg/L	0.000851	-0.00088	mg/L	0.000851	96.46%
Ba 233.527†	-2.9	-0.00056	mg/L	0.000018	-0.00056	mg/L	0.000018	3.27%
Be 234.861†	28.1	0.00005	mg/L	0.000015	0.00005	mg/L	0.000015	29.91%
B 249.677†	688.0	0.0165	mg/L	0.00052	0.0165	mg/L	0.00052	3.15%
Ca 227.546†	4.0	0.00512	mg/L	0.042730	0.00512	mg/L	0.042730	834.41%
Cd 228.802†	-3.3	-0.00011	mg/L	0.000154	-0.00011	mg/L	0.000154	134.62%
Co 228.616†	-4.8	0.00019	mg/L	0.000350	0.00019	mg/L	0.000350	187.69%
Cr 267.716†	12.8	-0.00011	mg/L	0.000084	-0.00011	mg/L	0.000084	74.92%
Cu 327.393†	74.2	0.00058	mg/L	0.000743	0.00058	mg/L	0.000743	129.01%
Fe 239.562†	1.6	0.00177	mg/L	0.000288	0.00177	mg/L	0.000288	16.24%
Mg 279.077†	0.2	-0.00685	mg/L	0.002788	-0.00685	mg/L	0.002788	40.68%
Mn 257.610†	-17.7	-0.00039	mg/L	0.000007	-0.00039	mg/L	0.000007	1.80%
Mo 202.031†	1.8	-0.00064	mg/L	0.000287	-0.00064	mg/L	0.000287	44.89%
Ni 231.604†	3.5	-0.00004	mg/L	0.000268	-0.00004	mg/L	0.000268	597.49%
Pb 220.353†	-1.8	-0.00096	mg/L	0.000682	-0.00096	mg/L	0.000682	71.07%
Sb 206.836†	0.3	0.00007	mg/L	0.000632	0.00007	mg/L	0.000632	857.04%
Se 196.026†	-7.7	-0.00118	mg/L	0.003384	-0.00118	mg/L	0.003384	286.92%
Si 251.611†	9.4	-0.00118	mg/L	0.000313	-0.00118	mg/L	0.000313	26.61%
Sn 189.927†	-79.7	-0.0119	mg/L	0.00068	-0.0119	mg/L	0.00068	5.69%
Ti 334.940†	-123.7	-0.00033	mg/L	0.000163	-0.00033	mg/L	0.000163	48.59%
Tl 190.801†	0.4	-0.00273	mg/L	0.000568	-0.00273	mg/L	0.000568	20.82%
V 290.880†	148.3	-0.00034	mg/L	0.000879	-0.00034	mg/L	0.000879	262.02%
Zn 206.200†	-137.6	-0.00457	mg/L	0.000135	-0.00457	mg/L	0.000135	2.95%
K 766.490†	1.1	0.0203	mg/L	0.02312	0.0203	mg/L	0.02312	114.05%
Na 589.592†	-178.5	-0.0127	mg/L	0.01700	-0.0127	mg/L	0.01700	134.19%
Sr 407.771†	104.7	-0.00053	mg/L	0.000040	-0.00053	mg/L	0.000040	7.53%
Li 670.784†	-10.7	-0.00168	mg/L	0.001299	-0.00168	mg/L	0.001299	77.22%

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Sequence No.: 27 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 5:49:59 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4852953.6						20357.13	0.42%
YRADIAL	287181.7						7063.93	2.46%
Ga 417.206	1270159.8						3429.28	0.27%
GaRADIAL	61936.2						1662.68	2.68%
Ag 328.068†	78647.6	0.397	mg/L	0.0026	0.397	mg/L	0.0026	0.65%
QC value within limits for Ag 328.068 Recovery = 99.31%								
Al 396.153†	46012.6	9.78	mg/L	0.055	9.78	mg/L	0.055	0.56%
QC value within limits for Al 396.153 Recovery = 97.77%								
As 188.979†	419.6	0.380	mg/L	0.0035	0.380	mg/L	0.0035	0.93%
QC value within limits for As 188.979 Recovery = 94.99%								
Ba 233.527†	58068.3	0.985	mg/L	0.0087	0.985	mg/L	0.0087	0.89%

Approved: February 24, 2011

Pierre Morris

QC value within limits for Ba 233.527 Recovery = 98.49%

Be 234.861†	28235.4	0.0496 mg/L	0.00066	0.0496 mg/L	0.00066	1.34%
QC value within limits for Be 234.861 Recovery = 99.25%						
B 249.677†	26270.0	0.506 mg/L	0.0033	0.506 mg/L	0.0033	0.65%
QC value within limits for B 249.677 Recovery = 101.25%						
Ca 227.546†	1023.6	9.98 mg/L	0.089	9.98 mg/L	0.089	0.89%
QC value within limits for Ca 227.546 Recovery = 99.80%						
Cd 228.802†	866.5	0.0486 mg/L	0.00008	0.0486 mg/L	0.00008	0.17%
QC value within limits for Cd 228.802 Recovery = 97.12%						
Co 228.616†	3790.8	0.189 mg/L	0.0014	0.189 mg/L	0.0014	0.73%
QC value within limits for Co 228.616 Recovery = 94.28%						
Cr 267.716†	56582.8	0.488 mg/L	0.0054	0.488 mg/L	0.0054	1.11%
QC value within limits for Cr 267.716 Recovery = 97.56%						
Cu 327.393†	70743.4	0.485 mg/L	0.0012	0.485 mg/L	0.0012	0.25%
QC value within limits for Cu 327.393 Recovery = 97.00%						
Fe 239.562†	1586.6	3.75 mg/L	0.092	3.75 mg/L	0.092	2.46%
QC value within limits for Fe 239.562 Recovery = 93.76%						
Mg 279.077†	7443.2	9.55 mg/L	0.255	9.55 mg/L	0.255	2.66%
QC value within limits for Mg 279.077 Recovery = 95.52%						
Mn 257.610†	221151.4	0.497 mg/L	0.0033	0.497 mg/L	0.0033	0.67%
QC value within limits for Mn 257.610 Recovery = 99.31%						
Mo 202.031†	13326.3	0.984 mg/L	0.0102	0.984 mg/L	0.0102	1.03%
QC value within limits for Mo 202.031 Recovery = 98.39%						
Ni 231.604†	17057.7	0.492 mg/L	0.0042	0.492 mg/L	0.0042	0.85%
QC value within limits for Ni 231.604 Recovery = 98.46%						
Pb 220.353†	2914.9	0.487 mg/L	0.0020	0.487 mg/L	0.0020	0.42%
QC value within limits for Pb 220.353 Recovery = 97.32%						
Sb 206.836†	1854.4	1.16 mg/L	0.005	1.16 mg/L	0.005	0.44%
QC value within limits for Sb 206.836 Recovery = 96.52%						
Se 196.026†	540.5	0.384 mg/L	0.0049	0.384 mg/L	0.0049	1.28%
QC value within limits for Se 196.026 Recovery = 95.92%						
Si 251.611†	167963.9	4.86 mg/L	0.035	4.86 mg/L	0.035	0.71%
QC value within limits for Si 251.611 Recovery = 97.20%						
Sn 189.927†	5697.0	0.974 mg/L	0.0061	0.974 mg/L	0.0061	0.62%
QC value within limits for Sn 189.927 Recovery = 97.40%						
Ti 334.940†	701160.7	0.966 mg/L	0.0022	0.966 mg/L	0.0022	0.22%
QC value within limits for Ti 334.940 Recovery = 96.65%						
Tl 190.801†	838.1	0.496 mg/L	0.0003	0.496 mg/L	0.0003	0.06%
QC value within limits for Tl 190.801 Recovery = 99.19%						
V 290.880†	146691.7	0.979 mg/L	0.0071	0.979 mg/L	0.0071	0.72%
QC value within limits for V 290.880 Recovery = 97.92%						
Zn 206.200†	32758.4	0.985 mg/L	0.0126	0.985 mg/L	0.0126	1.27%
QC value within limits for Zn 206.200 Recovery = 98.49%						
K 766.490†	120321.5	48.4 mg/L	0.37	48.4 mg/L	0.37	0.77%
QC value within limits for K 766.490 Recovery = 96.90%						
Na 589.592†	623899.7	48.2 mg/L	0.42	48.2 mg/L	0.42	0.87%
QC value within limits for Na 589.592 Recovery = 96.47%						
Sr 407.771†	998852.8	0.985 mg/L	0.0566	0.985 mg/L	0.0566	5.75%
QC value within limits for Sr 407.771 Recovery = 98.55%						
Li 670.784†	73536.5	0.967 mg/L	0.0041	0.967 mg/L	0.0041	0.42%
QC value within limits for Li 670.784 Recovery = 96.67%						

All analyte(s) passed QC.

Sequence No.: 28 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 5:56:39 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	5027054.7				34031.89	0.68%
YRADIAL	293376.6				6451.65	2.20%
Ga 417.206	1341795.1				17556.00	1.31%
GaRADIAL	63195.2				256.76	0.41%

Approved: February 24, 2011

Pierre Morris

Ag 328.068†	54.2	-0.00044 mg/L	0.000378	-0.00044 mg/L	0.000378	86.96%	
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153†	-7.8	-0.0135 mg/L	0.00396	-0.0135 mg/L	0.00396	29.40%	
QC value within limits for Al 396.153 Recovery = Not calculated							
As 188.979†	-0.2	0.00023 mg/L	0.001133	0.00023 mg/L	0.001133	491.74%	
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	5.7	-0.00042 mg/L	0.000130	-0.00042 mg/L	0.000130	31.14%	
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 234.861†	50.0	0.00009 mg/L	0.000023	0.00009 mg/L	0.000023	25.99%	
QC value within limits for Be 234.861 Recovery = Not calculated							
B 249.677†	508.0	0.0131 mg/L	0.00091	0.0131 mg/L	0.00091	6.94%	
QC value within limits for B 249.677 Recovery = Not calculated							
Ca 227.546†	5.3	0.0174 mg/L	0.01711	0.0174 mg/L	0.01711	98.45%	
QC value within limits for Ca 227.546 Recovery = Not calculated							
Cd 228.802†	-3.0	-0.00010 mg/L	0.000152	-0.00010 mg/L	0.000152	147.65%	
QC value within limits for Cd 228.802 Recovery = Not calculated							
Co 228.616†	-5.7	0.00014 mg/L	0.000180	0.00014 mg/L	0.000180	126.52%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	-22.4	-0.00042 mg/L	0.000024	-0.00042 mg/L	0.000024	5.74%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 327.393†	127.3	0.00094 mg/L	0.000411	0.00094 mg/L	0.000411	43.91%	
QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe 239.562†	0.1	-0.00178 mg/L	0.000853	-0.00178 mg/L	0.000853	47.95%	
QC value within limits for Fe 239.562 Recovery = Not calculated							
Mg 279.077†	2.6	-0.00385 mg/L	0.005596	-0.00385 mg/L	0.005596	145.31%	
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	57.3	-0.00022 mg/L	0.000037	-0.00022 mg/L	0.000037	17.04%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	3.9	-0.00049 mg/L	0.000052	-0.00049 mg/L	0.000052	10.73%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	-0.0	-0.00015 mg/L	0.000132	-0.00015 mg/L	0.000132	89.80%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	0.8	-0.00052 mg/L	0.000803	-0.00052 mg/L	0.000803	153.64%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	-2.5	-0.00166 mg/L	0.001216	-0.00166 mg/L	0.001216	73.13%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-6.0	0.00006 mg/L	0.004191	0.00006 mg/L	0.004191	>999.9%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-35.2	-0.00247 mg/L	0.000934	-0.00247 mg/L	0.000934	37.73%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-73.9	-0.0109 mg/L	0.00041	-0.0109 mg/L	0.00041	3.78%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-116.2	-0.00032 mg/L	0.000046	-0.00032 mg/L	0.000046	14.13%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	1.5	-0.00209 mg/L	0.000904	-0.00209 mg/L	0.000904	43.28%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	27.4	-0.00115 mg/L	0.000689	-0.00115 mg/L	0.000689	60.17%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-194.5	-0.00628 mg/L	0.000131	-0.00628 mg/L	0.000131	2.09%	
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	-5.7	0.0175 mg/L	0.02438	0.0175 mg/L	0.02438	138.93%	
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	-126.2	-0.00872 mg/L	0.003783	-0.00872 mg/L	0.003783	43.37%	
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	167.9	-0.00047 mg/L	0.000187	-0.00047 mg/L	0.000187	40.00%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	62.7	-0.00071 mg/L	0.000596	-0.00071 mg/L	0.000596	83.43%	
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 29 **Autosampler Location: 83**
Sample ID: L1102057401 **Date Collected: 2/23/2011 6:03:22 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057401

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Approved: February 24, 2011

Pierre Morris

Mean Data: L1102057401

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4939490.8						39048.67	0.79%
YRADIAL	294650.9						5416.46	1.84%
Ga 417.206	1361920.0						15217.12	1.12%
GaRADIAL	63360.0						1008.03	1.59%
Ag 328.068†	403.4	0.00081	mg/L	0.001375	0.00081	mg/L	0.001375	170.47%
Al 396.153†	63115.2	13.4	mg/L	0.04	13.4	mg/L	0.04	0.31%
As 188.979†	5.3	0.00544	mg/L	0.002225	0.00544	mg/L	0.002225	40.89%
Ba 233.527†	2593.4	0.0433	mg/L	0.00054	0.0433	mg/L	0.00054	1.25%
Be 234.861†	1221.7	-0.00005	mg/L	0.000232	-0.00005	mg/L	0.000232	432.16%
B 249.677†	1378.0	0.0626	mg/L	0.00226	0.0626	mg/L	0.00226	3.61%
Ca 227.546†	1779.9	16.8	mg/L	0.13	16.8	mg/L	0.13	0.80%
Cd 228.802†	27.7	0.00162	mg/L	0.000139	0.00162	mg/L	0.000139	8.53%
Co 228.616†	72.2	0.00330	mg/L	0.000368	0.00330	mg/L	0.000368	11.16%
Cr 267.716†	1776.0	0.0147	mg/L	0.00013	0.0147	mg/L	0.00013	0.92%
Cu 327.393†	1528.6	0.0119	mg/L	0.00099	0.0119	mg/L	0.00099	8.29%
Fe 239.562†	4365.5	10.3	mg/L	0.23	10.3	mg/L	0.23	2.24%
Mg 279.077†	7475.3	9.59	mg/L	0.252	9.59	mg/L	0.252	2.62%
Mn 257.610†	106512.5	0.241	mg/L	0.0021	0.241	mg/L	0.0021	0.87%
Mo 202.031†	23.4	0.00152	mg/L	0.000303	0.00152	mg/L	0.000303	19.92%
Ni 231.604†	424.9	0.0121	mg/L	0.00037	0.0121	mg/L	0.00037	3.03%
Pb 220.353†	74.0	0.0124	mg/L	0.00049	0.0124	mg/L	0.00049	4.00%
Sb 206.836†	18.9	0.0116	mg/L	0.00121	0.0116	mg/L	0.00121	10.50%
Se 196.026†	-22.6	-0.00506	mg/L	0.003111	-0.00506	mg/L	0.003111	61.50%
Si 251.611†	551231.6	16.0	mg/L	0.12	16.0	mg/L	0.12	0.77%
Sn 189.927†	-80.7	-0.0121	mg/L	0.00003	-0.0121	mg/L	0.00003	0.21%
Ti 334.940†	155197.2	0.214	mg/L	0.0019	0.214	mg/L	0.0019	0.90%
Tl 190.801†	35.4	0.0191	mg/L	0.00334	0.0191	mg/L	0.00334	17.50%
V 290.880†	3903.8	0.0256	mg/L	0.00155	0.0256	mg/L	0.00155	6.06%
Zn 206.200†	8273.6	0.248	mg/L	0.0020	0.248	mg/L	0.0020	0.82%
K 766.490†	25812.6	10.3	mg/L	0.21	10.3	mg/L	0.21	2.07%
Na 589.592†	487823.7	37.5	mg/L	0.29	37.5	mg/L	0.29	0.76%
Sr 407.771†	89459.0	0.0865	mg/L	0.00226	0.0865	mg/L	0.00226	2.61%
Li 670.784†	873.2	0.00996	mg/L	0.000102	0.00996	mg/L	0.000102	1.03%

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Sequence No.: 30 **Autosampler Location: 84**
Sample ID: L1102057401PS WG357407-01 **Date Collected: 2/23/2011 6:09:08 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057401PS WG357407-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102057401PS WG357407-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4749450.1						32167.53	0.68%
YRADIAL	292695.6						12685.01	4.33%
Ga 417.206	1288788.9						17263.89	1.34%
GaRADIAL	62770.7						2459.28	3.92%
Ag 328.068†	40136.4	0.202	mg/L	0.0054	0.202	mg/L	0.0054	2.67%
Al 396.153†	81911.2	17.4	mg/L	0.06	17.4	mg/L	0.06	0.36%
As 188.979†	220.9	0.200	mg/L	0.0037	0.200	mg/L	0.0037	1.86%
Ba 233.527†	32687.4	0.554	mg/L	0.0049	0.554	mg/L	0.0049	0.88%
Be 234.861†	15715.2	0.0256	mg/L	0.00040	0.0256	mg/L	0.00040	1.55%
B 249.677†	53397.5	1.05	mg/L	0.020	1.05	mg/L	0.020	1.90%
Ca 227.546†	2222.4	21.2	mg/L	0.30	21.2	mg/L	0.30	1.43%
Cd 228.802†	457.0	0.0257	mg/L	0.00044	0.0257	mg/L	0.00044	1.73%
Co 228.616†	2061.4	0.102	mg/L	0.0008	0.102	mg/L	0.0008	0.78%
Cr 267.716†	30535.2	0.263	mg/L	0.0026	0.263	mg/L	0.0026	1.00%
Cu 327.393†	37495.7	0.258	mg/L	0.0061	0.258	mg/L	0.0061	2.37%
Fe 239.562†	4868.7	11.5	mg/L	0.65	11.5	mg/L	0.65	5.60%
Mg 279.077†	10770.6	13.8	mg/L	0.76	13.8	mg/L	0.76	5.49%
Mn 257.610†	213582.8	0.481	mg/L	0.0007	0.481	mg/L	0.0007	0.15%
Mo 202.031†	6852.1	0.506	mg/L	0.0058	0.506	mg/L	0.0058	1.16%
Ni 231.604†	9163.1	0.264	mg/L	0.0016	0.264	mg/L	0.0016	0.61%

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Pb 220.353†	1582.5	0.264	mg/L	0.0021	0.264	mg/L	0.0021	0.79%
Sb 206.836†	971.0	0.606	mg/L	0.0084	0.606	mg/L	0.0084	1.38%
Se 196.026†	249.0	0.185	mg/L	0.0019	0.185	mg/L	0.0019	1.03%
Si 251.611†	620760.7	18.0	mg/L	0.15	18.0	mg/L	0.15	0.84%
Sn 189.927†	-82.9	-0.0125	mg/L	0.00071	-0.0125	mg/L	0.00071	5.66%
Ti 334.940†	515238.4	0.710	mg/L	0.0054	0.710	mg/L	0.0054	0.76%
Tl 190.801†	471.1	0.278	mg/L	0.0031	0.278	mg/L	0.0031	1.12%
V 290.880†	79969.5	0.534	mg/L	0.0032	0.534	mg/L	0.0032	0.60%
Zn 206.200†	24540.0	0.737	mg/L	0.0038	0.737	mg/L	0.0038	0.52%
K 766.490†	85875.7	34.5	mg/L	0.17	34.5	mg/L	0.17	0.49%
Na 589.592†	773320.9	60.2	mg/L	0.03	60.2	mg/L	0.03	0.05%
Sr 407.771†	580647.7	0.571	mg/L	0.0108	0.571	mg/L	0.0108	1.88%
Li 670.784†	40102.7	0.526	mg/L	0.0045	0.526	mg/L	0.0045	0.85%

Sequence No.: 31 **Autosampler Location: 85**
Sample ID: L1102057401DL WG357407-02 **Date Collected: 2/23/2011 6:14:57 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057401DL WG357407-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102057401DL WG357407-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5084258.1						23548.69	0.46%
YRADIAL	293005.9						2487.66	0.85%
Ga 417.206	1418730.2						15219.31	1.07%
GaRADIAL	64426.9						1492.51	2.32%
Ag 328.068†	-71.0	-0.00117	mg/L	0.000243	-0.00117	mg/L	0.000243	20.70%
Al 396.153†	12614.8	2.68	mg/L	0.015	2.68	mg/L	0.015	0.55%
As 188.979†	0.3	0.00074	mg/L	0.001088	0.00074	mg/L	0.001088	147.09%
Ba 233.527†	517.8	0.00824	mg/L	0.000064	0.00824	mg/L	0.000064	0.77%
Be 234.861†	353.5	0.00017	mg/L	0.000026	0.00017	mg/L	0.000026	14.93%
B 249.677†	494.5	0.0196	mg/L	0.00140	0.0196	mg/L	0.00140	7.11%
Ca 227.546†	353.9	3.32	mg/L	0.082	3.32	mg/L	0.082	2.48%
Cd 228.802†	1.2	0.00014	mg/L	0.000168	0.00014	mg/L	0.000168	122.58%
Co 228.616†	13.7	0.00097	mg/L	0.000275	0.00097	mg/L	0.000275	28.49%
Cr 267.716†	377.6	0.00295	mg/L	0.000139	0.00295	mg/L	0.000139	4.70%
Cu 327.393†	371.8	0.00290	mg/L	0.000465	0.00290	mg/L	0.000465	16.03%
Fe 239.562†	890.3	2.10	mg/L	0.042	2.10	mg/L	0.042	2.00%
Mg 279.077†	1543.1	1.97	mg/L	0.023	1.97	mg/L	0.023	1.17%
Mn 257.610†	21397.4	0.0481	mg/L	0.00052	0.0481	mg/L	0.00052	1.09%
Mo 202.031†	6.6	-0.00017	mg/L	0.000409	-0.00017	mg/L	0.000409	241.16%
Ni 231.604†	88.1	0.00239	mg/L	0.000162	0.00239	mg/L	0.000162	6.74%
Pb 220.353†	23.3	0.00335	mg/L	0.000718	0.00335	mg/L	0.000718	21.45%
Sb 206.836†	2.7	0.00152	mg/L	0.001877	0.00152	mg/L	0.001877	123.34%
Se 196.026†	-12.8	-0.00340	mg/L	0.004537	-0.00340	mg/L	0.004537	133.54%
Si 251.611†	109157.7	3.17	mg/L	0.036	3.17	mg/L	0.036	1.12%
Sn 189.927†	-79.4	-0.0119	mg/L	0.00070	-0.0119	mg/L	0.00070	5.93%
Ti 334.940†	30446.3	0.0418	mg/L	0.00057	0.0418	mg/L	0.00057	1.37%
Tl 190.801†	7.3	0.00159	mg/L	0.002363	0.00159	mg/L	0.002363	148.26%
V 290.880†	884.7	0.00475	mg/L	0.000294	0.00475	mg/L	0.000294	6.19%
Zn 206.200†	1573.7	0.0468	mg/L	0.00021	0.0468	mg/L	0.00021	0.44%
K 766.490†	5268.3	2.12	mg/L	0.030	2.12	mg/L	0.030	1.42%
Na 589.592†	97846.8	7.41	mg/L	0.114	7.41	mg/L	0.114	1.53%
Sr 407.771†	19160.9	0.0180	mg/L	0.00090	0.0180	mg/L	0.00090	5.00%
Li 670.784†	128.5	0.00015	mg/L	0.001107	0.00015	mg/L	0.001107	728.38%

Sequence No.: 32 **Autosampler Location: 86**
Sample ID: L1102057901 **Date Collected: 2/23/2011 6:21:36 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057901

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Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102057901

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4568647.5						76101.61	1.67%
YRADIAL	282689.8						5874.59	2.08%
Ga 417.206	1227296.4						26664.75	2.17%
GaRADIAL	61845.9						1819.80	2.94%
Ag 328.068†	68.9	-0.00055	mg/L	0.000255	-0.00055	mg/L	0.000255	46.74%
Al 396.153†	-77.4	-0.0283	mg/L	0.00524	-0.0283	mg/L	0.00524	18.51%
As 188.979†	3.2	0.00287	mg/L	0.003581	0.00287	mg/L	0.003581	124.97%
Ba 233.527†	6116.0	0.103	mg/L	0.0018	0.103	mg/L	0.0018	1.71%
Be 234.861†	35.4	0.00000	mg/L	0.000029	0.00000	mg/L	0.000029	>999.9%
B 249.677†	4120.1	0.0829	mg/L	0.00141	0.0829	mg/L	0.00141	1.70%
Ca 227.546†	2611.6	24.6	mg/L	0.53	24.6	mg/L	0.53	2.17%
Cd 228.802†	-1.0	-0.00001	mg/L	0.000082	-0.00001	mg/L	0.000082	813.64%
Co 228.616†	0.7	0.00042	mg/L	0.000261	0.00042	mg/L	0.000261	61.47%
Cr 267.716†	282.1	0.00220	mg/L	0.000118	0.00220	mg/L	0.000118	5.36%
Cu 327.393†	-166.5	-0.00104	mg/L	0.000891	-0.00104	mg/L	0.000891	85.38%
Fe 239.562†	128.3	0.301	mg/L	0.0189	0.301	mg/L	0.0189	6.28%
Mg 279.077†	24200.2	31.1	mg/L	1.53	31.1	mg/L	1.53	4.93%
Mn 257.610†	4915.1	0.0183	mg/L	0.00047	0.0183	mg/L	0.00047	2.56%
Mo 202.031†	5.1	-0.00038	mg/L	0.000356	-0.00038	mg/L	0.000356	93.96%
Ni 231.604†	61.5	0.00161	mg/L	0.000058	0.00161	mg/L	0.000058	3.58%
Pb 220.353†	1.3	0.00073	mg/L	0.001351	0.00073	mg/L	0.001351	184.04%
Sb 206.836†	9.9	0.00599	mg/L	0.000876	0.00599	mg/L	0.000876	14.62%
Se 196.026†	-18.4	-0.00236	mg/L	0.005023	-0.00236	mg/L	0.005023	212.52%
Si 251.611†	390936.1	11.3	mg/L	0.06	11.3	mg/L	0.06	0.49%
Sn 189.927†	-77.2	-0.0115	mg/L	0.00045	-0.0115	mg/L	0.00045	3.92%
Ti 334.940†	-356.8	-0.00041	mg/L	0.000231	-0.00041	mg/L	0.000231	56.42%
Tl 190.801†	49.9	0.0238	mg/L	0.00336	0.0238	mg/L	0.00336	14.10%
V 290.880†	-741.5	-0.00627	mg/L	0.001065	-0.00627	mg/L	0.001065	17.00%
Zn 206.200†	10.3	-0.00013	mg/L	0.000261	-0.00013	mg/L	0.000261	204.83%
K 766.490†	6394.4	1.98	mg/L	0.022	1.98	mg/L	0.022	1.10%
Na 589.592†	5540414.3	595	mg/L	35.9	595	mg/L	35.9	6.03%
Sr 407.771†	814628.3	0.804	mg/L	0.0520	0.804	mg/L	0.0520	6.46%
Li 670.784†	2857.3	0.0361	mg/L	0.00121	0.0361	mg/L	0.00121	3.36%

Sequence No.: 33 **Autosampler Location: 87**
Sample ID: L1102057902 **Date Collected: 2/23/2011 6:28:23 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102057902

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102057902

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4663983.6						22135.52	0.47%
YRADIAL	279316.2						3281.06	1.17%
Ga 417.206	1256929.0						15812.15	1.26%
GaRADIAL	61112.7						365.64	0.60%
Ag 328.068†	49.3	-0.00064	mg/L	0.000752	-0.00064	mg/L	0.000752	116.70%
Al 396.153†	-43.7	-0.0211	mg/L	0.01661	-0.0211	mg/L	0.01661	78.71%
As 188.979†	1.7	0.00157	mg/L	0.001387	0.00157	mg/L	0.001387	88.51%
Ba 233.527†	5691.5	0.0958	mg/L	0.00053	0.0958	mg/L	0.00053	0.56%
Be 234.861†	46.3	-0.00001	mg/L	0.000082	-0.00001	mg/L	0.000082	663.88%
B 249.677†	3779.8	0.0772	mg/L	0.00165	0.0772	mg/L	0.00165	2.14%
Ca 227.546†	2415.6	22.8	mg/L	0.31	22.8	mg/L	0.31	1.37%
Cd 228.802†	0.7	0.00009	mg/L	0.000066	0.00009	mg/L	0.000066	73.27%
Co 228.616†	-5.9	0.00009	mg/L	0.000207	0.00009	mg/L	0.000207	229.87%
Cr 267.716†	298.6	0.00235	mg/L	0.000168	0.00235	mg/L	0.000168	7.14%
Cu 327.393†	8.2	0.00017	mg/L	0.000795	0.00017	mg/L	0.000795	473.61%
Fe 239.562†	193.8	0.456	mg/L	0.0055	0.456	mg/L	0.0055	1.20%

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Mg 279.077†	22871.3	29.4	mg/L	0.15	29.4	mg/L	0.15 0.52%
Mn 257.610†	4389.2	0.0171	mg/L	0.00009	0.0171	mg/L	0.00009 0.55%
Mo 202.031†	6.5	-0.00027	mg/L	0.000571	-0.00027	mg/L	0.000571 209.45%
Ni 231.604†	66.1	0.00174	mg/L	0.000359	0.00174	mg/L	0.000359 20.57%
Pb 220.353†	5.1	0.00125	mg/L	0.001095	0.00125	mg/L	0.001095 87.31%
Sb 206.836†	4.9	0.00292	mg/L	0.000451	0.00292	mg/L	0.000451 15.41%
Se 196.026†	-19.9	-0.00379	mg/L	0.008988	-0.00379	mg/L	0.008988 237.13%
Si 251.611†	385687.0	11.2	mg/L	0.11	11.2	mg/L	0.11 0.96%
Sn 189.927†	-81.1	-0.0122	mg/L	0.00107	-0.0122	mg/L	0.00107 8.77%
Ti 334.940†	-296.4	-0.00035	mg/L	0.000126	-0.00035	mg/L	0.000126 36.40%
Tl 190.801†	48.3	0.0231	mg/L	0.00150	0.0231	mg/L	0.00150 6.47%
V 290.880†	-745.0	-0.00628	mg/L	0.001888	-0.00628	mg/L	0.001888 30.07%
Zn 206.200†	71.8	0.00171	mg/L	0.000154	0.00171	mg/L	0.000154 8.97%
K 766.490†	6085.1	1.86	mg/L	0.086	1.86	mg/L	0.086 4.65%
Na 589.592†	5530550.0	592	mg/L	10.2	592	mg/L	10.2 1.72%
Sr 407.771†	767969.5	0.758	mg/L	0.0488	0.758	mg/L	0.0488 6.44%
Li 670.784†	2824.2	0.0356	mg/L	0.00131	0.0356	mg/L	0.00131 3.69%

Sequence No.: 34 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 6:35:12 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	165.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4844304.4						49326.88	1.02%
YRADIAL	280635.2						3690.21	1.31%
Ga 417.206	1270497.9						7963.98	0.63%
GaRADIAL	60874.7						597.93	0.98%
Ag 328.068†	78469.2	0.396	mg/L	0.0039	0.396	mg/L	0.0039	0.98%
QC value within limits for Ag 328.068 Recovery = 99.08%								
Al 396.153†	46624.7	9.91	mg/L	0.085	9.91	mg/L	0.085	0.86%
QC value within limits for Al 396.153 Recovery = 99.08%								
As 188.979†	425.0	0.385	mg/L	0.0056	0.385	mg/L	0.0056	1.45%
QC value within limits for As 188.979 Recovery = 96.22%								
Ba 233.527†	58341.5	0.990	mg/L	0.0060	0.990	mg/L	0.0060	0.60%
QC value within limits for Ba 233.527 Recovery = 98.95%								
Be 234.861†	28379.8	0.0499	mg/L	0.00049	0.0499	mg/L	0.00049	0.99%
QC value within limits for Be 234.861 Recovery = 99.70%								
B 249.677†	25697.4	0.496	mg/L	0.0060	0.496	mg/L	0.0060	1.22%
QC value within limits for B 249.677 Recovery = 99.13%								
Ca 227.546†	1021.3	9.96	mg/L	0.110	9.96	mg/L	0.110	1.11%
QC value within limits for Ca 227.546 Recovery = 99.57%								
Cd 228.802†	868.6	0.0487	mg/L	0.00053	0.0487	mg/L	0.00053	1.09%
QC value within limits for Cd 228.802 Recovery = 97.32%								
Co 228.616†	3806.3	0.189	mg/L	0.0015	0.189	mg/L	0.0015	0.79%
QC value within limits for Co 228.616 Recovery = 94.66%								
Cr 267.716†	56566.7	0.488	mg/L	0.0024	0.488	mg/L	0.0024	0.50%
QC value within limits for Cr 267.716 Recovery = 97.54%								
Cu 327.393†	70589.8	0.484	mg/L	0.0056	0.484	mg/L	0.0056	1.16%
QC value within limits for Cu 327.393 Recovery = 96.80%								
Fe 239.562†	1622.4	3.83	mg/L	0.028	3.83	mg/L	0.028	0.73%
QC value within limits for Fe 239.562 Recovery = 95.87%								
Mg 279.077†	7601.6	9.76	mg/L	0.050	9.76	mg/L	0.050	0.52%
QC value within limits for Mg 279.077 Recovery = 97.56%								
Mn 257.610†	221585.7	0.498	mg/L	0.0021	0.498	mg/L	0.0021	0.42%
QC value within limits for Mn 257.610 Recovery = 99.51%								
Mo 202.031†	13284.7	0.981	mg/L	0.0055	0.981	mg/L	0.0055	0.56%
QC value within limits for Mo 202.031 Recovery = 98.08%								
Ni 231.604†	17032.8	0.492	mg/L	0.0020	0.492	mg/L	0.0020	0.41%
QC value within limits for Ni 231.604 Recovery = 98.31%								
Pb 220.353†	2921.9	0.488	mg/L	0.0049	0.488	mg/L	0.0049	1.01%
QC value within limits for Pb 220.353 Recovery = 97.55%								
Sb 206.836†	1849.0	1.15	mg/L	0.015	1.15	mg/L	0.015	1.26%

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QC value within limits for Sb 206.836 Recovery = 96.24%
Se 196.026† 548.4 0.389 mg/L 0.0009 0.389 mg/L 0.0009 0.23%
QC value within limits for Se 196.026 Recovery = 97.29%
Si 251.611† 168111.4 4.86 mg/L 0.056 4.86 mg/L 0.056 1.14%
QC value within limits for Si 251.611 Recovery = 97.29%
Sn 189.927† 5717.8 0.978 mg/L 0.0086 0.978 mg/L 0.0086 0.88%
QC value within limits for Sn 189.927 Recovery = 97.76%
Ti 334.940† 709930.6 0.979 mg/L 0.0108 0.979 mg/L 0.0108 1.10%
QC value within limits for Ti 334.940 Recovery = 97.86%
Tl 190.801† 833.9 0.494 mg/L 0.0070 0.494 mg/L 0.0070 1.43%
QC value within limits for Tl 190.801 Recovery = 98.72%
V 290.880† 147121.2 0.982 mg/L 0.0054 0.982 mg/L 0.0054 0.55%
QC value within limits for V 290.880 Recovery = 98.21%
Zn 206.200† 32922.7 0.990 mg/L 0.0086 0.990 mg/L 0.0086 0.87%
QC value within limits for Zn 206.200 Recovery = 98.98%
K 766.490† 121361.4 48.9 mg/L 0.55 48.9 mg/L 0.55 1.13%
QC value within limits for K 766.490 Recovery = 97.74%
Na 589.592† 631254.2 48.8 mg/L 0.23 48.8 mg/L 0.23 0.47%
QC value within limits for Na 589.592 Recovery = 97.64%
Sr 407.771† 1023744.7 1.01 mg/L 0.071 1.01 mg/L 0.071 7.00%
QC value within limits for Sr 407.771 Recovery = 101.01%
Li 670.784† 74303.3 0.977 mg/L 0.0042 0.977 mg/L 0.0042 0.43%
QC value within limits for Li 670.784 Recovery = 97.68%
All analyte(s) passed QC.

Sequence No.: 35 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 6:41:51 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4989548.5						87690.83	1.76%
YRADIAL	295447.3						5250.56	1.78%
Ga 417.206	1317560.3						12531.45	0.95%
GaRADIAL	63761.1						2057.66	3.23%
Ag 328.068†	-131.0	-0.00137	mg/L	0.000699	-0.00137	mg/L	0.000699	51.01%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-2.7	-0.0124	mg/L	0.01392	-0.0124	mg/L	0.01392	112.14%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.5	-0.00004	mg/L	0.002301	-0.00004	mg/L	0.002301	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-3.5	-0.00057	mg/L	0.000072	-0.00057	mg/L	0.000072	12.66%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	40.6	0.00007	mg/L	0.000016	0.00007	mg/L	0.000016	21.78%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	114.0	0.00567	mg/L	0.001237	0.00567	mg/L	0.001237	21.83%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	3.0	-0.00466	mg/L	0.079075	-0.00466	mg/L	0.079075	>999.9%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-3.0	-0.00010	mg/L	0.000117	-0.00010	mg/L	0.000117	115.03%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-2.2	0.00032	mg/L	0.000183	0.00032	mg/L	0.000183	57.39%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-4.4	-0.00026	mg/L	0.000126	-0.00026	mg/L	0.000126	48.11%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	74.3	0.00057	mg/L	0.000854	0.00057	mg/L	0.000854	148.58%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	1.4	0.00124	mg/L	0.005745	0.00124	mg/L	0.005745	462.32%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	5.8	0.00035	mg/L	0.007516	0.00035	mg/L	0.007516	>999.9%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	41.3	-0.00025	mg/L	0.000016	-0.00025	mg/L	0.000016	6.18%
QC value within limits for Mn 257.610 Recovery = Not calculated								

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Mo 202.031†	6.9	-0.00026 mg/L	0.000353	-0.00026 mg/L	0.000353	134.30%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	9.1	0.00012 mg/L	0.000396	0.00012 mg/L	0.000396	336.01%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	2.4	-0.00025 mg/L	0.000206	-0.00025 mg/L	0.000206	81.45%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	1.2	0.00063 mg/L	0.002542	0.00063 mg/L	0.002542	405.80%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-2.5	0.00247 mg/L	0.007632	0.00247 mg/L	0.007632	308.75%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	24.3	-0.00075 mg/L	0.000679	-0.00075 mg/L	0.000679	90.48%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-76.6	-0.0114 mg/L	0.00025	-0.0114 mg/L	0.00025	2.19%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-42.6	-0.00022 mg/L	0.000165	-0.00022 mg/L	0.000165	73.82%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	1.6	-0.00205 mg/L	0.002641	-0.00205 mg/L	0.002641	128.82%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	55.7	-0.00096 mg/L	0.000544	-0.00096 mg/L	0.000544	56.97%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	-209.1	-0.00671 mg/L	0.000147	-0.00671 mg/L	0.000147	2.19%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	127.9	0.0707 mg/L	0.04706	0.0707 mg/L	0.04706	66.52%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	1403.2	0.107 mg/L	0.0099	0.107 mg/L	0.0099	9.27%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	183.9	-0.00045 mg/L	0.000324	-0.00045 mg/L	0.000324	71.57%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	120.6	0.00005 mg/L	0.000373	0.00005 mg/L	0.000373	780.48%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 36 **Autosampler Location: 88**
Sample ID: PBW 04 WG357204-02 **Date Collected: 2/23/2011 6:48:33 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 04 WG357204-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: PBW 04 WG357204-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5182960.4						70862.82	1.37%
YRADIAL	296568.3						1887.33	0.64%
Ga 417.206	1312191.9						20197.06	1.54%
GaRADIAL	64735.3						1061.78	1.64%
Ag 328.068†	-125.6	-0.00134	mg/L	0.000711	-0.00134	mg/L	0.000711	52.94%
Al 396.153†	37.4	-0.00385	mg/L	0.008840	-0.00385	mg/L	0.008840	229.90%
As 188.979†	-1.0	-0.00051	mg/L	0.003414	-0.00051	mg/L	0.003414	665.83%
Ba 233.527†	238.3	0.00352	mg/L	0.000122	0.00352	mg/L	0.000122	3.48%
Be 234.861†	-44.7	-0.00008	mg/L	0.000021	-0.00008	mg/L	0.000021	28.00%
B 249.677†	122.5	0.00583	mg/L	0.000756	0.00583	mg/L	0.000756	12.96%
Ca 227.546†	-3.2	-0.0628	mg/L	0.03276	-0.0628	mg/L	0.03276	52.20%
Cd 228.802†	1.6	0.00016	mg/L	0.000165	0.00016	mg/L	0.000165	103.02%
Co 228.616†	-3.1	0.00027	mg/L	0.000146	0.00027	mg/L	0.000146	53.29%
Cr 267.716†	27.0	0.00001	mg/L	0.000103	0.00001	mg/L	0.000103	>999.9%
Cu 327.393†	171.5	0.00124	mg/L	0.000572	0.00124	mg/L	0.000572	46.17%
Fe 239.562†	3.5	0.00626	mg/L	0.005004	0.00626	mg/L	0.005004	79.97%
Mg 279.077†	4.5	-0.00142	mg/L	0.003414	-0.00142	mg/L	0.003414	240.42%
Mn 257.610†	-4.0	-0.00035	mg/L	0.000018	-0.00035	mg/L	0.000018	5.08%
Mo 202.031†	-2.8	-0.00098	mg/L	0.000189	-0.00098	mg/L	0.000189	19.33%
Ni 231.604†	-1.0	-0.00017	mg/L	0.000323	-0.00017	mg/L	0.000323	186.58%
Pb 220.353†	4.6	0.00009	mg/L	0.000576	0.00009	mg/L	0.000576	620.09%
Sb 206.836†	2.8	0.00158	mg/L	0.002422	0.00158	mg/L	0.002422	153.39%
Se 196.026†	-0.2	0.00408	mg/L	0.003772	0.00408	mg/L	0.003772	92.51%
Si 251.611†	39.9	-0.00029	mg/L	0.000439	-0.00029	mg/L	0.000439	152.81%
Sn 189.927†	-56.4	-0.00796	mg/L	0.000462	-0.00796	mg/L	0.000462	5.80%

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Ti 334.940†	-55.2	-0.00024 mg/L	0.000161	-0.00024 mg/L	0.000161	66.83%
Tl 190.801†	-2.6	-0.00449 mg/L	0.003157	-0.00449 mg/L	0.003157	70.30%
V 290.880†	-29.8	-0.00153 mg/L	0.000348	-0.00153 mg/L	0.000348	22.78%
Zn 206.200†	-139.6	-0.00463 mg/L	0.000129	-0.00463 mg/L	0.000129	2.80%
K 766.490†	48.0	0.0389 mg/L	0.02252	0.0389 mg/L	0.02252	57.90%
Na 589.592†	898.1	0.0686 mg/L	0.00695	0.0686 mg/L	0.00695	10.14%
Sr 407.771†	75.6	-0.00056 mg/L	0.000112	-0.00056 mg/L	0.000112	20.08%
Li 670.784†	-107.1	-0.00295 mg/L	0.002101	-0.00295 mg/L	0.002101	71.19%

Sequence No.: 37 **Autosampler Location: 89**
Sample ID: LCSW 04 WG357204-03 **Date Collected: 2/23/2011 6:55:13 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 04 WG357204-03

Analyte	Back Pressure	Flow
All	165.0 kPa	0.50 L/min

Mean Data: LCSW 04 WG357204-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4985131.7						15041.26	0.30%
YRADIAL	284305.8						4209.60	1.48%
Ga 417.206	1281517.4						6760.66	0.53%
GaRADIAL	62103.2						1568.42	2.53%
Ag 328.068†	37991.7	0.192	mg/L	0.0016	0.192	mg/L	0.0016	0.86%
Al 396.153†	22578.6	4.79	mg/L	0.026	4.79	mg/L	0.026	0.55%
As 188.979†	200.9	0.182	mg/L	0.0021	0.182	mg/L	0.0021	1.16%
Ba 233.527†	28176.6	0.478	mg/L	0.0016	0.478	mg/L	0.0016	0.33%
Be 234.861†	13211.8	0.0232	mg/L	0.00015	0.0232	mg/L	0.00015	0.64%
B 249.677†	48520.2	0.925	mg/L	0.0071	0.925	mg/L	0.0071	0.77%
Ca 227.546†	479.6	4.66	mg/L	0.065	4.66	mg/L	0.065	1.40%
Cd 228.802†	422.9	0.0238	mg/L	0.00025	0.0238	mg/L	0.00025	1.05%
Co 228.616†	1867.9	0.0931	mg/L	0.00044	0.0931	mg/L	0.00044	0.47%
Cr 267.716†	27526.9	0.237	mg/L	0.0008	0.237	mg/L	0.0008	0.33%
Cu 327.393†	34678.5	0.238	mg/L	0.0009	0.238	mg/L	0.0009	0.38%
Fe 239.562†	806.4	1.91	mg/L	0.050	1.91	mg/L	0.050	2.64%
Mg 279.077†	3795.5	4.87	mg/L	0.124	4.87	mg/L	0.124	2.54%
Mn 257.610†	108833.9	0.244	mg/L	0.0006	0.244	mg/L	0.0006	0.23%
Mo 202.031†	6465.5	0.477	mg/L	0.0000	0.477	mg/L	0.0000	0.01%
Ni 231.604†	8296.9	0.239	mg/L	0.0015	0.239	mg/L	0.0015	0.63%
Pb 220.353†	1433.1	0.239	mg/L	0.0012	0.239	mg/L	0.0012	0.50%
Sb 206.836†	907.2	0.567	mg/L	0.0070	0.567	mg/L	0.0070	1.24%
Se 196.026†	259.4	0.186	mg/L	0.0018	0.186	mg/L	0.0018	0.99%
Si 251.611†	83497.3	2.42	mg/L	0.022	2.42	mg/L	0.022	0.90%
Sn 189.927†	-53.1	-0.00738	mg/L	0.000814	-0.00738	mg/L	0.000814	11.02%
Ti 334.940†	348324.6	0.480	mg/L	0.0032	0.480	mg/L	0.0032	0.66%
Tl 190.801†	406.2	0.239	mg/L	0.0027	0.239	mg/L	0.0027	1.14%
V 290.880†	71558.3	0.477	mg/L	0.0010	0.477	mg/L	0.0010	0.20%
Zn 206.200†	15504.4	0.466	mg/L	0.0012	0.466	mg/L	0.0012	0.26%
K 766.490†	59259.4	23.8	mg/L	0.23	23.8	mg/L	0.23	0.95%
Na 589.592†	315492.6	24.1	mg/L	0.88	24.1	mg/L	0.88	3.65%
Sr 407.771†	515398.3	0.508	mg/L	0.0226	0.508	mg/L	0.0226	4.45%
Li 670.784†	36448.9	0.478	mg/L	0.0052	0.478	mg/L	0.0052	1.09%

Sequence No.: 38 **Autosampler Location: 90**
Sample ID: FBLK WG357124-01 **Date Collected: 2/23/2011 7:01:56 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG357124-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: FBLK WG357124-01

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Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4944305.7						57395.27	1.16%
YRADIAL	290411.9						3722.78	1.28%
Ga 417.206	1253405.1						8071.86	0.64%
GaRADIAL	61723.1						571.86	0.93%
Ag 328.068†	-152.2	-0.00148	mg/L	0.000369	-0.00148	mg/L	0.000369	24.89%
Al 396.153†	258.4	0.0432	mg/L	0.00849	0.0432	mg/L	0.00849	19.64%
As 188.979†	-4.2	-0.00344	mg/L	0.001187	-0.00344	mg/L	0.001187	34.47%
Ba 233.527†	185.6	0.00263	mg/L	0.000047	0.00263	mg/L	0.000047	1.80%
Be 234.861†	-52.1	-0.00011	mg/L	0.000019	-0.00011	mg/L	0.000019	16.77%
B 249.677†	356.6	0.0108	mg/L	0.00127	0.0108	mg/L	0.00127	11.78%
Ca 227.546†	9.4	0.0572	mg/L	0.00837	0.0572	mg/L	0.00837	14.65%
Cd 228.802†	-0.1	0.00008	mg/L	0.000132	0.00008	mg/L	0.000132	157.00%
Co 228.616†	-6.6	0.00009	mg/L	0.000275	0.00009	mg/L	0.000275	309.70%
Cr 267.716†	63.7	0.00032	mg/L	0.000112	0.00032	mg/L	0.000112	34.66%
Cu 327.393†	208.9	0.00151	mg/L	0.000593	0.00151	mg/L	0.000593	39.31%
Fe 239.562†	53.6	0.125	mg/L	0.0102	0.125	mg/L	0.0102	8.15%
Mg 279.077†	56.6	0.0654	mg/L	0.00165	0.0654	mg/L	0.00165	2.53%
Mn 257.610†	814.9	0.00280	mg/L	0.000077	0.00280	mg/L	0.000077	2.76%
Mo 202.031†	-1.5	-0.00088	mg/L	0.000366	-0.00088	mg/L	0.000366	41.56%
Ni 231.604†	21.0	0.00046	mg/L	0.000103	0.00046	mg/L	0.000103	22.19%
Pb 220.353†	11.1	0.00117	mg/L	0.000682	0.00117	mg/L	0.000682	58.09%
Sb 206.836†	3.3	0.00192	mg/L	0.001486	0.00192	mg/L	0.001486	77.60%
Se 196.026†	4.5	0.00740	mg/L	0.005641	0.00740	mg/L	0.005641	76.24%
Si 251.611†	2549.3	0.0726	mg/L	0.00063	0.0726	mg/L	0.00063	0.86%
Sn 189.927†	-58.1	-0.00825	mg/L	0.000645	-0.00825	mg/L	0.000645	7.81%
Ti 334.940†	1289.4	0.00161	mg/L	0.000011	0.00161	mg/L	0.000011	0.67%
Tl 190.801†	-0.8	-0.00338	mg/L	0.002981	-0.00338	mg/L	0.002981	88.28%
V 290.880†	184.1	-0.00009	mg/L	0.000562	-0.00009	mg/L	0.000562	648.89%
Zn 206.200†	-28.7	-0.00130	mg/L	0.000130	-0.00130	mg/L	0.000130	9.99%
K 766.490†	528.3	0.0878	mg/L	0.02039	0.0878	mg/L	0.02039	23.23%
Na 589.592†	1759051.7	143	mg/L	1.6	143	mg/L	1.6	1.10%
Sr 407.771†	623.2	-0.00003	mg/L	0.000108	-0.00003	mg/L	0.000108	321.88%
Li 670.784†	168.4	0.00068	mg/L	0.001251	0.00068	mg/L	0.001251	184.97%

Sequence No.: 39 **Autosampler Location: 91**
Sample ID: FBLK WG357124-02 **Date Collected: 2/23/2011 7:08:41 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG357124-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: FBLK WG357124-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5190652.7						12978.50	0.25%
YRADIAL	302553.8						5481.96	1.81%
Ga 417.206	1314630.7						2446.88	0.19%
GaRADIAL	65440.3						1048.88	1.60%
Ag 328.068†	-111.4	-0.00128	mg/L	0.000660	-0.00128	mg/L	0.000660	51.49%
Al 396.153†	633.6	0.123	mg/L	0.0198	0.123	mg/L	0.0198	16.07%
As 188.979†	-1.4	-0.00084	mg/L	0.000830	-0.00084	mg/L	0.000830	98.34%
Ba 233.527†	73.5	0.00073	mg/L	0.000040	0.00073	mg/L	0.000040	5.54%
Be 234.861†	-17.9	-0.00007	mg/L	0.000050	-0.00007	mg/L	0.000050	68.60%
B 249.677†	69.9	0.00563	mg/L	0.000062	0.00563	mg/L	0.000062	1.11%
Ca 227.546†	14.6	0.106	mg/L	0.0448	0.106	mg/L	0.0448	42.35%
Cd 228.802†	-0.3	0.00005	mg/L	0.000073	0.00005	mg/L	0.000073	141.81%
Co 228.616†	-8.4	-0.00001	mg/L	0.000220	-0.00001	mg/L	0.000220	>999.9%
Cr 267.716†	66.4	0.00034	mg/L	0.000056	0.00034	mg/L	0.000056	16.32%
Cu 327.393†	220.5	0.00160	mg/L	0.000438	0.00160	mg/L	0.000438	27.37%
Fe 239.562†	87.9	0.206	mg/L	0.0045	0.206	mg/L	0.0045	2.18%
Mg 279.077†	68.6	0.0808	mg/L	0.00385	0.0808	mg/L	0.00385	4.77%
Mn 257.610†	1962.8	0.00404	mg/L	0.000032	0.00404	mg/L	0.000032	0.80%
Mo 202.031†	-5.5	-0.00117	mg/L	0.000048	-0.00117	mg/L	0.000048	4.13%
Ni 231.604†	6.6	0.00005	mg/L	0.000352	0.00005	mg/L	0.000352	736.74%
Pb 220.353†	13.2	0.00151	mg/L	0.001526	0.00151	mg/L	0.001526	100.80%

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Sb 206.836†	2.1	0.00118	mg/L	0.002644	0.00118	mg/L	0.002644 224.31%
Se 196.026†	2.7	0.00621	mg/L	0.002156	0.00621	mg/L	0.002156 34.73%
Si 251.611†	2092.3	0.0593	mg/L	0.00028	0.0593	mg/L	0.00028 0.47%
Sn 189.927†	-58.8	-0.00837	mg/L	0.001192	-0.00837	mg/L	0.001192 14.25%
Ti 334.940†	2793.6	0.00369	mg/L	0.000086	0.00369	mg/L	0.000086 2.32%
Tl 190.801†	-7.9	-0.00753	mg/L	0.002068	-0.00753	mg/L	0.002068 27.48%
V 290.880†	-80.4	-0.00185	mg/L	0.000743	-0.00185	mg/L	0.000743 40.20%
Zn 206.200†	-26.8	-0.00125	mg/L	0.000076	-0.00125	mg/L	0.000076 6.12%
K 766.490†	46.4	0.0382	mg/L	0.02379	0.0382	mg/L	0.02379 62.22%
Na 589.592†	1238.5	0.0943	mg/L	0.01124	0.0943	mg/L	0.01124 11.92%
Sr 407.771†	362.3	-0.00030	mg/L	0.000064	-0.00030	mg/L	0.000064 21.11%
Li 670.784†	-55.8	-0.00228	mg/L	0.000858	-0.00228	mg/L	0.000858 37.70%

Sequence No.: 40 **Autosampler Location: 92**
Sample ID: L1102049201 **Date Collected: 2/23/2011 7:15:22 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049201

Analyte	Back Pressure	Flow
All	165.0 kPa	0.50 L/min

Mean Data: L1102049201

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5086040.0						54206.07	1.07%
YRADIAL	291401.5						2676.50	0.92%
Ga 417.206	1333226.0						4051.95	0.30%
GaRADIAL	63785.1						1850.12	2.90%
Ag 328.068†	-194.5	-0.00170	mg/L	0.000239	-0.00170	mg/L	0.000239	14.03%
Al 396.153†	399.0	0.0731	mg/L	0.02033	0.0731	mg/L	0.02033	27.79%
As 188.979†	0.1	0.00045	mg/L	0.000973	0.00045	mg/L	0.000973	214.87%
Ba 233.527†	58.0	0.00047	mg/L	0.000094	0.00047	mg/L	0.000094	20.00%
Be 234.861†	-27.8	-0.00007	mg/L	0.000001	-0.00007	mg/L	0.000001	1.92%
B 249.677†	70.2	0.00543	mg/L	0.001262	0.00543	mg/L	0.001262	23.23%
Ca 227.546†	120.3	1.10	mg/L	0.015	1.10	mg/L	0.015	1.40%
Cd 228.802†	4.6	0.00032	mg/L	0.000126	0.00032	mg/L	0.000126	39.23%
Co 228.616†	-12.2	-0.00021	mg/L	0.000403	-0.00021	mg/L	0.000403	192.24%
Cr 267.716†	129.0	0.00088	mg/L	0.000100	0.00088	mg/L	0.000100	11.39%
Cu 327.393†	943.7	0.00654	mg/L	0.000344	0.00654	mg/L	0.000344	5.26%
Fe 239.562†	64.4	0.150	mg/L	0.0033	0.150	mg/L	0.0033	2.22%
Mg 279.077†	426.7	0.541	mg/L	0.0130	0.541	mg/L	0.0130	2.41%
Mn 257.610†	9428.1	0.0207	mg/L	0.00036	0.0207	mg/L	0.00036	1.72%
Mo 202.031†	53.3	0.00317	mg/L	0.000620	0.00317	mg/L	0.000620	19.57%
Ni 231.604†	11.1	0.00018	mg/L	0.000172	0.00018	mg/L	0.000172	97.36%
Pb 220.353†	11.8	0.00136	mg/L	0.001045	0.00136	mg/L	0.001045	76.83%
Sb 206.836†	8.3	0.00507	mg/L	0.000544	0.00507	mg/L	0.000544	10.72%
Se 196.026†	-10.5	-0.00280	mg/L	0.004666	-0.00280	mg/L	0.004666	166.72%
Si 251.611†	14162.5	0.410	mg/L	0.0059	0.410	mg/L	0.0059	1.45%
Sn 189.927†	-51.4	-0.00710	mg/L	0.000342	-0.00710	mg/L	0.000342	4.81%
Ti 334.940†	7279.9	0.00988	mg/L	0.000212	0.00988	mg/L	0.000212	2.14%
Tl 190.801†	-1.3	-0.00368	mg/L	0.002785	-0.00368	mg/L	0.002785	75.73%
V 290.880†	34.8	-0.00109	mg/L	0.000631	-0.00109	mg/L	0.000631	58.11%
Zn 206.200†	1267.2	0.0376	mg/L	0.00057	0.0376	mg/L	0.00057	1.53%
K 766.490†	1146.1	0.477	mg/L	0.0382	0.477	mg/L	0.0382	8.02%
Na 589.592†	8984.9	0.679	mg/L	0.0196	0.679	mg/L	0.0196	2.89%
Sr 407.771†	3791.5	0.00309	mg/L	0.000228	0.00309	mg/L	0.000228	7.37%
Li 670.784†	-20.9	-0.00182	mg/L	0.001272	-0.00182	mg/L	0.001272	70.05%

Sequence No.: 41 **Autosampler Location: 93**
Sample ID: L1102049201PS WG357223-03 **Date Collected: 2/23/2011 7:22:02 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049201PS WG357223-03

Analyte	Back Pressure	Flow

Approved: February 24, 2011

Pierre Morris

All 166.0 kPa 0.50 L/min

Mean Data: L1102049201PS WG357223-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5029293.1						56657.47	1.13%
YRADIAL	300901.5						1953.38	0.65%
Ga 417.206	1298590.6						16906.44	1.30%
GaRADIAL	65479.5						831.21	1.27%
Ag 328.068†	38131.5	0.192	mg/L	0.0043	0.192	mg/L	0.0043	2.24%
Al 396.153†	22169.7	4.70	mg/L	0.039	4.70	mg/L	0.039	0.83%
As 188.979†	201.9	0.183	mg/L	0.0015	0.183	mg/L	0.0015	0.83%
Ba 233.527†	28298.6	0.480	mg/L	0.0059	0.480	mg/L	0.0059	1.22%
Be 234.861†	13266.6	0.0233	mg/L	0.00012	0.0233	mg/L	0.00012	0.51%
B 249.677†	48878.2	0.932	mg/L	0.0167	0.932	mg/L	0.0167	1.79%
Ca 227.546†	606.9	5.87	mg/L	0.111	5.87	mg/L	0.111	1.90%
Cd 228.802†	418.3	0.0235	mg/L	0.00039	0.0235	mg/L	0.00039	1.67%
Co 228.616†	1847.6	0.0921	mg/L	0.00119	0.0921	mg/L	0.00119	1.30%
Cr 267.716†	27702.9	0.239	mg/L	0.0026	0.239	mg/L	0.0026	1.09%
Cu 327.393†	35636.5	0.244	mg/L	0.0056	0.244	mg/L	0.0056	2.29%
Fe 239.562†	816.0	1.93	mg/L	0.014	1.93	mg/L	0.014	0.74%
Mg 279.077†	3968.5	5.09	mg/L	0.036	5.09	mg/L	0.036	0.70%
Mn 257.610†	117489.9	0.264	mg/L	0.0030	0.264	mg/L	0.0030	1.14%
Mo 202.031†	6573.0	0.485	mg/L	0.0045	0.485	mg/L	0.0045	0.92%
Ni 231.604†	8272.5	0.239	mg/L	0.0029	0.239	mg/L	0.0029	1.19%
Pb 220.353†	1421.1	0.237	mg/L	0.0033	0.237	mg/L	0.0033	1.41%
Sb 206.836†	910.5	0.569	mg/L	0.0074	0.569	mg/L	0.0074	1.30%
Se 196.026†	254.0	0.183	mg/L	0.0024	0.183	mg/L	0.0024	1.32%
Si 251.611†	96713.1	2.80	mg/L	0.052	2.80	mg/L	0.052	1.85%
Sn 189.927†	-58.8	-0.00837	mg/L	0.000459	-0.00837	mg/L	0.000459	5.49%
Ti 334.940†	345816.9	0.477	mg/L	0.0017	0.477	mg/L	0.0017	0.36%
Tl 190.801†	401.1	0.236	mg/L	0.0049	0.236	mg/L	0.0049	2.08%
V 290.880†	71936.2	0.480	mg/L	0.0054	0.480	mg/L	0.0054	1.12%
Zn 206.200†	16706.9	0.502	mg/L	0.0024	0.502	mg/L	0.0024	0.48%
K 766.490†	58099.0	23.3	mg/L	0.11	23.3	mg/L	0.11	0.46%
Na 589.592†	306173.9	23.4	mg/L	0.27	23.4	mg/L	0.27	1.14%
Sr 407.771†	487491.6	0.481	mg/L	0.0288	0.481	mg/L	0.0288	6.00%
Li 670.784†	35143.9	0.461	mg/L	0.0031	0.461	mg/L	0.0031	0.68%

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Sequence No.: 42 **Autosampler Location: 94**
Sample ID: L1102049201DL WG357223-04 **Date Collected: 2/23/2011 7:28:45 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049201DL WG357223-04

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102049201DL WG357223-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5023350.2						33797.58	0.67%
YRADIAL	292417.6						5121.95	1.75%
Ga 417.206	1294429.5						15809.09	1.22%
GaRADIAL	63177.1						1748.64	2.77%
Ag 328.068†	-96.9	-0.00120	mg/L	0.000508	-0.00120	mg/L	0.000508	42.37%
Al 396.153†	94.7	0.00833	mg/L	0.014209	0.00833	mg/L	0.014209	170.55%
As 188.979†	1.2	0.00151	mg/L	0.001145	0.00151	mg/L	0.001145	76.02%
Ba 233.527†	12.2	-0.00030	mg/L	0.000095	-0.00030	mg/L	0.000095	31.35%
Be 234.861†	-3.8	-0.00001	mg/L	0.000033	-0.00001	mg/L	0.000033	362.77%
B 249.677†	253.1	0.00842	mg/L	0.000523	0.00842	mg/L	0.000523	6.21%
Ca 227.546†	20.1	0.157	mg/L	0.0552	0.157	mg/L	0.0552	35.07%
Cd 228.802†	-1.0	0.00000	mg/L	0.000065	0.00000	mg/L	0.000065	>999.9%
Co 228.616†	-6.5	0.00010	mg/L	0.000321	0.00010	mg/L	0.000321	323.55%
Cr 267.716†	28.2	0.00002	mg/L	0.000143	0.00002	mg/L	0.000143	767.88%
Cu 327.393†	211.3	0.00152	mg/L	0.000660	0.00152	mg/L	0.000660	43.52%
Fe 239.562†	14.4	0.0321	mg/L	0.00611	0.0321	mg/L	0.00611	19.06%
Mg 279.077†	91.1	0.110	mg/L	0.0058	0.110	mg/L	0.0058	5.30%

Approved: February 24, 2011

Pierre Morris

Mn 257.610†	1938.3	0.00399	mg/L	0.000017	0.00399	mg/L	0.000017	0.43%
Mo 202.031†	11.3	0.00006	mg/L	0.000334	0.00006	mg/L	0.000334	550.50%
Ni 231.604†	7.0	0.00005	mg/L	0.000395	0.00005	mg/L	0.000395	728.20%
Pb 220.353†	3.0	-0.00015	mg/L	0.000445	-0.00015	mg/L	0.000445	297.94%
Sb 206.836†	-0.1	-0.00017	mg/L	0.002043	-0.00017	mg/L	0.002043	>999.9%
Se 196.026†	-4.0	0.00145	mg/L	0.001444	0.00145	mg/L	0.001444	99.46%
Si 251.611†	2955.1	0.0843	mg/L	0.00347	0.0843	mg/L	0.00347	4.11%
Sn 189.927†	-65.6	-0.00953	mg/L	0.000260	-0.00953	mg/L	0.000260	2.73%
Ti 334.940†	1386.3	0.00175	mg/L	0.000138	0.00175	mg/L	0.000138	7.87%
Tl 190.801†	4.0	-0.00059	mg/L	0.003577	-0.00059	mg/L	0.003577	606.10%
V 290.880†	127.2	-0.00048	mg/L	0.001655	-0.00048	mg/L	0.001655	348.16%
Zn 206.200†	153.5	0.00417	mg/L	0.000145	0.00417	mg/L	0.000145	3.47%
K 766.490†	173.9	0.0891	mg/L	0.02023	0.0891	mg/L	0.02023	22.72%
Na 589.592†	2268.2	0.172	mg/L	0.0078	0.172	mg/L	0.0078	4.51%
Sr 407.771†	1135.5	0.00048	mg/L	0.000159	0.00048	mg/L	0.000159	32.91%
Li 670.784†	75.1	-0.00055	mg/L	0.000403	-0.00055	mg/L	0.000403	73.18%

Sequence No.: 43 **Autosampler Location: 95**
Sample ID: L1102053501 WG357204-01 **Date Collected: 2/23/2011 7:35:23 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102053501 WG357204-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102053501 WG357204-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4893055.3						36665.86	0.75%
YRADIAL	287517.0						3074.40	1.07%
Ga 417.206	1290817.0						6423.19	0.50%
GaRADIAL	62707.2						1166.08	1.86%
Ag 328.068†	781.1	0.00322	mg/L	0.000220	0.00322	mg/L	0.000220	6.85%
Al 396.153†	25.8	-0.00633	mg/L	0.006347	-0.00633	mg/L	0.006347	100.22%
As 188.979†	12.2	0.00748	mg/L	0.000676	0.00748	mg/L	0.000676	9.04%
Ba 233.527†	3227.9	0.0541	mg/L	0.00041	0.0541	mg/L	0.00041	0.76%
Be 234.861†	-30.7	-0.00006	mg/L	0.000018	-0.00006	mg/L	0.000018	28.81%
B 249.677†	1302.9	0.0284	mg/L	0.00010	0.0284	mg/L	0.00010	0.34%
Ca 227.546†	21211.0	201	mg/L	3.3	201	mg/L	3.3	1.65%
Cd 228.802†	-1.8	-0.00012	mg/L	0.000176	-0.00012	mg/L	0.000176	149.73%
Co 228.616†	-11.1	-0.00015	mg/L	0.000132	-0.00015	mg/L	0.000132	86.75%
Cr 267.716†	28.9	0.00002	mg/L	0.000111	0.00002	mg/L	0.000111	452.95%
Cu 327.393†	-606.5	-0.00406	mg/L	0.000831	-0.00406	mg/L	0.000831	20.47%
Fe 239.562†	22.2	0.0504	mg/L	0.00197	0.0504	mg/L	0.00197	3.91%
Mg 279.077†	1467.2	1.88	mg/L	0.023	1.88	mg/L	0.023	1.23%
Mn 257.610†	2450.1	0.00522	mg/L	0.000034	0.00522	mg/L	0.000034	0.64%
Mo 202.031†	-4.6	-0.00111	mg/L	0.000119	-0.00111	mg/L	0.000119	10.73%
Ni 231.604†	25.1	0.00053	mg/L	0.000255	0.00053	mg/L	0.000255	48.01%
Pb 220.353†	-22.5	0.00524	mg/L	0.000821	0.00524	mg/L	0.000821	15.68%
Sb 206.836†	22.0	0.0136	mg/L	0.00333	0.0136	mg/L	0.00333	24.52%
Se 196.026†	-43.3	0.0242	mg/L	0.00081	0.0242	mg/L	0.00081	3.35%
Si 251.611†	10965.7	0.317	mg/L	0.0057	0.317	mg/L	0.0057	1.80%
Sn 189.927†	-65.9	-0.00957	mg/L	0.001061	-0.00957	mg/L	0.001061	11.09%
Ti 334.940†	568.4	0.00263	mg/L	0.000305	0.00263	mg/L	0.000305	11.62%
Tl 190.801†	132.4	0.0561	mg/L	0.00138	0.0561	mg/L	0.00138	2.46%
V 290.880†	54.0	-0.00097	mg/L	0.000300	-0.00097	mg/L	0.000300	31.00%
Zn 206.200†	334.8	0.00961	mg/L	0.000217	0.00961	mg/L	0.000217	2.26%
K 766.490†	530.9	0.230	mg/L	0.0517	0.230	mg/L	0.0517	22.49%
Na 589.592†	21281.9	1.61	mg/L	0.010	1.61	mg/L	0.010	0.62%
Sr 407.771†	68739.1	0.0673	mg/L	0.00451	0.0673	mg/L	0.00451	6.70%
Li 670.784†	33.3	-0.00110	mg/L	0.001001	-0.00110	mg/L	0.001001	90.83%

Sequence No.: 44 **Autosampler Location: 96**
Sample ID: L1102053501S WG357204-04 **Date Collected: 2/23/2011 7:42:02 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

Pierre Morris

Nebulizer Parameters: L1102053501S WG357204-04

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102053501S WG357204-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4875605.7						37606.54	0.77%
YRADIAL	285493.4						5604.60	1.96%
Ga 417.206	1311874.9						9888.72	0.75%
GaRADIAL	62883.4						953.49	1.52%
Ag 328.068†	37271.6	0.188	mg/L	0.0021	0.188	mg/L	0.0021	1.12%
Al 396.153†	23082.1	4.90	mg/L	0.040	4.90	mg/L	0.040	0.81%
As 188.979†	205.0	0.182	mg/L	0.0026	0.182	mg/L	0.0026	1.44%
Ba 233.527†	29980.1	0.508	mg/L	0.0061	0.508	mg/L	0.0061	1.21%
Be 234.861†	12778.7	0.0225	mg/L	0.00038	0.0225	mg/L	0.00038	1.68%
B 249.677†	47613.2	0.908	mg/L	0.0155	0.908	mg/L	0.0155	1.71%
Ca 227.546†	20981.7	199	mg/L	3.3	199	mg/L	3.3	1.66%
Cd 228.802†	399.0	0.0224	mg/L	0.00029	0.0224	mg/L	0.00029	1.28%
Co 228.616†	1793.5	0.0894	mg/L	0.00043	0.0894	mg/L	0.00043	0.48%
Cr 267.716†	26691.5	0.230	mg/L	0.0022	0.230	mg/L	0.0022	0.96%
Cu 327.393†	31888.4	0.219	mg/L	0.0033	0.219	mg/L	0.0033	1.53%
Fe 239.562†	832.5	1.97	mg/L	0.027	1.97	mg/L	0.027	1.39%
Mg 279.077†	5111.7	6.56	mg/L	0.088	6.56	mg/L	0.088	1.33%
Mn 257.610†	107530.3	0.241	mg/L	0.0031	0.241	mg/L	0.0031	1.29%
Mo 202.031†	6532.5	0.482	mg/L	0.0039	0.482	mg/L	0.0039	0.82%
Ni 231.604†	8002.8	0.231	mg/L	0.0014	0.231	mg/L	0.0014	0.63%
Pb 220.353†	1351.2	0.235	mg/L	0.0032	0.235	mg/L	0.0032	1.36%
Sb 206.836†	886.7	0.554	mg/L	0.0052	0.554	mg/L	0.0052	0.95%
Se 196.026†	216.8	0.205	mg/L	0.0044	0.205	mg/L	0.0044	2.15%
Si 251.611†	101032.5	2.92	mg/L	0.041	2.92	mg/L	0.041	1.39%
Sn 189.927†	-57.8	-0.00819	mg/L	0.000520	-0.00819	mg/L	0.000520	6.34%
Ti 334.940†	345096.7	0.478	mg/L	0.0057	0.478	mg/L	0.0057	1.20%
Tl 190.801†	514.3	0.284	mg/L	0.0015	0.284	mg/L	0.0015	0.54%
V 290.880†	70694.3	0.471	mg/L	0.0079	0.471	mg/L	0.0079	1.68%
Zn 206.200†	15300.8	0.460	mg/L	0.0080	0.460	mg/L	0.0080	1.74%
K 766.490†	59215.3	23.7	mg/L	0.13	23.7	mg/L	0.13	0.55%
Na 589.592†	325014.0	24.8	mg/L	0.26	24.8	mg/L	0.26	1.03%
Sr 407.771†	556866.8	0.549	mg/L	0.0402	0.549	mg/L	0.0402	7.33%
Li 670.784†	36066.4	0.473	mg/L	0.0070	0.473	mg/L	0.0070	1.49%

Sequence No.: 45 WG357204-05 **Autosampler Location: 97**
Sample ID: L1102053501SD ~~**WG357204-01**~~ **Date Collected: 2/23/2011 7:48:44 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

WG357204-05

Nebulizer Parameters: L1102053501SD ~~**WG357204-01**~~

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

WG357204-05

Mean Data: L1102053501SD ~~**WG357204-01**~~

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4815209.8						55642.88	1.16%
YRADIAL	279414.6						3645.97	1.30%
Ga 417.206	1279424.1						20276.81	1.58%
GaRADIAL	62162.7						661.89	1.06%
Ag 328.068†	38574.1	0.194	mg/L	0.0032	0.194	mg/L	0.0032	1.67%
Al 396.153†	23393.4	4.97	mg/L	0.055	4.97	mg/L	0.055	1.11%
As 188.979†	213.8	0.190	mg/L	0.0046	0.190	mg/L	0.0046	2.42%
Ba 233.527†	30856.6	0.523	mg/L	0.0038	0.523	mg/L	0.0038	0.72%
Be 234.861†	13366.3	0.0234	mg/L	0.00046	0.0234	mg/L	0.00046	1.94%
B 249.677†	49972.8	0.954	mg/L	0.0109	0.954	mg/L	0.0109	1.14%
Ca 227.546†	21900.4	207	mg/L	2.4	207	mg/L	2.4	1.14%
Cd 228.802†	406.9	0.0228	mg/L	0.00048	0.0228	mg/L	0.00048	2.12%
Co 228.616†	1823.3	0.0908	mg/L	0.00167	0.0908	mg/L	0.00167	1.84%

Approved: February 24, 2011

Pierre Morris

Cr 267.716†	27487.4	0.237 mg/L	0.0014	0.237 mg/L	0.0014	0.59%
Cu 327.393†	33663.9	0.231 mg/L	0.0038	0.231 mg/L	0.0038	1.66%
Fe 239.562†	945.8	2.23 mg/L	0.027	2.23 mg/L	0.027	1.22%
Mg 279.077†	5284.0	6.78 mg/L	0.061	6.78 mg/L	0.061	0.90%
Mn 257.610†	111680.3	0.251 mg/L	0.0017	0.251 mg/L	0.0017	0.70%
Mo 202.031†	6630.5	0.489 mg/L	0.0087	0.489 mg/L	0.0087	1.77%
Ni 231.604†	8167.8	0.236 mg/L	0.0037	0.236 mg/L	0.0037	1.55%
Pb 220.353†	1382.7	0.240 mg/L	0.0045	0.240 mg/L	0.0045	1.87%
Sb 206.836†	913.1	0.570 mg/L	0.0139	0.570 mg/L	0.0139	2.44%
Se 196.026†	219.9	0.210 mg/L	0.0041	0.210 mg/L	0.0041	1.97%
Si 251.611†	95439.9	2.76 mg/L	0.037	2.76 mg/L	0.037	1.34%
Sn 189.927†	-68.8	-0.0101 mg/L	0.00027	-0.0101 mg/L	0.00027	2.69%
Ti 334.940†	351907.9	0.487 mg/L	0.0003	0.487 mg/L	0.0003	0.05%
Tl 190.801†	520.0	0.287 mg/L	0.0040	0.287 mg/L	0.0040	1.40%
V 290.880†	72732.4	0.485 mg/L	0.0041	0.485 mg/L	0.0041	0.84%
Zn 206.200†	15633.6	0.470 mg/L	0.0036	0.470 mg/L	0.0036	0.76%
K 766.490†	60322.8	24.2 mg/L	0.12	24.2 mg/L	0.12	0.48%
Na 589.592†	346159.6	26.5 mg/L	0.45	26.5 mg/L	0.45	1.68%
Sr 407.771†	612959.1	0.605 mg/L	0.0495	0.605 mg/L	0.0495	8.20%
Li 670.784†	36220.2	0.475 mg/L	0.0061	0.475 mg/L	0.0061	1.29%

Sequence No.: 46 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 7:55:29 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4798492.4						90367.37	1.88%
YRADIAL	286549.2						4208.19	1.47%
Ga 417.206	1265121.6						26332.56	2.08%
GaRADIAL	61912.2						1369.86	2.21%
Ag 328.068†	77614.5	0.392	mg/L	0.0109	0.392	mg/L	0.0109	2.77%
QC value within limits for Ag 328.068 Recovery = 98.00%								
Al 396.153†	46589.3	9.90	mg/L	0.042	9.90	mg/L	0.042	0.43%
QC value within limits for Al 396.153 Recovery = 99.00%								
As 188.979†	423.1	0.383	mg/L	0.0122	0.383	mg/L	0.0122	3.18%
QC value within limits for As 188.979 Recovery = 95.81%								
Ba 233.527†	57959.6	0.983	mg/L	0.0196	0.983	mg/L	0.0196	2.00%
QC value within limits for Ba 233.527 Recovery = 98.30%								
Be 234.861†	27840.2	0.0489	mg/L	0.00135	0.0489	mg/L	0.00135	2.76%
QC value within limits for Be 234.861 Recovery = 97.83%								
B 249.677†	25837.8	0.498	mg/L	0.0140	0.498	mg/L	0.0140	2.81%
QC value within limits for B 249.677 Recovery = 99.64%								
Ca 227.546†	1028.8	10.0	mg/L	0.28	10.0	mg/L	0.28	2.81%
QC value within limits for Ca 227.546 Recovery = 100.28%								
Cd 228.802†	870.8	0.0488	mg/L	0.00113	0.0488	mg/L	0.00113	2.32%
QC value within limits for Cd 228.802 Recovery = 97.59%								
Co 228.616†	3822.0	0.190	mg/L	0.0038	0.190	mg/L	0.0038	2.02%
QC value within limits for Co 228.616 Recovery = 95.06%								
Cr 267.716†	56512.6	0.487	mg/L	0.0090	0.487	mg/L	0.0090	1.85%
QC value within limits for Cr 267.716 Recovery = 97.44%								
Cu 327.393†	69825.3	0.479	mg/L	0.0155	0.479	mg/L	0.0155	3.23%
QC value within limits for Cu 327.393 Recovery = 95.75%								
Fe 239.562†	1610.3	3.81	mg/L	0.084	3.81	mg/L	0.084	2.20%
QC value within limits for Fe 239.562 Recovery = 95.16%								
Mg 279.077†	7498.8	9.62	mg/L	0.151	9.62	mg/L	0.151	1.57%
QC value within limits for Mg 279.077 Recovery = 96.24%								
Mn 257.610†	220360.9	0.495	mg/L	0.0110	0.495	mg/L	0.0110	2.22%
QC value within limits for Mn 257.610 Recovery = 98.97%								
Mo 202.031†	13224.7	0.976	mg/L	0.0148	0.976	mg/L	0.0148	1.51%
QC value within limits for Mo 202.031 Recovery = 97.64%								
Ni 231.604†	17000.7	0.491	mg/L	0.0074	0.491	mg/L	0.0074	1.52%
QC value within limits for Ni 231.604 Recovery = 98.13%								

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Pb 220.353†	2940.2	0.491 mg/L	0.0114	0.491 mg/L	0.0114	2.33%
QC value within limits for Pb 220.353 Recovery = 98.15%						
Sb 206.836†	1848.1	1.15 mg/L	0.030	1.15 mg/L	0.030	2.58%
QC value within limits for Sb 206.836 Recovery = 96.19%						
Se 196.026†	549.2	0.390 mg/L	0.0128	0.390 mg/L	0.0128	3.29%
QC value within limits for Se 196.026 Recovery = 97.44%						
Si 251.611†	166046.2	4.80 mg/L	0.129	4.80 mg/L	0.129	2.68%
QC value within limits for Si 251.611 Recovery = 96.09%						
Sn 189.927†	5764.3	0.986 mg/L	0.0190	0.986 mg/L	0.0190	1.93%
QC value within limits for Sn 189.927 Recovery = 98.55%						
Ti 334.940†	705060.6	0.972 mg/L	0.0045	0.972 mg/L	0.0045	0.47%
QC value within limits for Ti 334.940 Recovery = 97.19%						
Tl 190.801†	838.7	0.496 mg/L	0.0137	0.496 mg/L	0.0137	2.76%
QC value within limits for Tl 190.801 Recovery = 99.27%						
V 290.880†	146334.8	0.977 mg/L	0.0215	0.977 mg/L	0.0215	2.20%
QC value within limits for V 290.880 Recovery = 97.68%						
Zn 206.200†	32714.3	0.984 mg/L	0.0174	0.984 mg/L	0.0174	1.77%
QC value within limits for Zn 206.200 Recovery = 98.36%						
K 766.490†	121032.3	48.7 mg/L	0.27	48.7 mg/L	0.27	0.55%
QC value within limits for K 766.490 Recovery = 97.47%						
Na 589.592†	629910.3	48.7 mg/L	0.64	48.7 mg/L	0.64	1.31%
QC value within limits for Na 589.592 Recovery = 97.42%						
Sr 407.771†	1031242.8	1.02 mg/L	0.070	1.02 mg/L	0.070	6.92%
QC value within limits for Sr 407.771 Recovery = 101.75%						
Li 670.784†	74500.8	0.979 mg/L	0.0021	0.979 mg/L	0.0021	0.22%
QC value within limits for Li 670.784 Recovery = 97.94%						

All analyte(s) passed QC.

Sequence No.: 47 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 8:02:13 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5088294.6						69015.74	1.36%
YRADIAL	291320.9						5396.92	1.85%
Ga 417.206	1338868.4						20447.95	1.53%
GaRADIAL	62905.2						1811.86	2.88%
Ag 328.068†	-104.4	-0.00123	mg/L	0.000060	-0.00123	mg/L	0.000060	4.89%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	10.5	-0.00959	mg/L	0.001719	-0.00959	mg/L	0.001719	17.92%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-2.7	-0.00207	mg/L	0.000331	-0.00207	mg/L	0.000331	15.97%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	1.6	-0.00049	mg/L	0.000028	-0.00049	mg/L	0.000028	5.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	39.5	0.00007	mg/L	0.000045	0.00007	mg/L	0.000045	62.73%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	536.3	0.0137	mg/L	0.00051	0.0137	mg/L	0.00051	3.75%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	0.9	-0.0246	mg/L	0.04721	-0.0246	mg/L	0.04721	191.87%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-1.2	0.00001	mg/L	0.000032	0.00001	mg/L	0.000032	301.86%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-5.5	0.00015	mg/L	0.000184	0.00015	mg/L	0.000184	120.35%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	14.5	-0.00010	mg/L	0.000042	-0.00010	mg/L	0.000042	43.24%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-12.3	-0.00002	mg/L	0.000283	-0.00002	mg/L	0.000283	>999.9%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	1.5	0.00157	mg/L	0.002810	0.00157	mg/L	0.002810	178.73%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	1.2	-0.00561	mg/L	0.007465	-0.00561	mg/L	0.007465	133.07%

Approved: February 24, 2011

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QC value within limits for Mg 279.077 Recovery = Not calculated
Mn 257.610† 32.2 -0.00027 mg/L 0.000008 -0.00027 mg/L 0.000008 2.91%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† 3.7 -0.00050 mg/L 0.000326 -0.00050 mg/L 0.000326 65.27%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† 1.5 -0.00010 mg/L 0.000152 -0.00010 mg/L 0.000152 150.38%
QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† 3.1 -0.00015 mg/L 0.000168 -0.00015 mg/L 0.000168 115.74%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† -0.7 -0.00057 mg/L 0.001910 -0.00057 mg/L 0.001910 333.70%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -3.0 0.00210 mg/L 0.004363 0.00210 mg/L 0.004363 207.37%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† -39.6 -0.00260 mg/L 0.000351 -0.00260 mg/L 0.000351 13.48%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -71.5 -0.0105 mg/L 0.00033 -0.0105 mg/L 0.00033 3.09%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -133.1 -0.00035 mg/L 0.000124 -0.00035 mg/L 0.000124 35.51%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -2.6 -0.00446 mg/L 0.003525 -0.00446 mg/L 0.003525 79.09%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† 79.3 -0.00080 mg/L 0.000458 -0.00080 mg/L 0.000458 57.43%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† -197.4 -0.00636 mg/L 0.000038 -0.00636 mg/L 0.000038 0.59%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 84.8 0.0536 mg/L 0.02698 0.0536 mg/L 0.02698 50.31%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 201.6 0.0160 mg/L 0.01498 0.0160 mg/L 0.01498 93.56%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† 304.3 -0.00033 mg/L 0.000308 -0.00033 mg/L 0.000308 92.38%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 71.1 -0.00060 mg/L 0.000449 -0.00060 mg/L 0.000449 74.33%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 48 **Autosampler Location: 98**
Sample ID: PBW 82 WG357047-02 **Date Collected: 2/23/2011 8:08:50 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 82 WG357047-02

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: PBW 82 WG357047-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5138099.9						27391.78	0.53%
YRADIAL	299398.2						6288.19	2.10%
Ga 417.206	1394895.1						24961.86	1.79%
GaRADIAL	64916.3						1713.08	2.64%
Ag 328.068†	-76.1	-0.00109	mg/L	0.000423	-0.00109	mg/L	0.000423	38.69%
Al 396.153†	99.7	0.00941	mg/L	0.017179	0.00941	mg/L	0.017179	182.58%
As 188.979†	-0.9	-0.00043	mg/L	0.001824	-0.00043	mg/L	0.001824	422.42%
Ba 233.527†	23.3	-0.00012	mg/L	0.000137	-0.00012	mg/L	0.000137	115.91%
Be 234.861†	63.7	0.00011	mg/L	0.000031	0.00011	mg/L	0.000031	27.99%
B 249.677†	273.2	0.00868	mg/L	0.001218	0.00868	mg/L	0.001218	14.04%
Ca 227.546†	9.3	0.0548	mg/L	0.05379	0.0548	mg/L	0.05379	98.19%
Cd 228.802†	-3.5	-0.00013	mg/L	0.000145	-0.00013	mg/L	0.000145	111.13%
Co 228.616†	-2.9	0.00028	mg/L	0.000157	0.00028	mg/L	0.000157	55.27%
Cr 267.716†	3.2	-0.00020	mg/L	0.000090	-0.00020	mg/L	0.000090	45.69%
Cu 327.393†	83.6	0.00064	mg/L	0.000727	0.00064	mg/L	0.000727	113.74%
Fe 239.562†	3.3	0.00585	mg/L	0.002931	0.00585	mg/L	0.002931	50.12%
Mg 279.077†	8.9	0.00430	mg/L	0.002954	0.00430	mg/L	0.002954	68.67%
Mn 257.610†	67.0	-0.00020	mg/L	0.000018	-0.00020	mg/L	0.000018	9.42%
Mo 202.031†	1.2	-0.00069	mg/L	0.000720	-0.00069	mg/L	0.000720	104.52%
Ni 231.604†	8.1	0.00009	mg/L	0.000041	0.00009	mg/L	0.000041	46.24%
Pb 220.353†	8.7	0.00078	mg/L	0.000645	0.00078	mg/L	0.000645	82.59%
Sb 206.836†	-1.9	-0.00132	mg/L	0.003869	-0.00132	mg/L	0.003869	292.07%

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Se 196.026†	-4.7	0.00094 mg/L	0.002234	0.00094 mg/L	0.002234	238.74%
Si 251.611†	250.4	0.00582 mg/L	0.000536	0.00582 mg/L	0.000536	9.21%
Sn 189.927†	-79.6	-0.0119 mg/L	0.00015	-0.0119 mg/L	0.00015	1.23%
Ti 334.940†	161.8	0.00006 mg/L	0.000063	0.00006 mg/L	0.000063	106.18%
Tl 190.801†	2.1	-0.00176 mg/L	0.002966	-0.00176 mg/L	0.002966	168.99%
V 290.880†	89.2	-0.00073 mg/L	0.000573	-0.00073 mg/L	0.000573	78.42%
Zn 206.200†	-119.3	-0.00402 mg/L	0.000148	-0.00402 mg/L	0.000148	3.69%
K 766.490†	-66.6	-0.00676 mg/L	0.036373	-0.00676 mg/L	0.036373	537.94%
Na 589.592†	64.9	0.00570 mg/L	0.011680	0.00570 mg/L	0.011680	205.01%
Sr 407.771†	134.6	-0.00050 mg/L	0.000047	-0.00050 mg/L	0.000047	9.38%
Li 670.784†	72.1	-0.00059 mg/L	0.001198	-0.00059 mg/L	0.001198	202.60%

Sequence No.: 49 **Autosampler Location: 99**
Sample ID: LCSW 82 WG357047-03 **Date Collected: 2/23/2011 8:15:32 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 82 WG357047-03

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: LCSW 82 WG357047-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4970087.1						3057.09	0.06%
YRADIAL	296481.5						4527.21	1.53%
Ga 417.206	1345079.1						3921.06	0.29%
GaRADIAL	64408.4						753.78	1.17%
Ag 328.068†	38494.1	0.194	mg/L	0.0019	0.194	mg/L	0.0019	0.96%
Al 396.153†	23170.8	4.92	mg/L	0.026	4.92	mg/L	0.026	0.53%
As 188.979†	200.4	0.182	mg/L	0.0008	0.182	mg/L	0.0008	0.43%
Ba 233.527†	29227.9	0.495	mg/L	0.0058	0.495	mg/L	0.0058	1.17%
Be 234.861†	13688.9	0.0241	mg/L	0.00035	0.0241	mg/L	0.00035	1.47%
B 249.677†	52200.5	0.994	mg/L	0.0069	0.994	mg/L	0.0069	0.69%
Ca 227.546†	492.3	4.79	mg/L	0.065	4.79	mg/L	0.065	1.36%
Cd 228.802†	411.6	0.0231	mg/L	0.00005	0.0231	mg/L	0.00005	0.22%
Co 228.616†	1894.7	0.0944	mg/L	0.00019	0.0944	mg/L	0.00019	0.20%
Cr 267.716†	28291.8	0.244	mg/L	0.0021	0.244	mg/L	0.0021	0.88%
Cu 327.393†	34637.5	0.238	mg/L	0.0024	0.238	mg/L	0.0024	0.99%
Fe 239.562†	791.4	1.87	mg/L	0.031	1.87	mg/L	0.031	1.64%
Mg 279.077†	3737.8	4.79	mg/L	0.082	4.79	mg/L	0.082	1.71%
Mn 257.610†	111477.6	0.250	mg/L	0.0025	0.250	mg/L	0.0025	1.01%
Mo 202.031†	6648.6	0.490	mg/L	0.0079	0.490	mg/L	0.0079	1.60%
Ni 231.604†	8655.7	0.250	mg/L	0.0030	0.250	mg/L	0.0030	1.21%
Pb 220.353†	1455.4	0.243	mg/L	0.0009	0.243	mg/L	0.0009	0.36%
Sb 206.836†	893.4	0.558	mg/L	0.0027	0.558	mg/L	0.0027	0.49%
Se 196.026†	261.7	0.188	mg/L	0.0019	0.188	mg/L	0.0019	0.99%
Si 251.611†	84237.3	2.44	mg/L	0.027	2.44	mg/L	0.027	1.11%
Sn 189.927†	2974.0	0.509	mg/L	0.0019	0.509	mg/L	0.0019	0.37%
Ti 334.940†	357867.1	0.493	mg/L	0.0066	0.493	mg/L	0.0066	1.34%
Tl 190.801†	423.5	0.249	mg/L	0.0014	0.249	mg/L	0.0014	0.57%
V 290.880†	73629.0	0.491	mg/L	0.0044	0.491	mg/L	0.0044	0.89%
Zn 206.200†	16155.6	0.486	mg/L	0.0069	0.486	mg/L	0.0069	1.42%
K 766.490†	60386.5	24.2	mg/L	0.08	24.2	mg/L	0.08	0.31%
Na 589.592†	312419.8	23.9	mg/L	0.38	23.9	mg/L	0.38	1.59%
Sr 407.771†	513633.0	0.506	mg/L	0.0335	0.506	mg/L	0.0335	6.62%
Li 670.784†	37298.6	0.490	mg/L	0.0028	0.490	mg/L	0.0028	0.57%

Sequence No.: 50 **Autosampler Location: 100**
Sample ID: L1102048607 WG357047-01 **Date Collected: 2/23/2011 8:22:15 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048607 WG357047-01

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Approved: February 24, 2011

Pierre Morris

Mean Data: L1102048607 WG357047-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5141914.8						46761.96	0.91%
YRADIAL	296170.4						6430.85	2.17%
Ga 417.206	1404746.1						9026.38	0.64%
GaRADIAL	64889.1						446.01	0.69%
Ag 328.068†	64.5	-0.00042	mg/L	0.000325	-0.00042	mg/L	0.000325	77.84%
Al 396.153†	3081.8	0.645	mg/L	0.0251	0.645	mg/L	0.0251	3.89%
As 188.979†	-0.2	0.00024	mg/L	0.002603	0.00024	mg/L	0.002603	>999.9%
Ba 233.527†	1343.7	0.0222	mg/L	0.00030	0.0222	mg/L	0.00030	1.37%
Be 234.861†	129.9	0.00010	mg/L	0.000034	0.00010	mg/L	0.000034	33.92%
B 249.677†	472.0	0.0146	mg/L	0.00069	0.0146	mg/L	0.00069	4.74%
Ca 227.546†	94.9	0.852	mg/L	0.0696	0.852	mg/L	0.0696	8.17%
Cd 228.802†	-3.0	-0.00010	mg/L	0.000010	-0.00010	mg/L	0.000010	10.14%
Co 228.616†	4.9	0.00064	mg/L	0.000274	0.00064	mg/L	0.000274	43.07%
Cr 267.716†	353.7	0.00280	mg/L	0.000005	0.00280	mg/L	0.000005	0.20%
Cu 327.393†	127.1	0.00101	mg/L	0.000496	0.00101	mg/L	0.000496	49.05%
Fe 239.562†	260.2	0.613	mg/L	0.0088	0.613	mg/L	0.0088	1.43%
Mg 279.077†	517.9	0.657	mg/L	0.0100	0.657	mg/L	0.0100	1.52%
Mn 257.610†	9665.9	0.0224	mg/L	0.00022	0.0224	mg/L	0.00022	0.98%
Mo 202.031†	9.8	-0.00002	mg/L	0.000308	-0.00002	mg/L	0.000308	>999.9%
Ni 231.604†	99.4	0.00272	mg/L	0.000260	0.00272	mg/L	0.000260	9.54%
Pb 220.353†	8.5	0.00079	mg/L	0.001087	0.00079	mg/L	0.001087	137.86%
Sb 206.836†	0.1	-0.00010	mg/L	0.000920	-0.00010	mg/L	0.000920	879.36%
Se 196.026†	-5.9	0.00045	mg/L	0.004843	0.00045	mg/L	0.004843	>999.9%
Si 251.611†	225992.7	6.56	mg/L	0.087	6.56	mg/L	0.087	1.33%
Sn 189.927†	-78.2	-0.0117	mg/L	0.00058	-0.0117	mg/L	0.00058	4.94%
Ti 334.940†	4606.1	0.00619	mg/L	0.000203	0.00619	mg/L	0.000203	3.27%
Tl 190.801†	7.2	0.00127	mg/L	0.001971	0.00127	mg/L	0.001971	155.35%
V 290.880†	83.1	-0.00073	mg/L	0.000939	-0.00073	mg/L	0.000939	129.26%
Zn 206.200†	-0.0	-0.00044	mg/L	0.000033	-0.00044	mg/L	0.000033	7.44%
K 766.490†	1739.9	0.713	mg/L	0.0149	0.713	mg/L	0.0149	2.10%
Na 589.592†	23013.1	1.74	mg/L	0.028	1.74	mg/L	0.028	1.59%
Sr 407.771†	8016.5	0.00721	mg/L	0.000443	0.00721	mg/L	0.000443	6.14%
Li 670.784†	132.5	0.00020	mg/L	0.001319	0.00020	mg/L	0.001319	644.25%

Sequence No.: 51 **Autosampler Location: 101**
Sample ID: L1102048608S WG357047-04 **Date Collected: 2/23/2011 8:28:54 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048608S WG357047-04

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102048608S WG357047-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4919127.6						53715.14	1.09%
YRADIAL	292788.8						7390.81	2.52%
Ga 417.206	1328288.8						18006.98	1.36%
GaRADIAL	64056.2						1766.37	2.76%
Ag 328.068†	38759.9	0.195	mg/L	0.0041	0.195	mg/L	0.0041	2.10%
Al 396.153†	26484.9	5.62	mg/L	0.058	5.62	mg/L	0.058	1.03%
As 188.979†	209.8	0.190	mg/L	0.0040	0.190	mg/L	0.0040	2.12%
Ba 233.527†	30567.7	0.518	mg/L	0.0037	0.518	mg/L	0.0037	0.72%
Be 234.861†	14024.1	0.0245	mg/L	0.00037	0.0245	mg/L	0.00037	1.52%
B 249.677†	51106.8	0.977	mg/L	0.0189	0.977	mg/L	0.0189	1.94%
Ca 227.546†	597.0	5.77	mg/L	0.116	5.77	mg/L	0.116	2.01%
Cd 228.802†	431.0	0.0242	mg/L	0.00048	0.0242	mg/L	0.00048	1.98%
Co 228.616†	1957.4	0.0975	mg/L	0.00145	0.0975	mg/L	0.00145	1.49%
Cr 267.716†	29048.2	0.250	mg/L	0.0034	0.250	mg/L	0.0034	1.37%
Cu 327.393†	34740.9	0.238	mg/L	0.0054	0.238	mg/L	0.0054	2.25%
Fe 239.562†	1188.3	2.81	mg/L	0.097	2.81	mg/L	0.097	3.45%
Mg 279.077†	4410.4	5.66	mg/L	0.168	5.66	mg/L	0.168	2.96%
Mn 257.610†	126231.1	0.284	mg/L	0.0027	0.284	mg/L	0.0027	0.94%

Approved: February 24, 2011

Pierre Morris

Mo 202.031†	6696.5	0.494 mg/L	0.0082	0.494 mg/L	0.0082	1.65%
Ni 231.604†	8739.0	0.252 mg/L	0.0036	0.252 mg/L	0.0036	1.42%
Pb 220.353†	1489.3	0.248 mg/L	0.0024	0.248 mg/L	0.0024	0.96%
Sb 206.836†	914.4	0.571 mg/L	0.0125	0.571 mg/L	0.0125	2.18%
Se 196.026†	268.1	0.193 mg/L	0.0057	0.193 mg/L	0.0057	2.97%
Si 251.611†	325515.9	9.44 mg/L	0.179	9.44 mg/L	0.179	1.89%
Sn 189.927†	3041.4	0.521 mg/L	0.0047	0.521 mg/L	0.0047	0.90%
Ti 334.940†	361532.2	0.498 mg/L	0.0065	0.498 mg/L	0.0065	1.31%
Tl 190.801†	427.8	0.252 mg/L	0.0055	0.252 mg/L	0.0055	2.19%
V 290.880†	74242.6	0.495 mg/L	0.0056	0.495 mg/L	0.0056	1.13%
Zn 206.200†	16423.3	0.494 mg/L	0.0031	0.494 mg/L	0.0031	0.63%
K 766.490†	62364.1	25.0 mg/L	0.15	25.0 mg/L	0.15	0.59%
Na 589.592†	343777.1	26.3 mg/L	0.92	26.3 mg/L	0.92	3.52%
Sr 407.771†	549818.6	0.542 mg/L	0.0311	0.542 mg/L	0.0311	5.74%
Li 670.784†	37885.6	0.497 mg/L	0.0017	0.497 mg/L	0.0017	0.35%

Sequence No.: 52 **Autosampler Location: 102**
Sample ID: L1102048609SD WG357047-05 **Date Collected: 2/23/2011 8:35:41 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102048609SD WG357047-05

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102048609SD WG357047-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4950376.9						48379.76	0.98%
YRADIAL	290368.7						7626.45	2.63%
Ga 417.206	1330687.9						20763.19	1.56%
GaRADIAL	63153.1						1888.28	2.99%
Ag 328.068†	38643.1	0.195	mg/L	0.0056	0.195	mg/L	0.0056	2.89%
Al 396.153†	27085.6	5.75	mg/L	0.036	5.75	mg/L	0.036	0.63%
As 188.979†	207.4	0.188	mg/L	0.0015	0.188	mg/L	0.0015	0.79%
Ba 233.527†	30352.9	0.514	mg/L	0.0099	0.514	mg/L	0.0099	1.92%
Be 234.861†	13931.0	0.0243	mg/L	0.00044	0.0243	mg/L	0.00044	1.83%
B 249.677†	50991.6	0.975	mg/L	0.0310	0.975	mg/L	0.0310	3.18%
Ca 227.546†	601.4	5.81	mg/L	0.064	5.81	mg/L	0.064	1.11%
Cd 228.802†	423.3	0.0238	mg/L	0.00032	0.0238	mg/L	0.00032	1.36%
Co 228.616†	1946.9	0.0970	mg/L	0.00080	0.0970	mg/L	0.00080	0.83%
Cr 267.716†	28776.8	0.248	mg/L	0.0046	0.248	mg/L	0.0046	1.87%
Cu 327.393†	34586.7	0.237	mg/L	0.0072	0.237	mg/L	0.0072	3.04%
Fe 239.562†	1189.5	2.81	mg/L	0.096	2.81	mg/L	0.096	3.41%
Mg 279.077†	4419.2	5.67	mg/L	0.171	5.67	mg/L	0.171	3.02%
Mn 257.610†	127230.4	0.287	mg/L	0.0056	0.287	mg/L	0.0056	1.95%
Mo 202.031†	6647.3	0.490	mg/L	0.0087	0.490	mg/L	0.0087	1.77%
Ni 231.604†	8722.5	0.252	mg/L	0.0052	0.252	mg/L	0.0052	2.06%
Pb 220.353†	1490.0	0.248	mg/L	0.0028	0.248	mg/L	0.0028	1.14%
Sb 206.836†	912.6	0.570	mg/L	0.0070	0.570	mg/L	0.0070	1.24%
Se 196.026†	265.7	0.191	mg/L	0.0054	0.191	mg/L	0.0054	2.84%
Si 251.611†	326619.0	9.47	mg/L	0.082	9.47	mg/L	0.082	0.87%
Sn 189.927†	3030.5	0.519	mg/L	0.0037	0.519	mg/L	0.0037	0.71%
Ti 334.940†	360120.3	0.496	mg/L	0.0029	0.496	mg/L	0.0029	0.58%
Tl 190.801†	429.1	0.252	mg/L	0.0011	0.252	mg/L	0.0011	0.43%
V 290.880†	73616.2	0.491	mg/L	0.0103	0.491	mg/L	0.0103	2.10%
Zn 206.200†	16331.0	0.491	mg/L	0.0051	0.491	mg/L	0.0051	1.04%
K 766.490†	62450.3	25.0	mg/L	0.12	25.0	mg/L	0.12	0.47%
Na 589.592†	344198.2	26.3	mg/L	0.40	26.3	mg/L	0.40	1.52%
Sr 407.771†	540589.3	0.533	mg/L	0.0329	0.533	mg/L	0.0329	6.17%
Li 670.784†	38383.0	0.504	mg/L	0.0016	0.504	mg/L	0.0016	0.31%

Sequence No.: 53 **Autosampler Location: 103**
Sample ID: L1102047501 **Date Collected: 2/23/2011 8:42:21 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: February 24, 2011

Pierre Morris

Nebulizer Parameters: L1102047501

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102047501

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4967445.1						10422.69	0.21%
YRADIAL	290828.9						2866.38	0.99%
Ga 417.206	1343032.4						11887.18	0.89%
GaRADIAL	63147.8						1433.46	2.27%
Ag 328.068†	-134.1	-0.00138	mg/L	0.000262	-0.00138	mg/L	0.000262	18.95%
Al 396.153†	21.8	-0.00719	mg/L	0.013745	-0.00719	mg/L	0.013745	191.09%
As 188.979†	-0.0	0.00033	mg/L	0.002201	0.00033	mg/L	0.002201	659.24%
Ba 233.527†	5.8	-0.00041	mg/L	0.000082	-0.00041	mg/L	0.000082	19.75%
Be 234.861†	38.6	0.00007	mg/L	0.000047	0.00007	mg/L	0.000047	66.95%
B 249.677†	3023.7	0.0607	mg/L	0.00157	0.0607	mg/L	0.00157	2.58%
Ca 227.546†	9.2	0.0538	mg/L	0.03641	0.0538	mg/L	0.03641	67.63%
Cd 228.802†	-3.4	-0.00013	mg/L	0.000054	-0.00013	mg/L	0.000054	42.45%
Co 228.616†	-4.7	0.00019	mg/L	0.000033	0.00019	mg/L	0.000033	16.74%
Cr 267.716†	15.8	-0.00009	mg/L	0.000127	-0.00009	mg/L	0.000127	147.73%
Cu 327.393†	-4.0	0.00004	mg/L	0.000525	0.00004	mg/L	0.000525	>999.9%
Fe 239.562†	1.5	0.00146	mg/L	0.003760	0.00146	mg/L	0.003760	257.90%
Mg 279.077†	6.2	0.00082	mg/L	0.000578	0.00082	mg/L	0.000578	70.87%
Mn 257.610†	-34.4	-0.00040	mg/L	0.000015	-0.00040	mg/L	0.000015	3.79%
Mo 202.031†	4.0	-0.00048	mg/L	0.000445	-0.00048	mg/L	0.000445	93.64%
Ni 231.604†	6.6	0.00005	mg/L	0.000236	0.00005	mg/L	0.000236	515.46%
Pb 220.353†	3.4	-0.00009	mg/L	0.000604	-0.00009	mg/L	0.000604	688.46%
Sb 206.836†	0.3	0.00008	mg/L	0.000627	0.00008	mg/L	0.000627	743.39%
Se 196.026†	-1.2	0.00337	mg/L	0.002710	0.00337	mg/L	0.002710	80.52%
Si 251.611†	2099.4	0.0595	mg/L	0.00224	0.0595	mg/L	0.00224	3.77%
Sn 189.927†	-78.8	-0.0118	mg/L	0.00048	-0.0118	mg/L	0.00048	4.11%
Ti 334.940†	-42.4	-0.00022	mg/L	0.000120	-0.00022	mg/L	0.000120	54.13%
Tl 190.801†	-1.4	-0.00376	mg/L	0.003042	-0.00376	mg/L	0.003042	80.82%
V 290.880†	172.9	-0.00017	mg/L	0.000239	-0.00017	mg/L	0.000239	139.55%
Zn 206.200†	-148.9	-0.00491	mg/L	0.000121	-0.00491	mg/L	0.000121	2.46%
K 766.490†	-31.1	0.00708	mg/L	0.043582	0.00708	mg/L	0.043582	615.40%
Na 589.592†	4250.8	0.322	mg/L	0.0126	0.322	mg/L	0.0126	3.91%
Sr 407.771†	208.3	-0.00043	mg/L	0.000095	-0.00043	mg/L	0.000095	22.24%
Li 670.784†	22.6	-0.00124	mg/L	0.001880	-0.00124	mg/L	0.001880	151.28%

Sequence No.: 54 **Autosampler Location: 104**
Sample ID: L1102049202 **Date Collected: 2/23/2011 8:49:50 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049202

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102049202

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5059389.2						66538.58	1.32%
YRADIAL	300908.6						3235.58	1.08%
Ga 417.206	1395428.1						24254.16	1.74%
GaRADIAL	65600.9						644.53	0.98%
Ag 328.068†	78.2	-0.00040	mg/L	0.000932	-0.00040	mg/L	0.000932	234.45%
Al 396.153†	575.6	0.110	mg/L	0.0021	0.110	mg/L	0.0021	1.87%
As 188.979†	9.1	0.00838	mg/L	0.000844	0.00838	mg/L	0.000844	10.07%
Ba 233.527†	539.0	0.00864	mg/L	0.000120	0.00864	mg/L	0.000120	1.39%
Be 234.861†	160.6	0.00018	mg/L	0.000017	0.00018	mg/L	0.000017	9.46%
B 249.677†	1301.4	0.0322	mg/L	0.00082	0.0322	mg/L	0.00082	2.56%
Ca 227.546†	1119.3	10.6	mg/L	0.23	10.6	mg/L	0.23	2.19%
Cd 228.802†	41.6	0.00236	mg/L	0.000046	0.00236	mg/L	0.000046	1.97%
Co 228.616†	11.4	0.00097	mg/L	0.000147	0.00097	mg/L	0.000147	15.13%
Cr 267.716†	900.9	0.00746	mg/L	0.000422	0.00746	mg/L	0.000422	5.66%

Approved: February 24, 2011

Pierce Morris

Cu 327.393†	7366.7	0.0505	mg/L	0.00085	0.0505	mg/L	0.00085	1.68%
Fe 239.562†	382.2	0.902	mg/L	0.0116	0.902	mg/L	0.0116	1.29%
Mg 279.077†	3804.3	4.88	mg/L	0.037	4.88	mg/L	0.037	0.77%
Mn 257.610†	108307.4	0.241	mg/L	0.0030	0.241	mg/L	0.0030	1.26%
Mo 202.031†	579.2	0.0421	mg/L	0.00033	0.0421	mg/L	0.00033	0.80%
Ni 231.604†	63.1	0.00167	mg/L	0.000364	0.00167	mg/L	0.000364	21.83%
Pb 220.353†	38.9	0.00639	mg/L	0.001871	0.00639	mg/L	0.001871	29.25%
Sb 206.836†	43.7	0.0273	mg/L	0.00277	0.0273	mg/L	0.00277	10.15%
Se 196.026†	-13.5	-0.00235	mg/L	0.002316	-0.00235	mg/L	0.002316	98.68%
Si 251.611†	56059.5	1.63	mg/L	0.035	1.63	mg/L	0.035	2.15%
Sn 189.927†	-78.4	-0.0117	mg/L	0.00048	-0.0117	mg/L	0.00048	4.11%
Ti 334.940†	2334.3	0.00316	mg/L	0.000019	0.00316	mg/L	0.000019	0.62%
Tl 190.801†	26.8	0.0120	mg/L	0.00416	0.0120	mg/L	0.00416	34.57%
V 290.880†	677.5	0.00324	mg/L	0.000714	0.00324	mg/L	0.000714	22.01%
Zn 206.200†	14968.1	0.449	mg/L	0.0050	0.449	mg/L	0.0050	1.11%
K 766.490†	11031.1	4.42	mg/L	0.052	4.42	mg/L	0.052	1.18%
Na 589.592†	61125.5	4.62	mg/L	0.035	4.62	mg/L	0.035	0.75%
Sr 407.771†	34202.8	0.0330	mg/L	0.00231	0.0330	mg/L	0.00231	7.00%
Li 670.784†	64.3	-0.00069	mg/L	0.001618	-0.00069	mg/L	0.001618	233.33%

Sequence No.: 55 **Autosampler Location: 105**
Sample ID: L1102049202PS WG357117-03 **Date Collected: 2/23/2011 8:56:34 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102049202PS WG357117-03

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: L1102049202PS WG357117-03

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4900145.0						46779.10	0.95%
YRADIAL	290611.1						1932.24	0.66%
Ga 417.206	1346541.4						22451.51	1.67%
GaRADIAL	63693.8						938.79	1.47%
Ag 328.068†	37788.2	0.190	mg/L	0.0023	0.190	mg/L	0.0023	1.21%
Al 396.153†	23842.2	5.06	mg/L	0.011	5.06	mg/L	0.011	0.21%
As 188.979†	208.2	0.188	mg/L	0.0030	0.188	mg/L	0.0030	1.61%
Ba 233.527†	29415.9	0.499	mg/L	0.0043	0.499	mg/L	0.0043	0.86%
Be 234.861†	13626.2	0.0239	mg/L	0.00028	0.0239	mg/L	0.00028	1.18%
B 249.677†	50574.6	0.967	mg/L	0.0094	0.967	mg/L	0.0094	0.97%
Ca 227.546†	1538.9	14.7	mg/L	0.36	14.7	mg/L	0.36	2.44%
Cd 228.802†	454.1	0.0255	mg/L	0.00057	0.0255	mg/L	0.00057	2.22%
Co 228.616†	1938.1	0.0966	mg/L	0.00150	0.0966	mg/L	0.00150	1.55%
Cr 267.716†	28909.7	0.249	mg/L	0.0024	0.249	mg/L	0.0024	0.97%
Cu 327.393†	40699.3	0.279	mg/L	0.0038	0.279	mg/L	0.0038	1.38%
Fe 239.562†	1158.5	2.74	mg/L	0.034	2.74	mg/L	0.034	1.23%
Mg 279.077†	7243.2	9.29	mg/L	0.090	9.29	mg/L	0.090	0.97%
Mn 257.610†	206799.4	0.463	mg/L	0.0033	0.463	mg/L	0.0033	0.70%
Mo 202.031†	7163.3	0.529	mg/L	0.0043	0.529	mg/L	0.0043	0.82%
Ni 231.604†	8583.3	0.248	mg/L	0.0012	0.248	mg/L	0.0012	0.49%
Pb 220.353†	1505.2	0.251	mg/L	0.0044	0.251	mg/L	0.0044	1.76%
Sb 206.836†	935.4	0.584	mg/L	0.0127	0.584	mg/L	0.0127	2.17%
Se 196.026†	255.3	0.186	mg/L	0.0045	0.186	mg/L	0.0045	2.44%
Si 251.611†	133782.6	3.87	mg/L	0.058	3.87	mg/L	0.058	1.49%
Sn 189.927†	-88.9	-0.0135	mg/L	0.00076	-0.0135	mg/L	0.00076	5.61%
Ti 334.940†	359240.1	0.495	mg/L	0.0042	0.495	mg/L	0.0042	0.85%
Tl 190.801†	444.8	0.261	mg/L	0.0008	0.261	mg/L	0.0008	0.30%
V 290.880†	73944.4	0.493	mg/L	0.0027	0.493	mg/L	0.0027	0.54%
Zn 206.200†	29826.6	0.896	mg/L	0.0035	0.896	mg/L	0.0035	0.39%
K 766.490†	69688.2	28.0	mg/L	0.12	28.0	mg/L	0.12	0.43%
Na 589.592†	366342.0	28.0	mg/L	0.39	28.0	mg/L	0.39	1.39%
Sr 407.771†	545327.0	0.538	mg/L	0.0439	0.538	mg/L	0.0439	8.16%
Li 670.784†	37323.0	0.490	mg/L	0.0015	0.490	mg/L	0.0015	0.31%

Sequence No.: 56 WG357117-04 **Autosampler Location: 106**
Sample ID: L1102049202DL ~~**WG357047-04**~~ **Date Collected: 2/23/2011 9:03:14 PM**

Approved: February 24, 2011

Pierre Morris

Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

WG357117-04

Nebulizer Parameters: L1102049202DL ~~WG357047-04~~

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

WG357117-04

Mean Data: L1102049202DL ~~WG357047-04~~

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5010862.7						21053.18	0.42%
YRADIAL	289316.3						7858.36	2.72%
Ga 417.206	1345263.6						22610.46	1.68%
GaRADIAL	63075.4						2239.50	3.55%
Ag 328.068†	-176.3	-0.00162	mg/L	0.000440	-0.00162	mg/L	0.000440	27.24%
Al 396.153†	130.0	0.0158	mg/L	0.01278	0.0158	mg/L	0.01278	81.02%
As 188.979†	1.6	0.00177	mg/L	0.001025	0.00177	mg/L	0.001025	57.91%
Ba 233.527†	105.9	0.00128	mg/L	0.000073	0.00128	mg/L	0.000073	5.67%
Be 234.861†	68.9	0.00010	mg/L	0.000033	0.00010	mg/L	0.000033	32.48%
B 249.677†	769.9	0.0189	mg/L	0.00070	0.0189	mg/L	0.00070	3.69%
Ca 227.546†	227.8	2.12	mg/L	0.041	2.12	mg/L	0.041	1.93%
Cd 228.802†	6.1	0.00040	mg/L	0.000251	0.00040	mg/L	0.000251	63.30%
Co 228.616†	-3.8	0.00023	mg/L	0.000148	0.00023	mg/L	0.000148	64.36%
Cr 267.716†	178.3	0.00130	mg/L	0.000071	0.00130	mg/L	0.000071	5.48%
Cu 327.393†	1533.4	0.0106	mg/L	0.00024	0.0106	mg/L	0.00024	2.25%
Fe 239.562†	81.2	0.190	mg/L	0.0080	0.190	mg/L	0.0080	4.20%
Mg 279.077†	808.3	1.03	mg/L	0.036	1.03	mg/L	0.036	3.46%
Mn 257.610†	21535.8	0.0477	mg/L	0.00059	0.0477	mg/L	0.00059	1.23%
Mo 202.031†	116.6	0.00786	mg/L	0.000417	0.00786	mg/L	0.000417	5.31%
Ni 231.604†	25.5	0.00059	mg/L	0.000135	0.00059	mg/L	0.000135	23.01%
Pb 220.353†	12.4	0.00151	mg/L	0.000732	0.00151	mg/L	0.000732	48.34%
Sb 206.836†	10.1	0.00623	mg/L	0.001675	0.00623	mg/L	0.001675	26.88%
Se 196.026†	-11.1	-0.00292	mg/L	0.002149	-0.00292	mg/L	0.002149	73.53%
Si 251.611†	11540.5	0.333	mg/L	0.0073	0.333	mg/L	0.0073	2.18%
Sn 189.927†	-77.2	-0.0115	mg/L	0.00085	-0.0115	mg/L	0.00085	7.37%
Ti 334.940†	496.1	0.00054	mg/L	0.000159	0.00054	mg/L	0.000159	29.39%
Tl 190.801†	4.6	-0.00042	mg/L	0.004892	-0.00042	mg/L	0.004892	>999.9%
V 290.880†	125.0	-0.00048	mg/L	0.000066	-0.00048	mg/L	0.000066	13.71%
Zn 206.200†	2936.6	0.0877	mg/L	0.00018	0.0877	mg/L	0.00018	0.21%
K 766.490†	2232.0	0.910	mg/L	0.0333	0.910	mg/L	0.0333	3.67%
Na 589.592†	12649.1	0.956	mg/L	0.0178	0.956	mg/L	0.0178	1.86%
Sr 407.771†	7266.1	0.00652	mg/L	0.000802	0.00652	mg/L	0.000802	12.30%
Li 670.784†	61.6	-0.00073	mg/L	0.000464	-0.00073	mg/L	0.000464	63.61%

Sequence No.: 57 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 9:09:56 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4758270.1						54463.98	1.14%
YRADIAL	282901.8						6257.05	2.21%
Ga 417.206	1247909.0						15555.55	1.25%
GaRADIAL	61472.1						277.64	0.45%
Ag 328.068†	80185.2	0.405	mg/L	0.0036	0.405	mg/L	0.0036	0.89%
QC value within limits for Ag 328.068 Recovery = 101.25%								
Al 396.153†	47753.1	10.1	mg/L	0.09	10.1	mg/L	0.09	0.85%
QC value within limits for Al 396.153 Recovery = 101.48%								
As 188.979†	436.2	0.395	mg/L	0.0064	0.395	mg/L	0.0064	1.63%
QC value within limits for As 188.979 Recovery = 98.76%								

Approved: February 24, 2011

Pierre Morris

Ba 233.527†	59324.2	1.01 mg/L	0.002	1.01 mg/L	0.002	0.24%
QC value within limits for Ba 233.527 Recovery = 100.62%						
Be 234.861†	28640.3	0.0503 mg/L	0.00029	0.0503 mg/L	0.00029	0.59%
QC value within limits for Be 234.861 Recovery = 100.63%						
B 249.677†	26668.4	0.514 mg/L	0.0037	0.514 mg/L	0.0037	0.72%
QC value within limits for B 249.677 Recovery = 102.81%						
Ca 227.546†	1050.5	10.2 mg/L	0.16	10.2 mg/L	0.16	1.53%
QC value within limits for Ca 227.546 Recovery = 102.38%						
Cd 228.802†	895.7	0.0502 mg/L	0.00044	0.0502 mg/L	0.00044	0.88%
QC value within limits for Cd 228.802 Recovery = 100.35%						
Co 228.616†	3913.9	0.195 mg/L	0.0020	0.195 mg/L	0.0020	1.05%
QC value within limits for Co 228.616 Recovery = 97.33%						
Cr 267.716†	57728.0	0.498 mg/L	0.0016	0.498 mg/L	0.0016	0.31%
QC value within limits for Cr 267.716 Recovery = 99.54%						
Cu 327.393†	72101.9	0.494 mg/L	0.0048	0.494 mg/L	0.0048	0.98%
QC value within limits for Cu 327.393 Recovery = 98.87%						
Fe 239.562†	1649.5	3.90 mg/L	0.039	3.90 mg/L	0.039	1.00%
QC value within limits for Fe 239.562 Recovery = 97.48%						
Mg 279.077†	7675.1	9.85 mg/L	0.149	9.85 mg/L	0.149	1.51%
QC value within limits for Mg 279.077 Recovery = 98.50%						
Mn 257.610†	225766.6	0.507 mg/L	0.0005	0.507 mg/L	0.0005	0.10%
QC value within limits for Mn 257.610 Recovery = 101.40%						
Mo 202.031†	13490.5	0.996 mg/L	0.0058	0.996 mg/L	0.0058	0.58%
QC value within limits for Mo 202.031 Recovery = 99.60%						
Ni 231.604†	17329.9	0.500 mg/L	0.0012	0.500 mg/L	0.0012	0.23%
QC value within limits for Ni 231.604 Recovery = 100.03%						
Pb 220.353†	3001.6	0.501 mg/L	0.0040	0.501 mg/L	0.0040	0.79%
QC value within limits for Pb 220.353 Recovery = 100.20%						
Sb 206.836†	1909.4	1.19 mg/L	0.015	1.19 mg/L	0.015	1.26%
QC value within limits for Sb 206.836 Recovery = 99.37%						
Se 196.026†	568.2	0.403 mg/L	0.0058	0.403 mg/L	0.0058	1.45%
QC value within limits for Se 196.026 Recovery = 100.76%						
Si 251.611†	171777.7	4.97 mg/L	0.026	4.97 mg/L	0.026	0.53%
QC value within limits for Si 251.611 Recovery = 99.41%						
Sn 189.927†	5891.7	1.01 mg/L	0.010	1.01 mg/L	0.010	0.98%
QC value within limits for Sn 189.927 Recovery = 100.73%						
Ti 334.940†	725667.0	1.00 mg/L	0.004	1.00 mg/L	0.004	0.40%
QC value within limits for Ti 334.940 Recovery = 100.03%						
Tl 190.801†	860.1	0.509 mg/L	0.0036	0.509 mg/L	0.0036	0.71%
QC value within limits for Tl 190.801 Recovery = 101.83%						
V 290.880†	150165.4	1.00 mg/L	0.001	1.00 mg/L	0.001	0.12%
QC value within limits for V 290.880 Recovery = 100.24%						
Zn 206.200†	33334.7	1.00 mg/L	0.004	1.00 mg/L	0.004	0.42%
QC value within limits for Zn 206.200 Recovery = 100.22%						
K 766.490†	124175.7	50.0 mg/L	0.61	50.0 mg/L	0.61	1.22%
QC value within limits for K 766.490 Recovery = 100.03%						
Na 589.592†	643625.1	49.8 mg/L	0.37	49.8 mg/L	0.37	0.75%
QC value within limits for Na 589.592 Recovery = 99.60%						
Sr 407.771†	1072730.1	1.06 mg/L	0.078	1.06 mg/L	0.078	7.35%
QC value within limits for Sr 407.771 Recovery = 105.84%						
Li 670.784†	76439.9	1.00 mg/L	0.005	1.00 mg/L	0.005	0.51%
QC value within limits for Li 670.784 Recovery = 100.49%						

All analyte(s) passed QC.

Sequence No.: 58 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 9:16:34 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc. Units	Std.Dev.	Sample Conc. Units	Std.Dev.	RSD
Y 371.029	5021927.7				24881.61	0.50%
YRADIAL	287592.2				10871.16	3.78%
Ga 417.206	1326874.0				21333.48	1.61%

Approved: February 24, 2011

Pierre Morris

GaRADIAL	62465.3					1610.47	2.58%
Ag 328.068†	-180.9	-0.00162 mg/L	0.000371	-0.00162 mg/L	0.000371	22.88%	
QC value within limits for Ag 328.068 Recovery = Not calculated							
Al 396.153†	-7.1	-0.0133 mg/L	0.00760	-0.0133 mg/L	0.00760	57.03%	
QC value within limits for Al 396.153 Recovery = Not calculated							
As 188.979†	1.0	0.00133 mg/L	0.001178	0.00133 mg/L	0.001178	88.82%	
QC value within limits for As 188.979 Recovery = Not calculated							
Ba 233.527†	2.0	-0.00048 mg/L	0.000071	-0.00048 mg/L	0.000071	14.88%	
QC value within limits for Ba 233.527 Recovery = Not calculated							
Be 234.861†	50.0	0.00009 mg/L	0.000026	0.00009 mg/L	0.000026	29.46%	
QC value within limits for Be 234.861 Recovery = Not calculated							
B 249.677†	540.7	0.0137 mg/L	0.00056	0.0137 mg/L	0.00056	4.08%	
QC value within limits for B 249.677 Recovery = Not calculated							
Ca 227.546†	5.9	0.0228 mg/L	0.02259	0.0228 mg/L	0.02259	98.89%	
QC value within limits for Ca 227.546 Recovery = Not calculated							
Cd 228.802†	-0.2	0.00005 mg/L	0.000088	0.00005 mg/L	0.000088	184.86%	
QC value within limits for Cd 228.802 Recovery = Not calculated							
Co 228.616†	-4.9	0.00018 mg/L	0.000089	0.00018 mg/L	0.000089	49.42%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	18.3	-0.00007 mg/L	0.000066	-0.00007 mg/L	0.000066	100.64%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 327.393†	75.3	0.00058 mg/L	0.000371	0.00058 mg/L	0.000371	63.81%	
QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe 239.562†	1.7	0.00195 mg/L	0.003128	0.00195 mg/L	0.003128	160.59%	
QC value within limits for Fe 239.562 Recovery = Not calculated							
Mg 279.077†	-0.2	-0.00737 mg/L	0.007519	-0.00737 mg/L	0.007519	102.04%	
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	19.0	-0.00030 mg/L	0.000023	-0.00030 mg/L	0.000023	7.58%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-5.1	-0.00115 mg/L	0.000181	-0.00115 mg/L	0.000181	15.72%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	4.5	-0.00002 mg/L	0.000258	-0.00002 mg/L	0.000258	>999.9%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	3.5	-0.00009 mg/L	0.001152	-0.00009 mg/L	0.001152	>999.9%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	1.9	0.00104 mg/L	0.001042	0.00104 mg/L	0.001042	100.59%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-8.6	-0.00178 mg/L	0.001448	-0.00178 mg/L	0.001448	81.55%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-50.7	-0.00291 mg/L	0.000394	-0.00291 mg/L	0.000394	13.54%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-74.6	-0.0111 mg/L	0.00029	-0.0111 mg/L	0.00029	2.63%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-10.9	-0.00018 mg/L	0.000289	-0.00018 mg/L	0.000289	161.36%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	4.2	-0.00049 mg/L	0.001746	-0.00049 mg/L	0.001746	355.33%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	42.5	-0.00104 mg/L	0.001142	-0.00104 mg/L	0.001142	109.49%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-216.5	-0.00693 mg/L	0.000210	-0.00693 mg/L	0.000210	3.02%	
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	-4.2	0.0181 mg/L	0.02625	0.0181 mg/L	0.02625	144.82%	
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	-47.2	-0.00276 mg/L	0.005493	-0.00276 mg/L	0.005493	199.24%	
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	218.0	-0.00042 mg/L	0.000306	-0.00042 mg/L	0.000306	72.95%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	31.9	-0.00112 mg/L	0.000997	-0.00112 mg/L	0.000997	89.03%	
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 59 **Autosampler Location: 107**
Sample ID: L1102051701 DL0.2 **Date Collected: 2/23/2011 9:23:11 PM**
Analyst: PDM **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1102051701 DL0.2

Analyte	**Back Pressure**	**Flow**
All	166.0 kPa	0.50 L/min

Approved: February 24, 2011

Pierre Morris

Mean Data: L1102051701 DL0.2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4864940.4						48941.96	1.01%
YRADIAL	286943.8						5331.82	1.86%
Ga 417.206	1333046.9						29123.21	2.18%
GaRADIAL	62712.4						1212.86	1.93%
Ag 328.068†	-12.8	-0.00242	mg/L	0.000653	-0.00242	mg/L	0.000653	27.04%
Al 396.153†	66604.4	14.2	mg/L	0.03	14.2	mg/L	0.03	0.21%
As 188.979†	12.9	0.0152	mg/L	0.00119	0.0152	mg/L	0.00119	7.84%
Ba 233.527†	254894.4	4.31	mg/L	0.019	4.31	mg/L	0.019	0.45%
Be 234.861†	4528.9	0.00121	mg/L	0.000090	0.00121	mg/L	0.000090	7.44%
B 249.677†	-2266.0	0.0911	mg/L	0.00162	0.0911	mg/L	0.00162	1.77%
Ca 227.546†	2292.7	21.8	mg/L	0.44	21.8	mg/L	0.44	2.02%
Cd 228.802†	11.5	0.00075	mg/L	0.000145	0.00075	mg/L	0.000145	19.29%
Co 228.616†	268.0	0.0112	mg/L	0.00027	0.0112	mg/L	0.00027	2.43%
Cr 267.716†	3300.9	0.0277	mg/L	0.00086	0.0277	mg/L	0.00086	3.09%
Cu 327.393†	28263.4	0.197	mg/L	0.0057	0.197	mg/L	0.0057	2.90%
Fe 239.562†	13292.5	31.4	mg/L	0.52	31.4	mg/L	0.52	1.66%
Mg 279.077†	2267.7	2.89	mg/L	0.055	2.89	mg/L	0.055	1.90%
Mn 257.610†	266377.9	0.598	mg/L	0.0015	0.598	mg/L	0.0015	0.25%
Mo 202.031†	86.8	0.00731	mg/L	0.000372	0.00731	mg/L	0.000372	5.09%
Ni 231.604†	1318.9	0.0379	mg/L	0.00024	0.0379	mg/L	0.00024	0.65%
Pb 220.353†	1042.0	0.172	mg/L	0.0017	0.172	mg/L	0.0017	1.01%
Sb 206.836†	10.7	0.00638	mg/L	0.002631	0.00638	mg/L	0.002631	41.27%
Se 196.026†	-35.1	-0.00503	mg/L	0.003632	-0.00503	mg/L	0.003632	72.15%
Si 251.611†	466875.9	13.6	mg/L	0.16	13.6	mg/L	0.16	1.20%
Sn 189.927†	-59.6	-0.00851	mg/L	0.000907	-0.00851	mg/L	0.000907	10.66%
Ti 334.940†	150306.2	0.207	mg/L	0.0011	0.207	mg/L	0.0011	0.51%
Tl 190.801†	40.8	0.0222	mg/L	0.00169	0.0222	mg/L	0.00169	7.59%
V 290.880†	4782.4	0.0329	mg/L	0.00122	0.0329	mg/L	0.00122	3.70%
Zn 206.200†	6133.3	0.183	mg/L	0.0014	0.183	mg/L	0.0014	0.78%
K 766.490†	11332.9	4.53	mg/L	0.027	4.53	mg/L	0.027	0.59%
Na 589.592†	227530.4	17.3	mg/L	0.12	17.3	mg/L	0.12	0.70%
Sr 407.771†	194342.3	0.188	mg/L	0.0107	0.188	mg/L	0.0107	5.72%
Li 670.784†	1367.8	0.0165	mg/L	0.00152	0.0165	mg/L	0.00152	9.20%

Sequence No.: 60 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 2/23/2011 9:29:58 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4514516.5						90231.41	2.00%
YRADIAL	275538.3						752.07	0.27%
Ga 417.206	1213135.8						40895.70	3.37%
GaRADIAL	61308.5						661.41	1.08%
Ag 328.068†	586.3	-0.00263	mg/L	0.000846	-0.00263	mg/L	0.000846	32.10%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1183699.1	252	mg/L	0.7	252	mg/L	0.7	0.28%
QC value within limits for Al 396.153 Recovery = 100.87%								
As 188.979†	7.2	-0.00274	mg/L	0.004211	-0.00274	mg/L	0.004211	153.95%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	135.2	-0.00059	mg/L	0.000303	-0.00059	mg/L	0.000303	51.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	11577.9	-0.00085	mg/L	0.000786	-0.00085	mg/L	0.000786	91.92%
QC value less than the lower limit for Be 234.861 Recovery = Not calculated								
B 249.677†	-10278.6	-0.0177	mg/L	0.00624	-0.0177	mg/L	0.00624	35.34%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	29977.0	284	mg/L	8.3	284	mg/L	8.3	2.92%
QC value within limits for Ca 227.546 Recovery = 113.56%								
Cd 228.802†	1.0	-0.00004	mg/L	0.000069	-0.00004	mg/L	0.000069	173.93%

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QC value within limits for Cd 228.802 Recovery = Not calculated
Co 228.616† 18.0 -0.00122 mg/L 0.000260 -0.00122 mg/L 0.000260 21.27%
QC value within limits for Co 228.616 Recovery = Not calculated
Cr 267.716† 619.1 -0.00111 mg/L 0.000133 -0.00111 mg/L 0.000133 11.97%
QC value within limits for Cr 267.716 Recovery = Not calculated
Cu 327.393† -1594.2 0.00042 mg/L 0.000285 0.00042 mg/L 0.000285 67.64%
QC value within limits for Cu 327.393 Recovery = Not calculated
Fe 239.562† 41347.4 97.8 mg/L 0.25 97.8 mg/L 0.25 0.26%
QC value within limits for Fe 239.562 Recovery = 97.81%
Mg 279.077† 196420.9 252 mg/L 0.9 252 mg/L 0.9 0.36%
QC value within limits for Mg 279.077 Recovery = 100.85%
Mn 257.610† -219.3 -0.00009 mg/L 0.000420 -0.00009 mg/L 0.000420 482.77%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† -15.0 0.00295 mg/L 0.001024 0.00295 mg/L 0.001024 34.71%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† -59.6 -0.00192 mg/L 0.000493 -0.00192 mg/L 0.000493 25.62%
QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† -83.8 0.00314 mg/L 0.001700 0.00314 mg/L 0.001700 54.22%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 16.0 0.00978 mg/L 0.002396 0.00978 mg/L 0.002396 24.50%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -113.3 0.00425 mg/L 0.002593 0.00425 mg/L 0.002593 61.01%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 1226.3 0.0342 mg/L 0.00173 0.0342 mg/L 0.00173 5.06%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -124.0 -0.0195 mg/L 0.00157 -0.0195 mg/L 0.00157 8.07%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -2058.8 -0.00017 mg/L 0.000477 -0.00017 mg/L 0.000477 281.44%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 155.0 0.0617 mg/L 0.00840 0.0617 mg/L 0.00840 13.61%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† -876.9 0.00032 mg/L 0.003343 0.00032 mg/L 0.003343 >999.9%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† -53.2 -0.00427 mg/L 0.000363 -0.00427 mg/L 0.000363 8.51%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 1.1 0.0202 mg/L 0.01656 0.0202 mg/L 0.01656 81.80%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 348.2 0.0271 mg/L 0.00526 0.0271 mg/L 0.00526 19.42%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† 14720.3 0.00217 mg/L 0.000359 0.00217 mg/L 0.000359 16.58%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 158.9 0.00055 mg/L 0.000307 0.00055 mg/L 0.000307 55.65%
QC value within limits for Li 670.784 Recovery = Not calculated
QC Failed. Continue with analysis.

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Sequence No.: 61 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 2/23/2011 9:35:40 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4548963.8						52629.24	1.16%
YRADIAL	269620.9						5769.68	2.14%
Ga 417.206	1215556.0						13179.16	1.08%
GaRADIAL	59719.2						1128.16	1.89%
Ag 328.068†	104761.6	0.524	mg/L	0.0062	0.524	mg/L	0.0062	1.18%
QC value within limits for Ag 328.068 Recovery = 104.71%								
Al 396.153†	1189716.9	253	mg/L	4.9	253	mg/L	4.9	1.93%
QC value within limits for Al 396.153 Recovery = 101.38%								
As 188.979†	281.6	0.249	mg/L	0.0066	0.249	mg/L	0.0066	2.66%
QC value within limits for As 188.979 Recovery = 99.56%								
Ba 233.527†	15001.6	0.252	mg/L	0.0036	0.252	mg/L	0.0036	1.45%
QC value within limits for Ba 233.527 Recovery = 100.62%								

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Be 234.861†	160489.9	0.257 mg/L	0.0052	0.257 mg/L	0.0052	2.03%
QC value within limits for Be 234.861 Recovery = 102.90%						
B 249.677†	-10266.1	-0.0421 mg/L	0.01346	-0.0421 mg/L	0.01346	31.93%
QC value within limits for B 249.677 Recovery = Not calculated						
Ca 227.546†	29521.6	280 mg/L	1.4	280 mg/L	1.4	0.49%
QC value within limits for Ca 227.546 Recovery = 111.97%						
Cd 228.802†	8451.4	0.478 mg/L	0.0072	0.478 mg/L	0.0072	1.51%
QC value within limits for Cd 228.802 Recovery = 95.55%						
Co 228.616†	4651.6	0.232 mg/L	0.0027	0.232 mg/L	0.0027	1.15%
QC value within limits for Co 228.616 Recovery = 92.65%						
Cr 267.716†	29505.0	0.248 mg/L	0.0032	0.248 mg/L	0.0032	1.29%
QC value within limits for Cr 267.716 Recovery = 99.19%						
Cu 327.393†	35505.2	0.253 mg/L	0.0024	0.253 mg/L	0.0024	0.96%
QC value within limits for Cu 327.393 Recovery = 101.37%						
Fe 239.562†	40435.4	95.6 mg/L	0.35	95.6 mg/L	0.35	0.37%
QC value within limits for Fe 239.562 Recovery = 95.65%						
Mg 279.077†	193206.9	248 mg/L	0.7	248 mg/L	0.7	0.28%
QC value within limits for Mg 279.077 Recovery = 99.20%						
Mn 257.610†	112469.1	0.252 mg/L	0.0027	0.252 mg/L	0.0027	1.06%
QC value within limits for Mn 257.610 Recovery = 100.76%						
Mo 202.031†	-10.4	0.00325 mg/L	0.000569	0.00325 mg/L	0.000569	17.50%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	16390.2	0.473 mg/L	0.0059	0.473 mg/L	0.0059	1.25%
QC value within limits for Ni 231.604 Recovery = 94.59%						
Pb 220.353†	2870.2	0.491 mg/L	0.0071	0.491 mg/L	0.0071	1.44%
QC value within limits for Pb 220.353 Recovery = 98.30%						
Sb 206.836†	840.0	0.521 mg/L	0.0048	0.521 mg/L	0.0048	0.91%
QC value within limits for Sb 206.836 Recovery = 104.20%						
Se 196.026†	250.0	0.256 mg/L	0.0085	0.256 mg/L	0.0085	3.34%
QC value within limits for Se 196.026 Recovery = 102.25%						
Si 251.611†	237.4	0.00546 mg/L	0.001126	0.00546 mg/L	0.001126	20.65%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-117.2	-0.0183 mg/L	0.00147	-0.0183 mg/L	0.00147	8.03%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-2137.2	-0.00039 mg/L	0.000041	-0.00039 mg/L	0.000041	10.48%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	995.9	0.552 mg/L	0.0109	0.552 mg/L	0.0109	1.98%
QC value within limits for Tl 190.801 Recovery = 110.31%						
V 290.880†	36852.1	0.252 mg/L	0.0010	0.252 mg/L	0.0010	0.38%
QC value within limits for V 290.880 Recovery = 100.96%						
Zn 206.200†	15532.3	0.465 mg/L	0.0077	0.465 mg/L	0.0077	1.66%
QC value within limits for Zn 206.200 Recovery = 92.96%						
K 766.490†	13008.1	5.21 mg/L	0.032	5.21 mg/L	0.032	0.61%
QC value within limits for K 766.490 Recovery = 104.25%						
Na 589.592†	66824.0	5.06 mg/L	0.023	5.06 mg/L	0.023	0.45%
QC value within limits for Na 589.592 Recovery = 101.11%						
Sr 407.771†	14333.2	0.00204 mg/L	0.000264	0.00204 mg/L	0.000264	12.93%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	225.1	0.00142 mg/L	0.001319	0.00142 mg/L	0.001319	92.64%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 62 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 2/23/2011 9:41:25 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	167.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4886068.0						23311.73	0.48%
YRADIAL	279426.7						9619.22	3.44%
Ga 417.206	1283463.3						9807.08	0.76%
GaRADIAL	60921.2						3227.31	5.30%
Ag 328.068†	77849.2	0.393	mg/L	0.0015	0.393	mg/L	0.0015	0.39%

Approved: February 24, 2011

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QC value within limits for Ag 328.068 Recovery = 98.29%

Al 396.153†	48352.1	10.3 mg/L	0.48	10.3 mg/L	0.48	4.63%
QC value within limits for Al 396.153 Recovery = 102.76%						
As 188.979†	419.1	0.380 mg/L	0.0031	0.380 mg/L	0.0031	0.81%
QC value within limits for As 188.979 Recovery = 94.89%						
Ba 233.527†	57471.0	0.975 mg/L	0.0033	0.975 mg/L	0.0033	0.33%
QC value within limits for Ba 233.527 Recovery = 97.47%						
Be 234.861†	27867.9	0.0489 mg/L	0.00011	0.0489 mg/L	0.00011	0.23%
QC value within limits for Be 234.861 Recovery = 97.85%						
B 249.677†	25350.6	0.489 mg/L	0.0044	0.489 mg/L	0.0044	0.91%
QC value within limits for B 249.677 Recovery = 97.85%						
Ca 227.546†	1037.6	10.1 mg/L	0.11	10.1 mg/L	0.11	1.14%
QC value within limits for Ca 227.546 Recovery = 101.07%						
Cd 228.802†	865.0	0.0485 mg/L	0.00033	0.0485 mg/L	0.00033	0.68%
QC value within limits for Cd 228.802 Recovery = 96.98%						
Co 228.616†	3813.6	0.190 mg/L	0.0012	0.190 mg/L	0.0012	0.64%
QC value within limits for Co 228.616 Recovery = 94.84%						
Cr 267.716†	56070.0	0.483 mg/L	0.0032	0.483 mg/L	0.0032	0.66%
QC value within limits for Cr 267.716 Recovery = 96.68%						
Cu 327.393†	70222.6	0.481 mg/L	0.0032	0.481 mg/L	0.0032	0.65%
QC value within limits for Cu 327.393 Recovery = 96.30%						
Fe 239.562†	1674.0	3.96 mg/L	0.210	3.96 mg/L	0.210	5.30%
QC value within limits for Fe 239.562 Recovery = 98.93%						
Mg 279.077†	7822.8	10.0 mg/L	0.50	10.0 mg/L	0.50	4.97%
QC value within limits for Mg 279.077 Recovery = 100.40%						
Mn 257.610†	219210.0	0.492 mg/L	0.0027	0.492 mg/L	0.0027	0.55%
QC value within limits for Mn 257.610 Recovery = 98.47%						
Mo 202.031†	13144.5	0.970 mg/L	0.0054	0.970 mg/L	0.0054	0.56%
QC value within limits for Mo 202.031 Recovery = 97.05%						
Ni 231.604†	16826.9	0.486 mg/L	0.0007	0.486 mg/L	0.0007	0.15%
QC value within limits for Ni 231.604 Recovery = 97.12%						
Pb 220.353†	2917.6	0.487 mg/L	0.0032	0.487 mg/L	0.0032	0.66%
QC value within limits for Pb 220.353 Recovery = 97.40%						
Sb 206.836†	1854.3	1.16 mg/L	0.011	1.16 mg/L	0.011	0.97%
QC value within limits for Sb 206.836 Recovery = 96.51%						
Se 196.026†	558.5	0.396 mg/L	0.0009	0.396 mg/L	0.0009	0.23%
QC value within limits for Se 196.026 Recovery = 99.07%						
Si 251.611†	166339.5	4.81 mg/L	0.020	4.81 mg/L	0.020	0.42%
QC value within limits for Si 251.611 Recovery = 96.26%						
Sn 189.927†	5713.9	0.977 mg/L	0.0048	0.977 mg/L	0.0048	0.49%
QC value within limits for Sn 189.927 Recovery = 97.69%						
Ti 334.940†	710250.8	0.979 mg/L	0.0039	0.979 mg/L	0.0039	0.40%
QC value within limits for Ti 334.940 Recovery = 97.90%						
Tl 190.801†	841.3	0.498 mg/L	0.0048	0.498 mg/L	0.0048	0.96%
QC value within limits for Tl 190.801 Recovery = 99.58%						
V 290.880†	145964.7	0.974 mg/L	0.0065	0.974 mg/L	0.0065	0.66%
QC value within limits for V 290.880 Recovery = 97.44%						
Zn 206.200†	32285.5	0.971 mg/L	0.0025	0.971 mg/L	0.0025	0.26%
QC value within limits for Zn 206.200 Recovery = 97.07%						
K 766.490†	125406.0	50.5 mg/L	2.03	50.5 mg/L	2.03	4.01%
QC value within limits for K 766.490 Recovery = 101.03%						
Na 589.592†	648208.5	50.2 mg/L	2.91	50.2 mg/L	2.91	5.81%
QC value within limits for Na 589.592 Recovery = 100.33%						
Sr 407.771†	1079231.1	1.06 mg/L	0.027	1.06 mg/L	0.027	2.58%
QC value within limits for Sr 407.771 Recovery = 106.48%						
Li 670.784†	77316.8	1.02 mg/L	0.051	1.02 mg/L	0.051	5.05%
QC value within limits for Li 670.784 Recovery = 101.64%						

All analyte(s) passed QC.

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Sequence No.: 63 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 2/23/2011 9:48:05 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	166.0 kPa	0.50 L/min

Mean Data: CCB

Approved: February 24, 2011

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Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4962282.1						38397.60	0.77%
YRADIAL	291121.2						10020.66	3.44%
Ga 417.206	1312799.5						4859.76	0.37%
GaRADIAL	62969.2						2205.14	3.50%
Ag 328.068†	-136.8	-0.00140	mg/L	0.000852	-0.00140	mg/L	0.000852	60.89%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-33.4	-0.0189	mg/L	0.00710	-0.0189	mg/L	0.00710	37.47%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.3	-0.00082	mg/L	0.002344	-0.00082	mg/L	0.002344	284.17%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-2.2	-0.00055	mg/L	0.000048	-0.00055	mg/L	0.000048	8.68%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	48.7	0.00009	mg/L	0.000025	0.00009	mg/L	0.000025	28.67%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	81.6	0.00505	mg/L	0.000212	0.00505	mg/L	0.000212	4.20%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	5.0	0.0151	mg/L	0.04225	0.0151	mg/L	0.04225	280.62%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-3.8	-0.00014	mg/L	0.000117	-0.00014	mg/L	0.000117	81.41%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-4.0	0.00023	mg/L	0.000077	0.00023	mg/L	0.000077	33.71%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	6.8	-0.00016	mg/L	0.000024	-0.00016	mg/L	0.000024	14.47%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	65.5	0.00051	mg/L	0.001222	0.00051	mg/L	0.001222	238.01%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.7	-0.00033	mg/L	0.004435	-0.00033	mg/L	0.004435	>999.9%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	2.8	-0.00358	mg/L	0.006050	-0.00358	mg/L	0.006050	168.96%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	46.3	-0.00024	mg/L	0.000011	-0.00024	mg/L	0.000011	4.61%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.8	-0.00072	mg/L	0.000213	-0.00072	mg/L	0.000213	29.67%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	8.4	0.00009	mg/L	0.000324	0.00009	mg/L	0.000324	342.93%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	4.4	0.00007	mg/L	0.001138	0.00007	mg/L	0.001138	>999.9%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.4	0.00135	mg/L	0.000479	0.00135	mg/L	0.000479	35.41%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-2.4	0.00257	mg/L	0.005370	0.00257	mg/L	0.005370	208.91%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-24.8	-0.00217	mg/L	0.000746	-0.00217	mg/L	0.000746	34.39%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-77.9	-0.0116	mg/L	0.00067	-0.0116	mg/L	0.00067	5.75%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-124.3	-0.00034	mg/L	0.000102	-0.00034	mg/L	0.000102	30.26%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	3.9	-0.00068	mg/L	0.002441	-0.00068	mg/L	0.002441	359.77%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	25.0	-0.00116	mg/L	0.000216	-0.00116	mg/L	0.000216	18.64%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-213.3	-0.00684	mg/L	0.000120	-0.00684	mg/L	0.000120	1.75%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	-24.5	0.0100	mg/L	0.02688	0.0100	mg/L	0.02688	267.56%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	-37.0	-0.00199	mg/L	0.014544	-0.00199	mg/L	0.014544	729.76%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	289.2	-0.00035	mg/L	0.000026	-0.00035	mg/L	0.000026	7.33%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	162.9	0.00060	mg/L	0.001093	0.00060	mg/L	0.001093	180.93%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Approved: February 24, 2011

Pierre Morris

2.1.2 Metals ICP-MS Data

2.1.2.1 Summary Data

Login Number: L11020574

Department: Metals

Analyst: Ji Hu
Analyst #2: Erin Long

METHOD

Preparation: SW-846 3015

Analysis: SW-846 6020

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

Low Level Check: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG357403 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 22272
Approved By: Sheri Pfalzgraf

LABORATORY REPORT

L11020574

03/07/11 10:27

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-1DM-21811-W	L11020574-01	6020	1	19-FEB-11

Report Number: **L11020574**
Report Date : **March 7, 2011**

Sample Number: **L11020574-01**
Client ID: **SWMU-57-1DM-21811-W**
Matrix: **Water**
Workgroup Number: **WG357403**
Collect Date: **02/18/2011 15:45**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **JYH**
Dilution: **1**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **02/23/2011 08:10**
Cal Date: **02/25/2011 10:03**
Run Date: **02/25/2011 14:06**
File ID: **EL.022511.140618**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Antimony, Total	7440-36-0	0.00916		0.00100	0.000500
Arsenic, Total	7440-38-2	0.00174		0.00100	0.000500
Cadmium, Total	7440-43-9	0.00198		0.000600	0.000300
Chromium, Total	7440-47-3	0.0197		0.00200	0.00100
Selenium, Total	7782-49-2	0.000864	J	0.00100	0.000500
Thallium, Total	7440-28-0	0.000107	J	0.000200	0.000100

J Estimated value ; the analyte concentration was less than the low standard (LOQ)

2.1.2.2 QC Summary Data

Example 6020 Calculations
Perkin Elmer ELAN 6100

1.0 Initial Calibration (ICAL) Parameters
The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Final volume	100
Vi = Initial volume	40
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in (ug/L)	0.25

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Final volume	200
Vi = Initial volume	0.5
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in (ug/kg)	40

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:	**Example:**
Cx = Concentration calculated as received (wet basis)	40
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (ug/kg)	50

50 ug/kg = 0.050 mg/kg

Perkin Elmer ELAN ICP/MS

STANDARDS KEY

QC Std 1 - ICV
QC Std 2 - ICB
QC Std 3 - LLICV
QC Std 4 - ICSA
QC Std 5 - ICSAB
QC Std 6 - CCV
QC Std 7 - CCB
QC Std 8 - LLCCV

Calibration Solutions

Analyte	Stock Conc. (mg/L)	S1 (mg/L)	S2 (mg/L)	S3 (mg/L)	S4 (mg/L)
Al	10	0	0.0004	0.05	0.1
Sb	10	0	0.0004	0.05	0.1
As	10	0	0.0004	0.05	0.1
Ba	10	0	0.0004	0.05	0.1
Be	10	0	0.0004	0.05	0.1
Ca	1000	0	0.04	5	10
Cd	10	0	0.0004	0.05	0.1
Cr	10	0	0.0004	0.05	0.1
Co	10	0	0.0004	0.05	0.1
Cu	10	0	0.0004	0.05	0.1
Fe	1000	0	0.04	5	10
Pb	10	0	0.0004	0.05	0.1
Mg	1000	0	0.04	5	10
Mn	10	0	0.0004	0.05	0.1
Ni	10	0	0.0004	0.05	0.1
K	1000	0	0.04	5	10
Se	10	0	0.0004	0.05	0.1
Ag	10	0	0.0004	0.05	0.1
Na	1000	0	0.04	5	10
Tl	10	0	0.0004	0.05	0.1
V	10	0	0.0004	0.05	0.1
U	1000	0	0.0004	0.05	0.1
Zn	10	0	0.0004	0.05	0.1

Microbac Laboratories Inc.
Microwave Digestion Log

Workgroup: WG357315
Analyst: VC
Spike Analyst: VC
Run Date: 02/23/2011 08:10
Method: 3015
Balance: BAL016
Instrument: MW-2

SOP: ME407 Revison 11
Spike Solution: STD41894
Spike Witness: BRG
HNO3 Lot #: COA15168
Digestion Tubes Lot #: COA15251
ICP;WG353481 Filter Lot COA15138

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG357315-02	BLANK	1	40 mL	100 mL	208.481 g	208.468 g		
2	WG357258-01	FBLK	18	40 mL	100 mL	207.172 g	207.162 g		
3	WG357315-03	LCS	1	40 mL	100 mL	206.027 g	206.01 g	.25 mL	
4	L11020542-02	SAMP	18	40 mL	100 mL	206.876 g	206.872 g		02/24/11
5	L11020571-01	SAMP	1	40 mL	100 mL	206.206 g	206.182 g		02/28/11
6	L11020571-02	SAMP	1	40 mL	100 mL	207.71 g	207.705 g		02/28/11
7	L11020574-01	SAMP	1	40 mL	100 mL	207.476 g	207.43 g		03/04/11
8	L11020579-01	SAMP	1	40 mL	100 mL	207.215 g	207.202 g		03/04/11
9	WG357315-01	REF	1	40 mL	100 mL	209.408 g	209.385 g		
10	L11020579-02	SAMP	1	40 mL	100 mL	209.408 g	209.385 g		03/04/11
11	WG357315-04	MS	1	40 mL	100 mL	206.886 g	206.87 g	.25 mL	
12	WG357315-05	MSD	1	40 mL	100 mL	206.456 g	206.445 g	.25 mL	

Analyst: Vicki Collins

Reviewer: Brenda Gregory

MW_DIG - Modified 09/30/2009
PDF ID: 1926596
Report generated: 02/23/2011 10:18

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 022411C.REP
Analyst1: EDL Analyst2: JYH
Method: 6020 SOP: ME700 Rev: 6
Maintenance Log ID: 36533

Calibration Std: STD43845 ICV Std: STD43557 Post Spike: STD42704
ICSA: STD43561 ICSAB: STD44048 Int. Std: STD43721
CCV: STD43914 LLCCV: STD44016

Workgroups: 357403

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	EL.022411.133413	Blank	Blank		1		02/24/11 13:34
2	EL.022411.134057	WG357545-01	Calibration Point		1		02/24/11 13:40
3	EL.022411.134742	WG357545-02	Calibration Point		1		02/24/11 13:47
4	EL.022411.135427	WG357545-03	Calibration Point		1		02/24/11 13:54
5	EL.022411.140113	WG357545-04	Calibration Point		1		02/24/11 14:01
6	EL.022411.140759	WG357545-05	Initial Calibration Verification		1		02/24/11 14:07
7	EL.022411.141523	WG357545-06	Initial Calib Blank		1		02/24/11 14:15
8	EL.022411.142210	WG357545-07	Low Level Initial Calibration V		1		02/24/11 14:22
9	EL.022411.142859	WG357545-08	Interference Check		1		02/24/11 14:28
10	EL.022411.143546	WG357545-09	Interference Check		1		02/24/11 14:35
11	EL.022411.144234	WG357545-10	CCV		1		02/24/11 14:42
12	EL.022411.144950	WG357545-11	CCB		1		02/24/11 14:49
13	EL.022411.145634	WG357403-03	Louisville Chem Requ		1		02/24/11 14:56
14	EL.022411.150319	WG357315-02	Method/Prep Blank	40/100	1		02/24/11 15:03
15	EL.022411.151003	WG357315-03	Laboratory Control S	40/100	1		02/24/11 15:10
16	EL.022411.151649	WG357258-01	Fluid Blank		1		02/24/11 15:16
17	EL.022411.152334	L11020542-02	60500-SSP0077	40/100	2		02/24/11 15:23
18	EL.022411.153020	WG357315-01	Reference Sample		5	L11020579-02	02/24/11 15:30
19	EL.022411.153706	WG357315-04	Matrix Spike	40/100	5	L11020579-02	02/24/11 15:37
20	EL.022411.154353	WG357315-05	Matrix Spike Duplica	40/100	5	L11020579-02	02/24/11 15:43
21	EL.022411.155040	WG357403-01	Post Digestion Spike		5	L11020579-02	02/24/11 15:50
22	EL.022411.155727	WG357403-02	Serial Dilution		25	L11020579-02	02/24/11 15:57
23	EL.022411.160414	WG357545-12	CCV		1		02/24/11 16:04
24	EL.022411.161130	WG357545-13	CCB		1		02/24/11 16:11
25	EL.022411.161815	L11020542-02	60500-SSP0077	40/100	100		02/24/11 16:18
26	EL.022411.162501	WG357545-14	CCV		1		02/24/11 16:25
27	EL.022411.163217	WG357545-15	CCB		1		02/24/11 16:32

Page: 1 Approved: February 24, 2011

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 022511A.REP
Analyst1: EDL Analyst2: JYH
Method: 6020 SOP: ME700 Rev: 6
Maintenance Log ID: 36565

Calibration Std: STD43845 ICV Std: STD43557 Post Spike: STD42704
ICSA: STD43561 ICSAB: STD44048 Int. Std: STD43721
CCV: STD43914 LLCCV: STD44016

Workgroups: 357485, 357403, 357219, 357487, 357404

Comments: Due to sequencing error, samples analyzed at 14:21, 14:35, 14:41, and 15:02 were not reported.

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	EL.022511.093612	Blank	Blank		1		02/25/11 09:36
2	EL.022511.094256	WG357624-01	Calibration Point		1		02/25/11 09:42
3	EL.022511.094941	WG357624-02	Calibration Point		1		02/25/11 09:49
4	EL.022511.095626	WG357624-03	Calibration Point		1		02/25/11 09:56
5	EL.022511.100312	WG357624-04	Calibration Point		1		02/25/11 10:03
6	EL.022511.100958	WG357624-05	Initial Calibration Verification		1		02/25/11 10:09
7	EL.022511.101722	WG357624-06	Initial Calib Blank		1		02/25/11 10:17
8	EL.022511.102409	WG357624-07	Low Level Initial Calibration V		1		02/25/11 10:24
9	EL.022511.103058	WG357624-08	Interference Check		1		02/25/11 10:30
10	EL.022511.103746	WG357624-09	Interference Check		1		02/25/11 10:37
11	EL.022511.104433	WG357624-10	CCV		1		02/25/11 10:44
12	EL.022511.105149	WG357624-11	CCB		1		02/25/11 10:51
13	EL.022511.110914	WG357433-03	Method/Prep Blank	40/100	1		02/25/11 11:09
14	EL.022511.111602	WG357433-04	Laboratory Control S	40/100	1		02/25/11 11:16
15	EL.022511.112250	WG357433-02	Reference Sample		2	L11020621-01	02/25/11 11:22
16	EL.022511.112938	WG357433-07	Matrix Spike	40/100	2	L11020621-01	02/25/11 11:29
17	EL.022511.113626	WG357433-08	Duplicate	40/100	2	L11020621-01	02/25/11 11:36
18	EL.022511.114313	L11020612-03	AV-OU7-VBII-C2-022111	40/100	1		02/25/11 11:43
19	EL.022511.114959	L11020612-02	AV-OU7-VBII-C1-022111	40/100	1		02/25/11 11:49
20	EL.022511.115645	WG357485-01	Post Digestion Spike		1	L11020612-02	02/25/11 11:56
21	EL.022511.120332	WG357485-02	Serial Dilution		5	L11020612-02	02/25/11 12:03
22	EL.022511.121018	WG357624-12	CCV		1		02/25/11 12:10
23	EL.022511.121734	WG357624-13	CCB		1		02/25/11 12:17
24	EL.022511.122420	L11020609-01	CLAMW12-110222	40/100	5		02/25/11 12:24
25	EL.022511.123107	L11020609-02	LF1MW01B-110222	40/100	5		02/25/11 12:31
26	EL.022511.123754	L11020609-03	LF1MW04A-110222	40/100	5		02/25/11 12:37
27	EL.022511.124442	L11020609-04	LF7MW04-110222	40/100	5		02/25/11 12:44
28	EL.022511.125130	L11020609-05	LFD02-110222	40/100	5		02/25/11 12:51
29	EL.022511.125819	WG357433-01	Reference Sample		5	L11020609-06	02/25/11 12:58
30	EL.022511.130508	WG357433-05	Matrix Spike	40/100	5	L11020609-06	02/25/11 13:05
31	EL.022511.131157	WG357433-06	Matrix Spike Duplica	40/100	5	L11020609-06	02/25/11 13:11
32	EL.022511.131844	L11020609-08	MW95-01-110222	40/100	5		02/25/11 13:18
33	EL.022511.132531	WG357624-14	CCV		1		02/25/11 13:25
34	EL.022511.133247	WG357624-15	CCB		1		02/25/11 13:32

Page: 1 Approved: February 28, 2011

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 022511A.REP
Analyst1: EDL Analyst2: JYH
Method: 6020 SOP: ME700 Rev: 6
Maintenance Log ID: 36565

Calibration Std: STD43845 ICV Std: STD43557 Post Spike: STD42704
ICSA: STD43561 ICSAB: STD44048 Int. Std: STD43721
CCV: STD43914 LLCCV: STD44016

Workgroups: 357485, 357403, 357219, 357487, 357404

Comments: Due to sequencing error, samples analyzed at 14:21, 14:35, 14:41, and 15:02 were not reported.

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	EL.022511.134603	WG357403-03	Louisville Chem Requ		1		02/25/11 13:46
36	EL.022511.135249	L11020571-01	SWMU-57-21711-EB	40/100	1		02/25/11 13:52
37	EL.022511.135933	L11020571-02	SWMU-57-21711-FB	40/100	1		02/25/11 13:59
38	EL.022511.140618	L11020574-01	SWMU-57-1DM-21811-W	40/100	1		02/25/11 14:06
39	EL.022511.141303	L11020579-01	LH18/24-SP650-6445-GRAB	40/100	5		02/25/11 14:13
40	EL.022511.142128	L11020571-02	SWMU-57-21711-FB		5		02/25/11 14:21
41	EL.022511.142814	WG357485-03	Post Digestion Spike		5	L11020609-01	02/25/11 14:28
42	EL.022511.143501	WG357485-04	Serial Dilution		25	L11020609-01	02/25/11 14:35
43	EL.022511.144148	L11020571-02	SWMU-57-21711-FB		2		02/25/11 14:41
44	EL.022511.144835	WG357624-16	CCV		1		02/25/11 14:48
45	EL.022511.145551	WG357624-17	CCB		1		02/25/11 14:55
46	EL.022511.150236	L11020571-02	SWMU-57-21711-FB		1		02/25/11 15:02
47	EL.022511.150923	WG357624-18	CCV		1		02/25/11 15:09
48	EL.022511.151639	WG357624-19	CCB		1		02/25/11 15:16
49	EL.022511.152324	WG357434-02	Method/Prep Blank	4/100	1		02/25/11 15:23
50	EL.022511.153011	WG357434-03	Laboratory Control S	4/100	1		02/25/11 15:30
51	EL.022511.153658	WG357088-01	Fluid Blank		1		02/25/11 15:36
52	EL.022511.154345	L11020502-17	GB-81-5	4/100	5		02/25/11 15:43
53	EL.022511.155033	WG357434-01	Reference Sample		5	L11020506-11	02/25/11 15:50
54	EL.022511.155719	WG357434-04	Matrix Spike	4/100	5	L11020506-11	02/25/11 15:57
55	EL.022511.160403	WG357434-05	Matrix Spike Duplica	4/100	5	L11020506-11	02/25/11 16:04
56	EL.022511.161048	L11020506-10	GB-66-1	4/100	5		02/25/11 16:10
57	EL.022511.161740	WG357487-01	Post Digestion Spike		5	L11020506-10	02/25/11 16:17
58	EL.022511.162426	WG357487-02	Serial Dilution		25	L11020506-10	02/25/11 16:24
59	EL.022511.163112	WG357624-20	CCV		1		02/25/11 16:31
60	EL.022511.163828	WG357624-21	CCB		1		02/25/11 16:38
61	EL.022511.164513	WG357299-03	Method/Prep Blank	.5/200	1		02/25/11 16:45
62	EL.022511.165200	WG357299-04	Laboratory Control S	.5/200	1		02/25/11 16:52
63	EL.022511.165846	L11020318-01	BATA-002	.508/200	5		02/25/11 16:58
64	EL.022511.170533	L11020318-02	BATA-003	.519/200	5		02/25/11 17:05
65	EL.022511.171221	L11020318-03	BATA-004	.505/200	5		02/25/11 17:12
66	EL.022511.171909	L11020318-04	BATA-001	.501/200	5		02/25/11 17:19
67	EL.022511.172557	L11020318-05	TD-001	.534/200	5		02/25/11 17:25
68	EL.022511.173243	L11020318-06	TD-003	.514/200	5		02/25/11 17:32

Page: 2 Approved: February 28, 2011

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 022511A.REP
Analyst1: EDL Analyst2: JYH
Method: 6020 SOP: ME700 Rev: 6
Maintenance Log ID: 36565

Calibration Std: STD43845 ICV Std: STD43557 Post Spike: STD42704
ICSA: STD43561 ICSAB: STD44048 Int. Std: STD43721
CCV: STD43914 LLCCV: STD44016

Workgroups: 357485, 357403, 357219, 357487, 357404

Comments: Due to sequencing error, samples analyzed at 14:21, 14:35, 14:41, and 15:02 were not reported.

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	EL.022511.173928	WG357404-01	Post Digestion Spike		5	L11020318-06	02/25/11 17:39
70	EL.022511.174614	WG357404-02	Serial Dilution		25	L11020318-06	02/25/11 17:46
71	EL.022511.175300	WG357624-22	CCV		1		02/25/11 17:53
72	EL.022511.180016	WG357624-23	CCB		1		02/25/11 18:00
73	EL.022511.180701	L11020318-07	TD-002	.532/200	5		02/25/11 18:07
74	EL.022511.181347	WG357299-01	Reference Sample		5	L11020318-08	02/25/11 18:13
75	EL.022511.182033	WG357299-05	Matrix Spike	.507/200	5	L11020318-08	02/25/11 18:20
76	EL.022511.182720	WG357299-06	Matrix Spike Duplica	.507/200	5	L11020318-08	02/25/11 18:27
77	EL.022511.183407	WG357299-07	Matrix Spike	.5/200	5	L11020571-06	02/25/11 18:34
78	EL.022511.184054	WG357299-08	Matrix Spike Duplica	.5/200	5	L11020571-06	02/25/11 18:40
79	EL.022511.184742	L11020571-05	SWMU-57-21711-DUP	.515/200	5		02/25/11 18:47
80	EL.022511.185430	WG357299-02	Reference Sample		5	L11020571-06	02/25/11 18:54
81	EL.022511.190118	L11020571-07	SWMU-57-21711-B-2-SS-2.5	.536/200	5		02/25/11 19:01
82	EL.022511.190805	L11020571-08	SWMU-57-21711-B-2-SS-5	.513/200	5		02/25/11 19:08
83	EL.022511.191451	WG357624-24	CCV		1		02/25/11 19:14
84	EL.022511.192207	WG357624-25	CCB		1		02/25/11 19:22
85	EL.022511.192852	L11020571-09	SWMU-57-21711-B-1-SS-2.5	.502/200	5		02/25/11 19:28
86	EL.022511.193538	L11020571-10	SWMU-57-21711-B-6-SS-2.5	.518/200	5		02/25/11 19:35
87	EL.022511.194224	L11020571-11	SWMU-57-21811-B3-SS-2	.532/200	5		02/25/11 19:42
88	EL.022511.194911	L11020571-12	SWMU-57-21811-B4-SS-2.5	.542/200	5		02/25/11 19:49
89	EL.022511.195557	L11020571-13	SWMU-57-21811-B7-SS-2	.522/200	5		02/25/11 19:55
90	EL.022511.200244	L11020506-07	GB-61-1		100		02/25/11 20:02
91	EL.022511.200930	WG357624-26	CCV		1		02/25/11 20:09
92	EL.022511.201646	WG357624-27	CCB		1		02/25/11 20:16
93	EL.022511.202333	WG357624-28	QC Std 8		1		02/25/11 20:23

Comments

Seq.	Rerun	Dil.	Reason	Analytes
40			Data not used.	
42			Data not used.	
43			Data not used.	
46				

Page: 3 Approved: February 28, 2011

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP
Dataset: 022511A.REP
Analyst1: EDL
Analyst2: JYH
Method: 6020
SOP: ME700
Rev: 6
Maintenance Log ID: 36565

Calibration Std: STD43845
ICV Std: STD43557
Post Spike: STD42704
ICSA: STD43561
ICSAB: STD44048
Int. Std: STD43721
CCV: STD43914
LLCCV: STD44016

Workgroups: 357485, 357403, 357219, 357487, 357404

Comments: Due to sequencing error, samples analyzed at 14:21, 14:35, 14:41, and 15:02 were not reported.

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time

Seq.	Rerun	Dil.	Reason	Analytes
			Data not used.	
90			Data not used.	

Approved: February 28, 2011
Maren Berry

Microbac Laboratories Inc.

Data Checklist

Date: 24-FEB-2011
Analyst: EDL
Analyst: JYH
Method: 6020
Instrument: ELAN-ICP
Curve Workgroup: 357545
Runlog ID: 39193
Analytical Workgroups: 357403

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	X
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	542, 579
Client Forms	X
Level X	
Level 3	579
Level 4	542
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	EDL
Secondary Reviewer	SLP
Comments	

Primary Reviewer:
24-FEB-2011

Secondary Reviewer:
02-MAR-2011

CHECKLIST1 - Modified 03/05/2008
Generated: MAR-02-2011 19:10:43

Microbac Laboratories Inc.

Data Checklist

Date: 25-FEB-2011
Analyst: EDL
Analyst: JYH
Method: 6020
Instrument: MS-ICP
Curve Workgroup: 357624
Runlog ID: 39214
Analytical Workgroups: 357485, 357403, 357219, 357487, 357404

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	X
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	609, 612, 571, 574, 579, 502, 506, 318
Client Forms	X
Level X	
Level 3	579, 502, 506
Level 4	609, 612, 571, 574, 318
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	EDL
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
28-FEB-2011
Erin D. Long

Secondary Reviewer:
28-FEB-2011
Maren Berry

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-28-2011 10:58:14

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6020 AAB#: WG357403

Login Number: L11020574

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-1DM-21811-W	01	02/18/11					02/23/11	4.7	180		02/25/11	6.9	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1930356
Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L11020574	Work Group:	WG357403
Blank File ID:	EL.022411.150319	Blank Sample ID:	WG357315-02
Prep Date:	02/23/11 08:10	Instrument ID:	ELAN-ICP
Analyzed Date:	02/24/11 15:03	Method:	6020
Analyst:	JYH		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357315-03	EL.022411.151003	02/24/11 15:10	01
SWMU-57-1DM-21811-W	L11020574-01	EL.022511.140618	02/25/11 14:06	01

Report Name: BLANK_SUMMARY
PDF File ID: 1930357
Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L11020574 Prep Date:02/23/11 08:10 Sample ID:WG357315-02
Instrument ID:ELAN-ICP Run Date:02/24/11 15:03 Prep Method:3015
File ID:EL.022411.150319 Analyst:JYH Method:6020
Workgroup (AAB#):WG357403 Matrix:Water Units:mg/L
Contract #: Cal ID:ELAN-I-24-FEB-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Antimony, Total	0.000500	0.00100	0.000500	1	U
Arsenic, Total	0.000500	0.00100	0.000500	1	U
Cadmium, Total	0.000300	0.000600	0.000300	1	U
Chromium, Total	0.00100	0.00200	0.00100	1	U
Selenium, Total	0.000500	0.00100	0.000500	1	U
Thallium, Total	0.000100	0.000200	0.000100	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1930358
25-FEB-2011 15:41

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357315-03
Instrument ID: ELAN-ICP Run Time: 15:10 Prep Method: 3015
File ID: EL.022411.151003 Analyst: JYH Method: 6020
Workgroup (AAB#): WG357403 Matrix: Water Units: mg/L
QC Key: DOD4 Lot#: STD41894 Cal ID: ELAN-I-24-FEB-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0589	94.3	80 - 120	
Arsenic, Total	0.0625	0.0597	95.5	80 - 120	
Cadmium, Total	0.0625	0.0582	93.2	80 - 120	
Chromium, Total	0.0625	0.0661	106	80 - 120	
Selenium, Total	0.0625	0.0544	87.1	80 - 120	
Thallium, Total	0.0625	0.0633	101	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1930359
Report generated: 02/25/2011 15:41

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11020574 Cal ID: ELAN-ICP- Worknum:WG357403

Instrument ID:ELAN-ICP Contract #: Method:6020

Parent ID:WG357315-01 File ID:EL.022411.153020 Dil:5 Matrix:WATER

Sample ID:WG357315-04 MS File ID:EL.022411.153706 Dil:5 Units:mg/L

Sample ID:WG357315-05 MSD File ID:EL.022411.154353 Dil:5

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony	ND	0.0625	0.0675	108	0.0625	0.0678	108	0.488	80 - 120	20	
Arsenic	0.00474	0.0625	0.0700	104	0.0625	0.0705	105	0.796	80 - 120	20	
Cadmium	ND	0.0625	0.0687	110	0.0625	0.0667	107	2.94	80 - 120	20	
Chromium	0.00316	0.0625	0.0692	106	0.0625	0.0691	106	0.0814	80 - 120	20	
Selenium	0.0164	0.0625	0.0812	104	0.0625	0.0744	92.7	8.81	80 - 120	20	
Thallium	0.000573	0.0625	0.0651	103	0.0625	0.0676	107	3.81	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008

PDF File ID:1930360

Report generated 02/25/2011 15:41

Microbac Laboratories Inc.
Serial Dilution Report

Login: L11020574 **Worknum:** WG357403
Instrument: ELAN-ICP **Method:** 6020
Serial Dil: WG357403-02 **File ID:** EL.022411.155727 **Dil:** 25 **Units:** ug/L
Sample: L11020579-02 **File ID:** EL.022411.153020 **Dil:** 5

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	ND	U		
Arsenic	1.895	F	ND	U		
Cadmium	ND	U	ND	U		
Chromium	ND	U	ND	U		
Selenium	6.55	X	8.6	F	31.30	
Thallium	.229	F	ND	U		

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 100 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 100 times the MDL.

SERIAL_DIL - Modified 09/22/2008
PDF File ID: 1930354
02/25/2011 15:41

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11020574 **Worknum:** WG357403
Instrument ID: ELAN-ICP **Method:** 6020
Post Spike ID: WG357403-01 **File ID:** EL.022411.155040 **Dil:** 5 **Units:** ug/L
Sample ID: L11020579-02 **File ID:** EL.022411.153020 **Dil:** 5 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	40.9		0	U	50	81.7	75 - 125	
ARSENIC	41.3		0.379	F	50	81.8	75 - 125	
CADMIUM	41.7		0	U	50	83.5	75 - 125	
CHROMIUM	40.6		0	U	50	81.3	75 - 125	
SELENIUM	41.6		1.31		50	80.5	75 - 125	
THALLIUM	41.2		0.0458	F	50	82.4	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1930355
Report generated: 02/25/2011 15:41

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L11020574**	Workgroup (AAB#):	**WG357403**
Analytical Method:	**6020**	Instrument ID:	**ELAN-ICP**
ICAL Worknum:	**WG357545**	Initial Calibration Date:	**24-FEB-2011 14:01**

	WG357545-01		WG357545-02		WG357545-03		WG357545-04			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ANTIMONY	0	110	.4	1520	50	187000	100	363000	1	
ARSENIC	0	-157	.4	259	50	51800	100	102000	.999989	
CADMIUM	0	-1.29	.4	444	50	56300	100	110000	.999997	
CHROMIUM	0	8300	.4	11300	50	425000	100	825000	.999974	
SELENIUM	0	2.25	.4	42.0	50	4730	100	9260	.999976	
THALLIUM	0	20.3	.4	2770	50	360000	100	700000	.999892	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L11020574**	Workgroup (AAB#):	**WG357403**
Analytical Method:	**6020**	Instrument ID:	**ELAN-ICP**
ICAL Worknum:	**WG357624**	Initial Calibration Date:	**25-FEB-2011 10:03**

	WG357624-01		WG357624-02		WG357624-03		WG357624-04			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ANTIMONY	0	35.1	.4	1360	50	162000	100	314000	.99997	
ARSENIC	0	-143	.4	220	50	44200	100	85200	.999928	
CADMIUM	0	2.14	.4	368	50	47300	100	91000	.999922	
CHROMIUM	0	8090	.4	11000	50	366000	100	709000	.999994	
SELENIUM	0	7.27	.4	42.0	50	4080	100	7540	.999506	
THALLIUM	0	17.7	.4	2610	50	310000	100	609000	.999997	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357545-06
Instrument ID: ELAN-ICP Run Time: 14:15 Method: 6020
File ID: EL.022411.141523 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG357403 Cal ID: ELAN-ICP - 24-FEB-11
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ARSENIC	.2	.4	.2	U
CADMIUM	.12	.24	.12	U
CHROMIUM	.4	.8	.4	U
ANTIMONY	.2	.4	.2	U
SELENIUM	.2	.4	.2	U
THALLIUM	.04	.08	.04	U

U = Result is less than 2 x MDL

F = Result is between MDL and 2 x MDL

* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1930365
Report generated 02/25/2011 15:41

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11020574 Run Date: 02/25/2011 Sample ID: WG357624-06
Instrument ID: ELAN-ICP Run Time: 10:17 Method: 6020
File ID: EL.022511.101722 Analyst: JYH Units: ug/L
Workgroup (AAB#): WG357403 Cal ID: ELAN-ICP - 25-FEB-11
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ARSENIC	.2	.4	.2	U
CADMIUM	.12	.24	.12	U
CHROMIUM	.4	.8	.4	U
ANTIMONY	.2	.4	.2	U
SELENIUM	.2	.4	.2	U
THALLIUM	.04	.08	.04	U

U = Result is less than 2 x MDL

F = Result is between MDL and 2 x MDL

* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1930365
Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357545-11

Instrument ID: ELAN-ICP Run Time: 14:49 Method: 6020

File ID: EL.022411.144950 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 24-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1930368
Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357545-13

Instrument ID: ELAN-ICP Run Time: 16:11 Method: 6020

File ID: EL.022411.161130 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 24-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1930368
Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020574 Run Date: 02/25/2011 Sample ID: WG357624-11

Instrument ID: ELAN-ICP Run Time: 10:51 Method: 6020

File ID: EL.022511.105149 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 25-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1930368
Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020574 Run Date: 02/25/2011 Sample ID: WG357624-15

Instrument ID: ELAN-ICP Run Time: 13:32 Method: 6020

File ID: EL.022511.133247 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 25-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1930368
Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11020574 Run Date: 02/25/2011 Sample ID: WG357624-17

Instrument ID: ELAN-ICP Run Time: 14:55 Method: 6020

File ID: EL.022511.145551 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 25-FEB-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Arsenic	0.200	0.400	0.200	U
Cadmium	0.120	0.240	0.120	U
Chromium	0.400	0.800	0.400	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1930368
Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357545-05

Instrument ID: ELAN-ICP Run Time: 14:07 Method: 6020

File ID: EL.022411.140759 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 24-FEB-11

QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	48.6	97.2	90 - 110	
Arsenic		50	49.9	99.8	90 - 110	
Cadmium		50	47.9	95.8	90 - 110	
Chromium		50	49.8	99.6	90 - 110	
Selenium		50	50.5	101	90 - 110	
Thallium		50	48.9	97.8	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008

PDF File ID: 1930364

Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11020574 Run Date: 02/25/2011 Sample ID: WG357624-05

Instrument ID: ELAN-ICP Run Time: 10:09 Method: 6020

File ID: EL.022511.100958 Analyst: JYH Units: ug/L

Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 25-FEB-11

QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	49.0	98.0	90 - 110	
Arsenic		50	50.0	99.9	90 - 110	
Cadmium		50	47.7	95.3	90 - 110	
Chromium		50	50.9	102	90 - 110	
Selenium		50	50.2	100	90 - 110	
Thallium		50	49.5	99.0	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008

PDF File ID: 1930364

Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357545-10

Instrument ID: ELAN-ICP Run Time: 14:42 Method: 6020

File ID: EL.022411.144234 Analyst: JYH QC Key: DOD4

Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 24-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.2	ug/L	100	90 - 110		
Arsenic		50.0	50.1	ug/L	100	90 - 110		
Cadmium		50.0	50.7	ug/L	101	90 - 110		
Chromium		50.0	49.0	ug/L	98.0	90 - 110		
Selenium		50.0	50.5	ug/L	101	90 - 110		
Thallium		50.0	49.7	ug/L	99.4	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1930367

Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357545-12

Instrument ID: ELAN-ICP Run Time: 16:04 Method: 6020

File ID: EL.022411.160414 Analyst: JYH QC Key: DOD4

Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 24-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	48.5	ug/L	97.0	90 - 110		
Arsenic		50.0	48.9	ug/L	97.9	90 - 110		
Cadmium		50.0	49.0	ug/L	98.1	90 - 110		
Chromium		50.0	48.4	ug/L	96.9	90 - 110		
Selenium		50.0	48.3	ug/L	96.7	90 - 110		
Thallium		50.0	48.2	ug/L	96.3	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1930367

Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020574 Run Date: 02/25/2011 Sample ID: WG357624-10

Instrument ID: ELAN-ICP Run Time: 10:44 Method: 6020

File ID: EL.022511.104433 Analyst: JYH QC Key: DOD4

Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 25-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	49.6	ug/L	99.2	90 - 110		
Arsenic		50.0	49.1	ug/L	98.3	90 - 110		
Cadmium		50.0	48.8	ug/L	97.7	90 - 110		
Chromium		50.0	50.6	ug/L	101	90 - 110		
Selenium		50.0	49.1	ug/L	98.2	90 - 110		
Thallium		50.0	49.7	ug/L	99.3	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1930367

Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020574 Run Date: 02/25/2011 Sample ID: WG357624-14

Instrument ID: ELAN-ICP Run Time: 13:25 Method: 6020

File ID: EL.022511.132531 Analyst: JYH QC Key: DOD4

Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 25-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.2	ug/L	100	90 - 110		
Arsenic		50.0	48.9	ug/L	97.8	90 - 110		
Cadmium		50.0	48.5	ug/L	97.0	90 - 110		
Chromium		50.0	49.6	ug/L	99.2	90 - 110		
Selenium		50.0	49.3	ug/L	98.5	90 - 110		
Thallium		50.0	48.7	ug/L	97.4	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1930367

Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020574 Run Date: 02/25/2011 Sample ID: WG357624-16

Instrument ID: ELAN-ICP Run Time: 14:48 Method: 6020

File ID: EL.022511.144835 Analyst: JYH QC Key: DOD4

Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 25-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	51.9	ug/L	104	90 - 110		
Arsenic		50.0	50.3	ug/L	101	90 - 110		
Cadmium		50.0	51.4	ug/L	103	90 - 110		
Chromium		50.0	50.8	ug/L	102	90 - 110		
Selenium		50.0	49.5	ug/L	99.0	90 - 110		
Thallium		50.0	49.6	ug/L	99.1	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1930367

Report generated 02/25/2011 15:41

Microbac Laboratories Inc.
LOW LEVEL CALIBRATION VERIFICATION

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357545-07
Instrument ID: ELAN-ICP Run Time: 14:22 Method: 6020
File ID: EL.022411.142210 Analyst: JYH QC Key: DOD4
Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 24-FEB-11
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Cadmium		0.200	0.202	ug/L	101	80 - 120		
Thallium		0.0800	0.0941	ug/L	118	80 - 120		

* Exceeds LIMITS Criteria

LLCCV - Modified 1/7/2010
PDF File ID: 1930369
Report generated 03/04/2011 16:09

Microbac Laboratories Inc.
LOW LEVEL CALIBRATION VERIFICATION

Login Number: L11020574 Run Date: 02/25/2011 Sample ID: WG357624-07
Instrument ID: ELAN-ICP Run Time: 10:24 Method: 6020
File ID: EL.022511.102409 Analyst: JYH QC Key: DOD4
Workgroup (AAB#): WG357403 Cal ID: ELAN-I - 25-FEB-11
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Cadmium		0.200	0.202	ug/L	101	80 - 120		
Thallium		0.0800	0.0800	ug/L	100	80 - 120		

* Exceeds LIMITS Criteria

LLCCV - Modified 1/7/2010
PDF File ID: 1930369
Report generated 03/04/2011 16:09

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11020574 **Workgroup (AAB#):** WG357403
Instrument ID: ELAN-ICP **Method:** 6020
Sol. A : WG357545-08 **File ID:** EL.022411.142859 **Units:** ug/L
Sol. AB : WG357545-09 **File ID:** EL.022411.143546 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0541	NS	100	104	104	
Arsenic	NS	-0.0124	NS	100	101	101	
Cadmium	NS	0.0607	NS	100	102	102	
Chromium	NS	0.108	NS	100	95.9	95.9	
Selenium	NS	-0.0119	NS	100	99.0	99.0	
Thallium	NS	0.0359	NS	100	97.4	97.4	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 1930366
Report generated 02/25/2011 15:41

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11020574 **Workgroup (AAB#):** WG357403
Instrument ID: ELAN-ICP **Method:** 6020
Sol. A : WG357624-08 **File ID:** EL.022511.103058 **Units:** ug/L
Sol. AB : WG357624-09 **File ID:** EL.022511.103746 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0521	NS	100	101	101	
Arsenic	NS	0.0122	NS	100	99.5	99.5	
Cadmium	NS	0.0877	NS	100	105	105	
Chromium	NS	0.0419	NS	100	102	102	
Selenium	NS	-0.0208	NS	100	96.9	96.9	
Thallium	NS	0.0173	NS	100	98.8	98.8	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

ICS - Modified 03/06/2008
PDF File ID: 1930366
Report generated 02/25/2011 15:41

Microbac Laboratories Inc.

INTERNAL STANDARD REPORT

Login: L11020574 **Analytical Method** 6020
Analytical Workgroup: WG357403 **Matrix:** 1
Instrument: ELAN-ICP **Analyst:** JYH
ICAL Date: 24-FEB-2011 13:40

			BISMUTH	GERMANIUM	INDIUM	TERBIUM
Sample	Type	Run Date	% Rec	% Rec	% Rec	% Rec
L11020579-02	SAMP	24-FEB-2011 15:30	90.624	94.18	92.081	92.671
WG357258-01	FBLK	24-FEB-2011 15:16	100.264	94.464	97.343	101.254
WG357315-01	REF	24-FEB-2011 15:30	90.624	94.18	92.081	92.671
WG357315-02	BLANK	24-FEB-2011 15:03	98.59	94.768	96.442	98.818
WG357315-03	LCS	24-FEB-2011 15:10	98.877	94.043	97.133	99.335
WG357315-04	MS	24-FEB-2011 15:37	101.099	97.163	95.957	98.615
WG357315-05	MSD	24-FEB-2011 15:43	88.538	92.673	88.65	92.98
WG357403-01	PSPK	24-FEB-2011 15:50	98.426	98.055	96.737	98.62
WG357403-02	SERIAL	24-FEB-2011 15:57	100.29	98.622	98.879	99.159
WG357403-03	QCMRL	24-FEB-2011 14:56	96.425	94.117	91.73	93.411
WG357545-05	ICV	24-FEB-2011 14:07	103.362	97.392	98.723	99.955
WG357545-06	ICB	24-FEB-2011 14:15	102.481	98.465	97.979	98.873
WG357545-07	LLICV	24-FEB-2011 14:22	89.676	92.273	87.727	91.561
WG357545-08	ICS	24-FEB-2011 14:28	89.76	91.112	89.901	89.398
WG357545-09	ICS	24-FEB-2011 14:35	88.297	90.58	85.936	86.148
WG357545-10	CCV	24-FEB-2011 14:42	88.923	90.873	87.979	88.357
WG357545-11	CCB	24-FEB-2011 14:49	94.77	94.45	92.5	94.345
WG357545-12	CCV	24-FEB-2011 16:04	106.924	101.68	101.114	100.877
WG357545-13	CCB	24-FEB-2011 16:11	102.71	100.075	99.452	102.592

Acceptance criteria: 30% - 120% Underlined recoveries are out of range
Acceptance criteria for CCVs and CCBs for method SW846-6020: 80% - 120%

INT_STD_ICPMS - Modified 07/28/2010
PDF File ID: 1930362
Report generated: 02/25/2011 15:41

Microbac Laboratories Inc.

INTERNAL STANDARD REPORT

Login: L11020574 **Analytical Method** 6020
Analytical Workgroup: WG357403 **Matrix:** 1
Instrument: ELAN-ICP **Analyst:** JYH
ICAL Date: 25-FEB-2011 09:42

			BISMUTH	GERMANIUM	INDIUM	TERBIUM
Sample	Type	Run Date	% Rec	% Rec	% Rec	% Rec
L11020574-01	SAMP	25-FEB-2011 14:06	93.584	93.673	95.967	98.243
WG357403-03	QCMRL	25-FEB-2011 13:46	99.502	97.479	98.693	96.497
WG357624-05	ICV	25-FEB-2011 10:09	96.837	96.841	97.744	98.965
WG357624-06	ICB	25-FEB-2011 10:17	94.749	96.872	97.555	97.298
WG357624-07	LLICV	25-FEB-2011 10:24	93.397	96.734	98.865	98.139
WG357624-08	ICS	25-FEB-2011 10:30	90.127	94.197	95.065	94.777
WG357624-09	ICS	25-FEB-2011 10:37	87.049	87.514	90.298	92.23
WG357624-10	CCV	25-FEB-2011 10:44	91.135	91.32	94.396	97.254
WG357624-11	CCB	25-FEB-2011 10:51	92.766	91.237	93.604	95.948
WG357624-14	CCV	25-FEB-2011 13:25	90.387	92.921	92.618	92.447
WG357624-15	CCB	25-FEB-2011 13:32	94.219	94.121	96.705	95.857
WG357624-16	CCV	25-FEB-2011 14:48	87.123	89.809	89.49	88.254
WG357624-17	CCB	25-FEB-2011 14:55	91.905	92.785	92.495	92.77

Acceptance criteria: 30% - 120% Underlined recoveries are out of range
Acceptance criteria for CCVs and CCBs for method SW846-6020: 80% - 120%

INT_STD_ICPMS - Modified 07/28/2010
PDF File ID: 1930362
Report generated: 02/25/2011 15:41

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L11020574 **Date:** 12/07/2010
Insturment ID: ELAN-ICP **Method:** 6020

Analyte	Integration Time (Sec.)	Concentration (ug/L)
Antimony	1.00	100.0
Arsenic	1.00	100.0
Barium	1.00	100.0
Cadmium	1.00	100.0
Chromium	1.00	100.0
Cobalt	1.00	100.0
Copper	1.00	100.0
Lead	1.00	100.0
Manganese	1.00	100.0
Nickel	1.00	100.0
Selenium	1.00	100.0
Silver	1.00	100.0
Thallium	1.00	100.0
Uranium	1.00	100.0
Vanadium	1.00	100.0
Zinc	1.00	100.0

Comments:
All analytes passed acceptance criteria at the specified concentration.

2.1.2.3 Raw Data

Instrument Tuning Report

File Name: 06302008.tun
File Path: C:\Elandata\Tuning\06302008.tun

Sample Information

Sample Date/Time: Thursday, February 24, 2011 08:11:18

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	3.026	626	2060	0.691	
Li	7.016	7.029	1591	2060	0.697	
Co	58.933	58.928	14285	1972	0.710	
Ce	139.905	139.929	33997	2015	0.724	
Tl	204.975	205.027	49701	2255	0.718	

Relative Std. Dev.

Mass	Meas. Intens. RSD
2.000	1.233
3.000	1.394
4.000	20.319
5.000	13.289
6.000	1.449
7.000	2.302
8.000	16.938
9.000	2.897
58.000	2.658
59.000	1.755
60.000	2.294
139.000	3.786
140.000	0.972
141.000	8.246
204.000	1.328
205.000	1.098
206.000	0.796

Report Date/Time: Thursday, February 24, 2011 08:12:29
Page 1

Approved: February 25, 2011

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, February 24, 2011 08:20:28
Sample Description:
Method File: C:\Elandata\Method\6020 DAILY.mth
Dataset File: C:\elandata\Dataset\021011\Sample.708
Tuning File: C:\Elandata\Tuning\06302008.tun
Optimization File: C:\Elandata\Optimize\Default.dac
Dual Detector Mode: Dual

Acq. Dead Time(ns): 50
Current Dead Time (ns): 50

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	64651.0	64651.023	462.491	0.7
	Rh	102.9	384588.8	384588.813	2369.233	0.6
	In	114.9	578775.1	578775.086	3381.270	0.6
	Pb	208.0	233837.5	233837.457	1200.538	0.5
	U	238.1	45.9	45.900	4.547	9.9
⌈>	Ba	137.9	322871.0	322871.007	2484.615	0.8
⌊	Ba++	69.0	5129.7	0.016	0.000	0.3
⌈>	Ce	139.9	404942.8	404942.797	4231.073	1.0
⌊	CeO	155.9	10721.9	0.026	0.001	2.0
	Bkgd	220.0	7.9	7.900	2.162	27.4
	Ar2	79.9	4898428.8	4898428.819	40267.311	0.8

Current Optimization File Data

Current Value	Description
0.95	Nebulizer Gas Flow
6.70	Lens Voltage
1500.00	ICP RF Power
-1834.38	Analog Stage Voltage
1000.00	Pulse Stage Voltage
20.00	Discriminator Threshold
-10.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	33	7.5	4793.5
Co	59	33	8.0	129402.2
Rh	103	33	9.0	140311.8
Pb	208	33	11.3	172960.6

Sample ID: Sample
Report Date/Time: Thursday, February 24, 2011 08:22:36
Page 1

Approved: February 25, 2011

Method 6020 - Summary Report

Sample ID: Blank

Sample Date/Time: Thursday, February 24, 2011 13:34:13
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

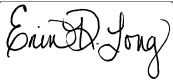
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21556.673					ug/L
|	Be	9	5.333					ug/L
|	Al	27	4767.814					ug/L
|>	Sc	45	289790.106					ug/L
⌈	Ti	49	43.338					ug/L
|	V	51	2343.046					ug/L
|	Cr	52	7966.586					ug/L
|	Cr	53	326.705					ug/L
|	Mn	55	327.342					ug/L
|	Co	59	91.335					ug/L
|	Ni	60	41.334					ug/L
|	Cu	65	134.669					ug/L
|	Zn	66	477.350					ug/L
|>	Ge	72	462018.097					ug/L
|	As	75	-178.277					ug/L
|	Se	77	60.000					ug/L
|	Se	82	2.913					ug/L
⌊	Rb	85	15.667					mg/L
	Y	89	288209.712					ug/L
	Rh	103	9.000					ug/L
⌈	Mo	98	35.640					ug/L
|	Ag	107	17.667					ug/L
|	Cd	114	1.600					ug/L
|>	In	115	357850.154					ug/L
|	Sn	118	80.134					ug/L
⌊	Sb	123	155.912					ug/L
⌈	Ba	135	13.667					ug/L
|	Ce	140	16.668					ug/L
⌊>	Tb	159	484089.171					ug/L
⌈	Ho	165	3.334					ug/L
|	Tl	203	24.667					ug/L
|	Tl	205	20.002					ug/L
|	Pb	206	342.676					ug/L
|	Pb	207	310.675					ug/L
|	Pb	208	1389.385					ug/L
|	U	238	29.334					ug/L
⌊>	Bi	209	452625.593					ug/L

Sample ID: Blank
Report Date/Time: Thursday, February 24, 2011 13:36:24
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⌈	Na	23	18682.677	mg/L
|	Mg	24	220.024	mg/L
|	K	39	557107.643	mg/L
|	Ca	43	203.356	mg/L
|	Fe	54	47500.285	mg/L
|	Fe	57	7246.684	mg/L
⌊>	Sc-1	45	289790.106	mg/L
	Cl	35	16916.311	mg/L
	Kr	83	48.334	mg/L
	Br	81	9048.094	mg/L
	P	31	11327.815	mg/L
	S	34	199530.106	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

Sample ID: Blank
Report Date/Time: Thursday, February 24, 2011 13:36:24
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Blank
Report Date/Time: Thursday, February 24, 2011 13:36:24
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Approved: February 25, 2011

Method 6020 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Thursday, February 24, 2011 13:40:57
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21473.076	0.00				ug/L
|	Be	9	9.333	0.00				ug/L
|	Al	27	3784.052	-0.00				ug/L
⌊>	Sc	45	284254.189	284254.19				ug/L
⌈	Ti	49	70.007	0.00				ug/L
|	V	51	2465.290	0.00				ug/L
|	Cr	52	8300.195	0.00				ug/L
|	Cr	53	346.707	0.00				ug/L
|	Mn	55	398.012	0.00				ug/L
|	Co	59	91.001	-0.00				ug/L
|	Ni	60	30.667	-0.00				ug/L
|	Cu	65	122.669	-0.00				ug/L
|	Zn	66	506.018	0.00				ug/L
| >	Ge	72	463118.025	463118.03				ug/L
|	As	75	-157.026	0.00				ug/L
|	Se	77	69.334	0.00				ug/L
|	Se	82	2.252	-0.00				ug/L
⌊	Rb	85	20.000	0.00				mg/L
	Y	89	279565.691	-8644.02				ug/L
	Rh	103	6.333	-2.67				ug/L
⌈	Mo	98	32.571	-0.00				ug/L
|	Ag	107	20.000	0.00				ug/L
|	Cd	114	-1.286	-0.00				ug/L
| >	In	115	352967.544	352967.54				ug/L
|	Sn	118	87.200	0.00				ug/L
⌊	Sb	123	110.202	-0.00				ug/L
⌈	Ba	135	9.333	-0.00				ug/L
|	Ce	140	10.001	-0.00				ug/L
⌊>	Tb	159	489190.317	489190.32				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	20.334	-0.00				ug/L
|	Tl	205	40.004	0.00				ug/L
|	Pb	206	346.676	-0.00				ug/L
|	Pb	207	315.008	-0.00				ug/L
|	Pb	208	1439.722	-0.00				ug/L
|	U	238	23.667	-0.00				ug/L
⌊>	Bi	209	478255.632	478255.63				ug/L

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⌈	Na	23	18685.992	0.00		mg/L
|	Mg	24	253.362	0.00		mg/L
|	K	39	562212.260	0.06		mg/L
|	Ca	43	140.015	-0.00		mg/L
|	Fe	54	45240.136	-0.00		mg/L
|	Fe	57	7480.212	0.00		mg/L
⌊>	Sc-1	45	284254.189	284254.19		mg/L
	Cl	35	16918.302	1.99		mg/L
	Kr	83	47.667	-0.67		mg/L
	Br	81	8699.787	-348.31		mg/L
	P	31	12555.980	1228.16		mg/L
	S	34	213151.278	13621.17		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 1
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Method 6020 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Thursday, February 24, 2011 13:47:42
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 2
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20988.775	-0.00				ug/L
|	Be	9	120.001	0.00				ug/L
|	Al	27	6118.559	0.00				ug/L
⌊>	Sc	45	286995.172	286995.17				ug/L
⌈	Ti	49	596.744	0.00				ug/L
|	V	51	6373.366	0.01				ug/L
|	Cr	52	11282.808	0.01				ug/L
|	Cr	53	643.419	0.00				ug/L
|	Mn	55	5567.273	0.01				ug/L
|	Co	59	4237.273	0.01				ug/L
|	Ni	60	933.720	0.00				ug/L
|	Cu	65	1017.729	0.00				ug/L
|	Zn	66	1010.395	0.00				ug/L
|>	Ge	72	458793.554	458793.55				ug/L
|	As	75	258.501	0.00				ug/L
|	Se	77	98.000	0.00				ug/L
|	Se	82	41.995	0.00				ug/L
⌊	Rb	85	40.334	0.00				mg/L
	Y	89	282717.394	-5492.32				ug/L
	Rh	103	7.667	-1.33				ug/L
⌈	Mo	98	1825.975	0.01				ug/L
|	Ag	107	1842.855	0.01				ug/L
|	Cd	114	443.805	0.00				ug/L
|>	In	115	351948.710	351948.71				ug/L
|	Sn	118	1663.472	0.00				ug/L
⌊	Sb	123	1515.624	0.00				ug/L
⌈	Ba	135	638.360	0.00				ug/L
|	Ce	140	16.668	0.00				ug/L
⌊>	Tb	159	487742.776	487742.78				ug/L
⌈	Ho	165	13.335	0.00				ug/L
|	Tl	203	2767.077	0.01				ug/L
|	Tl	205	6506.103	0.01				ug/L
|	Pb	206	2550.017	0.00				ug/L
|	Pb	207	2361.636	0.00				ug/L
|	Pb	208	10619.339	0.02				ug/L
|	U	238	14097.413	0.03				ug/L
⌊>	Bi	209	452299.690	452299.69				ug/L

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⌈	Na	23	249668.221	0.81		mg/L
|	Mg	24	146699.904	0.51		mg/L
|	K	39	937790.119	1.35		mg/L
|	Ca	43	993.483	0.00		mg/L
|	Fe	54	70623.169	0.08		mg/L
|	Fe	57	17734.153	0.04		mg/L
⌊>	Sc-1	45	286995.172	286995.17		mg/L
	Cl	35	16781.404	-134.91		mg/L
	Kr	83	39.000	-9.33		mg/L
	Br	81	8961.360	-86.73		mg/L
	P	31	10897.312	-430.50		mg/L
	S	34	205117.022	5586.92		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 2
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Method 6020 - Summary Report

Sample ID: Standard 3

Sample Date/Time: Thursday, February 24, 2011 13:54:27
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 3
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21957.903	0.00				ug/L
|	Be	9	15456.622	0.05	50.0000	4.358	8.717	ug/L
|	Al	27	301742.068	1.04	50.0000	4.505	9.011	ug/L
⌊>	Sc	45	286021.806	286021.81				ug/L
⌈	Ti	49	64413.369	0.14	100.0000	3.669	3.669	ug/L
|	V	51	509803.946	1.11	50.0000	0.597	1.195	ug/L
|	Cr	52	425368.389	0.92	50.0000	0.816	1.631	ug/L
|	Cr	53	48984.574	0.11	50.0000	0.147	0.293	ug/L
|	Mn	55	639941.887	1.40	50.0000	1.711	3.422	ug/L
|	Co	59	531348.304	1.17	50.0000	1.740	3.480	ug/L
|	Ni	60	111080.990	0.24	50.0000	0.150	0.300	ug/L
|	Cu	65	115197.335	0.25	50.0000	0.813	1.626	ug/L
|	Zn	66	66588.698	0.15	50.0000	1.185	2.370	ug/L
|>	Ge	72	455752.131	455752.13				ug/L
|	As	75	51814.235	0.11	50.0000	0.396	0.791	ug/L
|	Se	77	3859.412	0.01	50.0000	1.372	2.744	ug/L
|	Se	82	4729.846	0.01	50.0000	1.559	3.119	ug/L
⌊	Rb	85	1966.213	0.00				mg/L
	Y	89	278030.192	-10179.52				ug/L
	Rh	103	29.667	20.67				ug/L
⌈	Mo	98	232664.454	0.65	100.0000	2.185	2.185	ug/L
|	Ag	107	233764.972	0.66	50.0000	1.076	2.152	ug/L
|	Cd	114	56294.826	0.16	50.0000	2.099	4.197	ug/L
|>	In	115	356024.047	356024.05				ug/L
|	Sn	118	199337.007	0.56	50.0000	0.894	1.788	ug/L
⌊	Sb	123	187148.203	0.53	50.0000	1.033	2.066	ug/L
⌈	Ba	135	81105.073	0.17	50.0000	0.602	1.205	ug/L
|	Ce	140	53.339	0.00				ug/L
⌊>	Tb	159	490746.741	490746.74				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	359551.794	0.78	50.0000	1.896	3.791	ug/L
|	Tl	205	899100.934	1.96	50.0000	1.819	3.639	ug/L
|	Pb	206	292458.648	0.64	50.0000	1.237	2.475	ug/L
|	Pb	207	269085.844	0.59	50.0000	0.229	0.457	ug/L
|	Pb	208	1205044.994	2.62	50.0000	0.380	0.761	ug/L
|	U	238	1863345.225	4.06	50.0000	0.569	1.137	ug/L
⌊>	Bi	209	458805.440	458805.44				ug/L

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⌈	Na	23	28877915.267	101.06	5.0000	0.265	5.290	mg/L
|	Mg	24	17931312.526	62.77	5.0000	0.242	4.843	mg/L
|	K	39	44860177.220	155.06	5.0000	0.164	3.280	mg/L
|	Ca	43	96826.298	0.34	5.0000	0.145	2.894	mg/L
|	Fe	54	3220635.132	11.11	5.0000	0.261	5.214	mg/L
|	Fe	57	1336520.735	4.65	5.0000	0.100	1.998	mg/L
⌊>	Sc-1	45	286021.806	286021.81				mg/L
	Cl	35	18766.270	1849.96				mg/L
	Kr	83	39.000	-9.33				mg/L
	Br	81	8641.739	-406.36				mg/L
	P	31	13730.774	2402.96				mg/L
	S	34	242706.698	43176.59				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 3
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Method 6020 - Summary Report

Sample ID: Standard 4

Sample Date/Time: Thursday, February 24, 2011 14:01:13
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 4
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21406.227	0.01				ug/L
|	Be	9	30515.237	0.11	102.8560	3.251	3.161	ug/L
|	Al	27	592413.264	2.21	102.9534	3.372	3.275	ug/L
⌊>	Sc	45	265769.591	265769.59				ug/L
⌈	Ti	49	126001.815	0.28	198.5620	7.286	3.669	ug/L
|	V	51	990796.425	2.18	99.0368	2.895	2.924	ug/L
|	Cr	52	825138.640	1.81	99.2844	0.805	0.811	ug/L
|	Cr	53	96496.496	0.21	99.7173	1.896	1.902	ug/L
|	Mn	55	1239240.921	2.74	98.7552	2.922	2.959	ug/L
|	Co	59	1028607.782	2.27	98.7147	3.307	3.350	ug/L
|	Ni	60	214033.763	0.47	98.5003	2.357	2.393	ug/L
|	Cu	65	217850.980	0.48	97.5739	2.958	3.032	ug/L
|	Zn	66	128514.845	0.28	98.7425	2.030	2.056	ug/L
| >	Ge	72	452565.006	452565.01				ug/L
|	As	75	102109.323	0.23	99.5409	0.639	0.642	ug/L
|	Se	77	7261.970	0.02	97.7229	1.265	1.295	ug/L
|	Se	82	9260.984	0.02	99.3179	3.804	3.831	ug/L
⌊	Rb	85	3819.101	0.01				mg/L
	Y	89	272123.474	-16086.24				ug/L
	Rh	103	38.667	29.67				ug/L
⌈	Mo	98	465440.691	1.35	202.9482	1.357	0.669	ug/L
|	Ag	107	461375.608	1.33	100.8085	0.359	0.356	ug/L
|	Cd	114	109790.220	0.32	100.2238	0.744	0.742	ug/L
| >	In	115	345674.332	345674.33				ug/L
|	Sn	118	387212.888	1.12	100.0267	1.254	1.254	ug/L
⌊	Sb	123	362973.956	1.05	99.9403	2.959	2.961	ug/L
⌈	Ba	135	161252.324	0.33	100.2807	2.979	2.970	ug/L
|	Ce	140	83.342	0.00				ug/L
⌊>	Tb	159	484725.228	484725.23				ug/L
⌈	Ho	165	6.667	0.00				ug/L
|	Tl	203	699543.051	1.52	98.5428	4.138	4.199	ug/L
|	Tl	205	1718162.882	3.74	97.6285	3.544	3.630	ug/L
|	Pb	206	575641.833	1.25	99.1154	1.000	1.009	ug/L
|	Pb	207	528741.174	1.15	99.0193	2.163	2.185	ug/L
|	Pb	208	2348071.376	5.10	98.6101	0.768	0.779	ug/L
|	U	238	3592692.035	7.81	98.0618	1.344	1.371	ug/L
⌊>	Bi	209	459846.134	459846.13				ug/L

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⌈	Na	23	56026704.087	210.80	10.2091	0.315	3.089	mg/L
|	Mg	24	35511001.098	133.64	10.3114	0.156	1.514	mg/L
|	K	39	85048285.472	318.08	10.1278	0.342	3.381	mg/L
|	Ca	43	185224.930	0.70	10.1468	0.239	2.352	mg/L
|	Fe	54	6065928.721	22.67	10.0967	0.347	3.435	mg/L
|	Fe	57	2473204.433	9.29	9.9925	0.455	4.558	mg/L
⌊>	Sc-1	45	265769.591	265769.59				mg/L
	Cl	35	18156.476	1240.17				mg/L
	Kr	83	51.334	3.00				mg/L
	Br	81	8404.197	-643.90				mg/L
	P	31	13151.987	1824.17				mg/L
	S	34	227433.065	27902.96				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 4
Report Date/Time: Thursday, February 24, 2011 14:03:25
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Method 6020 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Thursday, February 24, 2011 14:07:59
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 11
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20521.076	-0.00				ug/L
|	Be	9	14778.267	0.05	47.8449	1.967	4.111	ug/L
|	Al	27	303768.430	1.08	50.4253	3.672	7.281	ug/L
|>	Sc	45	276849.028	276849.03				ug/L
⌈	Ti	49	60763.455	0.13	96.2273	1.258	1.307	ug/L
|	V	51	485045.130	1.07	48.6423	1.351	2.778	ug/L
|	Cr	52	415288.316	0.91	49.7867	0.357	0.717	ug/L
|	Cr	53	47972.959	0.11	49.7439	1.587	3.189	ug/L
|	Mn	55	628222.880	1.40	50.3376	1.158	2.300	ug/L
|	Co	59	503800.250	1.12	48.6306	1.646	3.386	ug/L
|	Ni	60	106485.642	0.24	49.2724	1.013	2.056	ug/L
|	Cu	65	110185.838	0.24	49.6183	0.232	0.468	ug/L
|	Zn	66	64394.001	0.14	49.5822	0.621	1.253	ug/L
|>	Ge	72	449969.642	449969.64				ug/L
|	As	75	50809.130	0.11	49.8873	0.912	1.829	ug/L
|	Se	77	3755.372	0.01	50.3920	0.282	0.560	ug/L
|	Se	82	4685.094	0.01	50.5053	0.873	1.729	ug/L
⌊	Rb	85	1934.873	0.00				mg/L
	Y	89	280718.222	-7491.49				ug/L
	Rh	103	26.667	17.67				ug/L
⌈	Mo	98	233009.357	0.66	99.5231	4.280	4.300	ug/L
|	Ag	107	228935.702	0.65	48.9695	0.937	1.913	ug/L
|	Cd	114	53498.180	0.15	47.9009	4.716	9.845	ug/L
|>	In	115	353280.175	353280.17				ug/L
|	Sn	118	190362.427	0.54	48.1295	1.033	2.146	ug/L
⌊	Sb	123	180419.687	0.51	48.6128	0.656	1.350	ug/L
⌈	Ba	135	79146.066	0.16	49.3393	0.378	0.766	ug/L
|	Ce	140	93.343	0.00				ug/L
|>	Tb	159	483871.481	483871.48				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	353167.477	0.76	48.8963	1.261	2.579	ug/L
|	Tl	205	834420.309	1.79	46.6346	2.215	4.750	ug/L
|	Pb	206	287858.333	0.61	48.7097	0.909	1.867	ug/L
|	Pb	207	252754.767	0.54	46.5481	1.753	3.767	ug/L
|	Pb	208	1174752.044	2.51	48.4965	1.678	3.461	ug/L
|	U	238	1751766.502	3.75	47.0257	1.251	2.661	ug/L
|>	Bi	209	467843.789	467843.79				ug/L

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⌈	Na	23	27264565.112	98.52	4.7721	0.287	6.022	mg/L
|	Mg	24	17042443.389	61.62	4.7550	0.262	5.515	mg/L
|	K	39	43145179.712	154.09	4.9047	0.257	5.242	mg/L
|	Ca	43	94187.602	0.34	4.9503	0.189	3.825	mg/L
|	Fe	54	3070162.828	10.93	4.8700	0.113	2.330	mg/L
|	Fe	57	1316675.874	4.74	5.0956	0.232	4.554	mg/L
⌊>	Sc-1	45	276849.028	276849.03				mg/L
	Cl	35	19556.443	2640.13				mg/L
	Kr	83	46.667	-1.67				mg/L
	Br	81	8274.091	-774.00				mg/L
	P	31	12449.771	1121.96				mg/L
	S	34	241543.532	42013.43				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9	95.690				
|	Al	27	100.851				
⌊>	Sc	45					
⌈	Ti	49	96.227				
|	V	51	97.285				
|	Cr	52	99.573				
|	Cr	53					
|	Mn	55	100.675				
|	Co	59	97.261				
|	Ni	60	98.545				
|	Cu	65	99.237				
|	Zn	66	99.164				
|>	Ge	72		97.392			
|	As	75	99.775				
|	Se	77					
|	Se	82	101.011				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	97.939				
|	Cd	114	95.802				
|>	In	115		98.723			
|	Sn	118					
⌊	Sb	123	97.226				
⌈	Ba	135	98.679				
|	Ce	140					
⌊>	Tb	159		99.955			
⌈	Ho	165					
|	Tl	203	97.793				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	96.993				
|	U	238	94.051				
⌊>	Bi	209		103.362			
⌈	Na	23	95.441				

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|	Mg	24	95.099
|	K	39	98.095
|	Ca	43	99.006
|	Fe	54	97.401
|	Fe	57	101.912
|>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 1
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Method 6020 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Thursday, February 24, 2011 14:15:23
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19569.342	0.00				ug/L
|	Be	9	10.000	0.00	0.0579	0.018	30.549	ug/L
|	Al	27	2483.643	-0.01	-0.1496	0.042	28.373	ug/L
⌊>	Sc	45	261390.616	261390.62				ug/L
⌈	Ti	49	63.340	0.00	-0.0285	0.032	111.913	ug/L
|	V	51	2348.510	0.00	0.0039	0.005	134.620	ug/L
|	Cr	52	8126.716	0.00	0.0298	0.019	63.603	ug/L
|	Cr	53	280.032	-0.00	0.0312	0.037	119.090	ug/L
|	Mn	55	349.010	0.00	-0.0104	0.000	4.652	ug/L
|	Co	59	94.001	0.00	0.0077	0.000	2.961	ug/L
|	Ni	60	38.334	-0.00	-0.0063	0.001	19.985	ug/L
|	Cu	65	100.002	-0.00	-0.0054	0.001	22.173	ug/L
|	Zn	66	442.348	-0.00	-0.0288	0.033	112.823	ug/L
|>	Ge	72	454925.831	454925.83				ug/L
|	As	75	-127.776	0.00	0.0286	0.038	131.532	ug/L
|	Se	77	69.334	0.00	0.0246	0.246	1000.539	ug/L
|	Se	82	4.942	0.00	0.0108	0.140	1301.721	ug/L
⌊	Rb	85	19.334	0.00				mg/L
	Y	89	285074.405	-3135.31				ug/L
	Rh	103	9.000	-0.00				ug/L
⌈	Mo	98	113.097	0.00	0.0666	0.005	7.175	ug/L
|	Ag	107	30.000	0.00	0.0110	0.001	12.463	ug/L
|	Cd	114	4.476	0.00	0.0059	0.001	15.461	ug/L
|>	In	115	350618.124	350618.12				ug/L
|	Sn	118	245.203	0.00	0.0403	0.003	6.235	ug/L
⌊	Sb	123	399.877	0.00	0.0984	0.009	8.675	ug/L
⌈	Ba	135	34.667	0.00	0.0272	0.005	18.465	ug/L
|	Ce	140	23.336	0.00				ug/L
⌊>	Tb	159	478634.994	478634.99				ug/L
⌈	Ho	165	6.667	0.00				ug/L
|	Tl	203	32.000	0.00	0.0084	0.000	3.654	ug/L
|	Tl	205	70.007	0.00	0.0283	0.001	3.309	ug/L
|	Pb	206	397.345	0.00	0.0212	0.002	10.805	ug/L
|	Pb	207	344.009	0.00	0.0139	0.000	1.520	ug/L
|	Pb	208	1609.734	0.00	0.0133	0.001	6.926	ug/L
|	U	238	121.335	0.00	0.0121	0.001	5.635	ug/L
⌊>	Bi	209	463854.369	463854.37				ug/L

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⌈	Na	23	18054.763	0.00	0.0012	0.000	3.083	mg/L
|	Mg	24	516.732	0.00	0.0007	0.000	1.786	mg/L
|	K	39	575695.672	0.28	0.0061	0.003	46.345	mg/L
|	Ca	43	190.021	0.00	0.0002	0.001	275.197	mg/L
|	Fe	54	46487.696	0.01	0.0097	0.007	66.800	mg/L
|	Fe	57	7590.312	0.00	0.0048	0.003	58.360	mg/L
⌊>	Sc-1	45	261390.616	261390.62				mg/L
	Cl	35	17443.203	526.89				mg/L
	Kr	83	45.001	-3.33				mg/L
	Br	81	8460.911	-587.18				mg/L
	P	31	13640.150	2312.34				mg/L
	S	34	226704.238	27174.13				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		98.465			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.979			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.873			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		102.481			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 2
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Method 6020 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Thursday, February 24, 2011 14:22:10
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 9
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17715.744	-0.00				ug/L
|	Be	9	12.000	0.00	0.0663	0.007	10.374	ug/L
|	Al	27	3100.484	-0.00	-0.0216	0.066	306.754	ug/L
⌊>	Sc	45	253097.104	253097.10				ug/L
⌈	Ti	49	103.344	0.00	0.0455	0.037	80.780	ug/L
|	V	51	5968.303	0.01	0.4046	0.021	5.087	ug/L
|	Cr	52	13970.227	0.02	0.8495	0.054	6.361	ug/L
|	Cr	53	996.816	0.00	0.8397	0.120	14.309	ug/L
|	Mn	55	6454.150	0.01	0.5081	0.026	5.171	ug/L
|	Co	59	3893.130	0.01	0.3954	0.007	1.822	ug/L
|	Ni	60	3300.578	0.01	1.5893	0.048	3.018	ug/L
|	Cu	65	1904.534	0.00	0.8561	0.017	1.972	ug/L
|	Zn	66	8372.588	0.02	6.4863	0.077	1.189	ug/L
|>	Ge	72	426319.433	426319.43				ug/L
|	As	75	255.257	0.00	0.4159	0.025	6.055	ug/L
|	Se	77	86.667	0.00	0.3364	0.155	46.110	ug/L
|	Se	82	37.563	0.00	0.3858	0.132	34.159	ug/L
⌊	Rb	85	33.334	0.00				mg/L
	Y	89	263558.494	-24651.22				ug/L
	Rh	103	8.000	-1.00				ug/L
⌈	Mo	98	78.165	0.00	0.0555	0.005	8.149	ug/L
|	Ag	107	1823.518	0.01	0.4432	0.002	0.451	ug/L
|	Cd	114	199.385	0.00	0.2023	0.007	3.612	ug/L
|>	In	115	313932.138	313932.14				ug/L
|	Sn	118	158.801	0.00	0.0230	0.002	7.388	ug/L
⌊	Sb	123	1497.162	0.00	0.4439	0.008	1.821	ug/L
⌈	Ba	135	1147.411	0.00	0.7868	0.057	7.210	ug/L
|	Ce	140	10.001	-0.00				ug/L
⌊>	Tb	159	443236.119	443236.12				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	565.022	0.00	0.0941	0.002	2.629	ug/L
|	Tl	205	1273.542	0.00	0.1065	0.009	8.492	ug/L
|	Pb	206	2364.970	0.01	0.4153	0.024	5.716	ug/L
|	Pb	207	2214.602	0.00	0.4205	0.040	9.424	ug/L
|	Pb	208	9849.013	0.02	0.4155	0.024	5.883	ug/L
|	U	238	12972.208	0.03	0.4100	0.005	1.333	ug/L
⌊>	Bi	209	405897.146	405897.15				ug/L

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⌈	Na	23	32743.468	0.06	0.0041	0.000	5.583	mg/L
|	Mg	24	1036.825	0.00	0.0009	0.000	4.527	mg/L
|	K	39	571461.125	0.34	0.0078	0.002	27.025	mg/L
|	Ca	43	303.368	0.00	0.0071	0.001	19.895	mg/L
|	Fe	54	41818.800	0.00	0.0040	0.001	29.701	mg/L
|	Fe	57	6866.379	0.00	0.0027	0.001	35.711	mg/L
⌊>	Sc-1	45	253097.104	253097.10				mg/L
	Cl	35	15876.598	-1039.71				mg/L
	Kr	83	50.334	2.00				mg/L
	Br	81	7568.204	-1479.89				mg/L
	P	31	8940.081	-2387.73				mg/L
	S	34	185175.739	-14354.37				mg/L

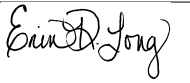
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	101.142				
|	Cr	52	106.190				
|	Cr	53					
|	Mn	55	101.629				
|	Co	59	98.840				
|	Ni	60	99.334				
|	Cu	65	107.011				
|	Zn	66	103.781				
|>	Ge	72		92.273			
|	As	75	103.966				
|	Se	77					
|	Se	82	96.461				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	110.810				
|	Cd	114	101.142				
|>	In	115		87.727			
|	Sn	118					
⌊	Sb	123	110.976				
⌈	Ba	135	104.907				
|	Ce	140					
⌊>	Tb	159		91.561			
⌈	Ho	165					
|	Tl	203	117.606				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	103.864				
|	U	238	102.499				
⌊>	Bi	209		89.676			
⌈	Na	23					

Sample ID: QC Std 3
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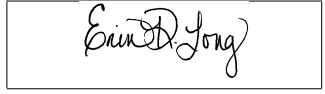
Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 3
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Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Thursday, February 24, 2011 14:28:59
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18350.307	-0.00				ug/L
|	Be	9	3.333	-0.00	0.0357	0.008	23.542	ug/L
|	Al	27	23383210.784	92.21	4281.7747	114.972	2.685	ug/L
⌊>	Sc	45	253644.456	253644.46				ug/L
⌈	Ti	49	57192.211	0.14	96.8058	2.200	2.273	ug/L
|	V	51	2018.819	-0.00	-0.0129	0.036	275.470	ug/L
|	Cr	52	8120.378	0.00	0.1080	0.007	6.722	ug/L
|	Cr	53	1406.907	0.00	1.3093	0.179	13.637	ug/L
|	Mn	55	3646.701	0.01	0.2745	0.007	2.473	ug/L
|	Co	59	1840.855	0.00	0.1886	0.003	1.352	ug/L
|	Ni	60	1129.075	0.00	0.5352	0.043	8.103	ug/L
|	Cu	65	773.038	0.00	0.3226	0.015	4.568	ug/L
|	Zn	66	859.379	0.00	0.3443	0.041	12.000	ug/L
|>	Ge	72	420953.823	420953.82				ug/L
|	As	75	-156.880	0.00	-0.0124	0.042	339.498	ug/L
|	Se	77	134.668	0.00	1.0522	0.056	5.336	ug/L
|	Se	82	2.603	0.00	-0.0119	0.126	1053.860	ug/L
⌊	Rb	85	1633.817	0.00				mg/L
	Y	89	245983.587	-42226.12				ug/L
	Rh	103	14.667	5.67				ug/L
⌈	Mo	98	211145.467	0.66	98.9563	1.955	1.975	ug/L
|	Ag	107	67.334	0.00	0.0203	0.001	3.496	ug/L
|	Cd	114	60.022	0.00	0.0607	0.020	32.138	ug/L
|>	In	115	321711.525	321711.52				ug/L
|	Sn	118	410.675	0.00	0.0918	0.006	6.911	ug/L
⌊	Sb	123	216.580	0.00	0.0541	0.000	0.743	ug/L
⌈	Ba	135	55.334	0.00	0.0440	0.004	9.417	ug/L
|	Ce	140	203.356	0.00				ug/L
⌊>	Tb	159	432764.870	432764.87				ug/L
⌈	Ho	165	13.335	0.00				ug/L
|	Tl	203	201.004	0.00	0.0359	0.003	8.020	ug/L
|	Tl	205	436.720	0.00	0.0524	0.002	4.498	ug/L
|	Pb	206	383.011	0.00	0.0281	0.004	12.781	ug/L
|	Pb	207	314.675	0.00	0.0167	0.003	19.988	ug/L
|	Pb	208	1493.392	0.00	0.0173	0.001	8.125	ug/L
|	U	238	25.000	-0.00	0.0096	0.000	2.600	ug/L
⌊>	Bi	209	406278.173	406278.17				ug/L

Sample ID: QC Std 4
Report Date/Time: Thursday, February 24, 2011 14:31:11
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Erin D. Long

⌈	Na	23	64034814.922	252.54	12.2304	0.483	3.949	mg/L
|	Mg	24	15687092.448	61.86	4.7729	0.136	2.858	mg/L
|	K	39	39554078.871	154.04	4.9033	0.104	2.129	mg/L
|	Ca	43	252494.755	0.99	14.4955	0.357	2.464	mg/L
|	Fe	54	6884682.742	26.99	12.0224	0.451	3.753	mg/L
|	Fe	57	2780835.400	10.95	11.7776	0.447	3.796	mg/L
⌊>	Sc-1	45	253644.456	253644.46				mg/L
	Cl	35	1928358.857	1911442.55				mg/L
	Kr	83	45.667	-2.67				mg/L
	Br	81	7424.755	-1623.34				mg/L
	P	31	1523961.419	1512633.60				mg/L
	S	34	351107.640	151577.53				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		91.112			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		89.901			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		89.398			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		89.760			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 4
Report Date/Time: Thursday, February 24, 2011 14:31:11
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Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Thursday, February 24, 2011 14:35:46
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19018.116	0.00				ug/L
|	Be	9	27826.037	0.12	103.3632	4.848	4.690	ug/L
|	Al	27	23327001.143	96.66	4488.6445	81.314	1.812	ug/L
⌊>	Sc	45	241310.384	241310.38				ug/L
⌈	Ti	49	55284.743	0.13	94.1377	3.755	3.989	ug/L
|	V	51	871260.523	2.08	94.1468	0.493	0.524	ug/L
|	Cr	52	737021.576	1.74	95.8851	2.019	2.106	ug/L
|	Cr	53	88559.643	0.21	98.9862	4.079	4.121	ug/L
|	Mn	55	1140473.559	2.73	98.3137	3.857	3.923	ug/L
|	Co	59	892878.354	2.13	92.6874	2.767	2.986	ug/L
|	Ni	60	188435.546	0.45	93.7831	1.344	1.434	ug/L
|	Cu	65	197745.570	0.47	95.8039	1.621	1.692	ug/L
|	Zn	66	117329.855	0.28	97.5053	1.633	1.675	ug/L
| >	Ge	72	418497.540	418497.54				ug/L
|	As	75	95712.587	0.23	100.9089	1.139	1.129	ug/L
|	Se	77	7111.862	0.02	103.5803	2.635	2.544	ug/L
|	Se	82	8537.061	0.02	99.0033	0.884	0.893	ug/L
⌊	Rb	85	1604.811	0.00				mg/L
	Y	89	244104.462	-44105.25				ug/L
	Rh	103	47.001	38.00				ug/L
⌈	Mo	98	211109.491	0.69	103.4873	0.915	0.884	ug/L
|	Ag	107	282332.019	0.92	69.3706	3.535	5.096	ug/L
|	Cd	114	99861.316	0.32	102.4897	1.882	1.836	ug/L
| >	In	115	307522.495	307522.49				ug/L
|	Sn	118	382.541	0.00	0.0890	0.004	4.586	ug/L
⌊	Sb	123	334929.008	1.09	103.6834	2.875	2.773	ug/L
⌈	Ba	135	137147.258	0.33	99.2126	1.330	1.341	ug/L
|	Ce	140	183.353	0.00				ug/L
⌊>	Tb	159	417034.802	417034.80				ug/L
⌈	Ho	165	13.335	0.00				ug/L
|	Tl	203	601555.999	1.50	97.4105	3.105	3.187	ug/L
|	Tl	205	1452067.190	3.63	94.8556	2.825	2.978	ug/L
|	Pb	206	505885.254	1.27	100.2198	1.302	1.299	ug/L
|	Pb	207	445840.375	1.12	96.1054	1.804	1.877	ug/L
|	Pb	208	2049739.888	5.13	99.0674	1.559	1.574	ug/L
|	U	238	2992800.615	7.49	93.9810	0.414	0.441	ug/L
⌊>	Bi	209	399653.729	399653.73				ug/L

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⌈	Na	23	62198933.711	257.65	12.4776	0.307	2.457	mg/L
|	Mg	24	15661107.362	64.90	5.0078	0.012	0.243	mg/L
|	K	39	39254387.388	160.76	5.1172	0.081	1.586	mg/L
|	Ca	43	245236.790	1.02	14.7968	0.417	2.816	mg/L
|	Fe	54	7048558.191	29.05	12.9376	0.340	2.628	mg/L
|	Fe	57	2788992.763	11.54	12.4124	0.603	4.860	mg/L
⌊>	Sc-1	45	241310.384	241310.38				mg/L
	Cl	35	1937126.860	1920210.55				mg/L
	Kr	83	42.667	-5.67				mg/L
	Br	81	6867.026	-2181.07				mg/L
	P	31	1534238.936	1522911.12				mg/L
	S	34	340058.269	140528.16				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	94.147				
|	Cr	52	95.885				
|	Cr	53					
|	Mn	55	98.314				
|	Co	59	92.687				
|	Ni	60	93.783				
|	Cu	65	95.804				
|	Zn	66	97.505				
|>	Ge	72		90.580			
|	As	75	100.909				
|	Se	77					
|	Se	82	99.003				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	69.371				
|	Cd	114	102.490				
|>	In	115		85.936			
|	Sn	118					
⌊	Sb	123	103.683				
⌈	Ba	135	99.213				
|	Ce	140					
⌊>	Tb	159		86.148			
⌈	Ho	165					
|	Tl	203	97.410				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	99.067				
|	U	238	93.981				
⌊>	Bi	209		88.297			
⌈	Na	23					

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Ag	107	ICSAB IS OUT OF LIMITS (+/-20%)

Sample ID: QC Std 5
Report Date/Time: Thursday, February 24, 2011 14:37:59
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 24, 2011 14:42:34
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

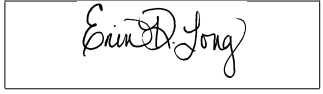
User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17482.089	-0.00				ug/L
|	Be	9	13583.237	0.06	49.5331	3.972	8.019	ug/L
|	Al	27	289909.515	1.16	54.1253	1.648	3.045	ug/L
⌊>	Sc	45	246143.748	246143.75				ug/L
⌈	Ti	49	57933.122	0.14	98.3391	2.138	2.174	ug/L
|	V	51	451941.873	1.07	48.5684	0.783	1.612	ug/L
|	Cr	52	381347.773	0.89	48.9813	0.191	0.389	ug/L
|	Cr	53	44486.510	0.11	49.4311	0.570	1.154	ug/L
|	Mn	55	568562.542	1.35	48.8248	0.860	1.761	ug/L
|	Co	59	449024.278	1.07	46.4597	1.265	2.722	ug/L
|	Ni	60	95320.767	0.23	47.2764	0.298	0.631	ug/L
|	Cu	65	99177.900	0.24	47.8713	1.523	3.181	ug/L
|	Zn	66	59416.922	0.14	49.0310	0.486	0.991	ug/L
|>	Ge	72	419849.458	419849.46				ug/L
|	As	75	47591.311	0.11	50.0862	0.411	0.821	ug/L
|	Se	77	3619.322	0.01	52.0726	1.246	2.393	ug/L
|	Se	82	4373.954	0.01	50.5444	1.203	2.380	ug/L
⌊	Rb	85	1786.177	0.00				mg/L
	Y	89	249451.087	-38758.63				ug/L
	Rh	103	20.667	11.67				ug/L
⌈	Mo	98	213027.709	0.68	102.0028	0.741	0.727	ug/L
|	Ag	107	205174.435	0.65	49.2379	2.001	4.065	ug/L
|	Cd	114	50511.432	0.16	50.6518	2.549	5.032	ug/L
|>	In	115	314834.204	314834.20				ug/L
|	Sn	118	172398.373	0.55	48.8951	1.079	2.207	ug/L
⌊	Sb	123	166047.341	0.53	50.1992	1.140	2.270	ug/L
⌈	Ba	135	71437.707	0.17	50.3925	0.513	1.018	ug/L
|	Ce	140	26.669	0.00				ug/L
⌊>	Tb	159	427726.384	427726.38				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	309000.121	0.77	49.7109	1.192	2.397	ug/L
|	Tl	205	740910.010	1.84	48.0965	1.133	2.355	ug/L
|	Pb	206	250473.299	0.62	49.2357	0.969	1.969	ug/L
|	Pb	207	231178.912	0.57	49.4470	0.210	0.425	ug/L
|	Pb	208	1034208.875	2.57	49.5982	0.091	0.183	ug/L
|	U	238	1563274.121	3.88	48.7513	0.607	1.244	ug/L
⌊>	Bi	209	402486.089	402486.09				ug/L

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⌈	Na	23	25281332.256	102.72	4.9750	0.223	4.485	mg/L
|	Mg	24	15952861.868	64.82	5.0017	0.061	1.220	mg/L
|	K	39	39004933.205	156.65	4.9862	0.200	4.009	mg/L
|	Ca	43	86033.871	0.35	5.0835	0.117	2.311	mg/L
|	Fe	54	2829795.271	11.33	5.0495	0.059	1.171	mg/L
|	Fe	57	1135402.545	4.59	4.9389	0.167	3.374	mg/L
⌊>	Sc-1	45	246143.748	246143.75				mg/L
	Cl	35	18406.258	1489.95				mg/L
	Kr	83	46.001	-2.33				mg/L
	Br	81	7416.751	-1631.34				mg/L
	P	31	9847.582	-1480.23				mg/L
	S	34	194290.302	-5239.80				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	97.137				
|	Cr	52	97.963				
|	Cr	53					
|	Mn	55	97.650				
|	Co	59	92.919				
|	Ni	60	94.553				
|	Cu	65	95.743				
|	Zn	66	98.062				
|>	Ge	72		90.873			
|	As	75	100.172				
|	Se	77					
|	Se	82	101.089				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	98.476				
|	Cd	114	101.304				
|>	In	115		87.979			
|	Sn	118					
⌊	Sb	123	100.398				
⌈	Ba	135	100.785				
|	Ce	140					
⌊>	Tb	159		88.357			
⌈	Ho	165					
|	Tl	203	99.422				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	99.196				
|	U	238	97.503				
⌊>	Bi	209		88.923			
⌈	Na	23					

Sample ID: QC Std 6
Report Date/Time: Thursday, February 24, 2011 14:44:47

Approved: February 25, 2011

	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Thursday, February 24, 2011 14:44:47
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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 24, 2011 14:49:50
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18951.327	-0.00				ug/L
|	Be	9	10.000	0.00	0.0587	0.006	10.414	ug/L
|	Al	27	5268.054	0.00	0.3636	0.047	12.807	ug/L
⌊>	Sc	45	256553.483	256553.48				ug/L
⌈	Ti	49	40.004	-0.00	-0.0621	0.034	54.085	ug/L
|	V	51	2293.431	0.00	0.0081	0.004	53.508	ug/L
|	Cr	52	7857.499	0.00	0.0374	0.005	14.603	ug/L
|	Cr	53	353.375	0.00	0.1232	0.087	70.718	ug/L
|	Mn	55	363.677	0.00	-0.0080	0.002	30.597	ug/L
|	Co	59	95.335	0.00	0.0082	0.002	18.444	ug/L
|	Ni	60	34.000	-0.00	-0.0076	0.003	35.364	ug/L
|	Cu	65	98.335	-0.00	-0.0043	0.005	110.152	ug/L
|	Zn	66	1370.111	0.00	0.7305	0.268	36.661	ug/L
⌊>	Ge	72	436374.822	436374.82				ug/L
|	As	75	-137.350	0.00	0.0136	0.017	122.149	ug/L
|	Se	77	65.334	0.00	0.0052	0.092	1779.622	ug/L
|	Se	82	7.281	0.00	0.0391	0.107	273.412	ug/L
⌊	Rb	85	15.000	0.00				mg/L
	Y	89	262592.602	-25617.11				ug/L
	Rh	103	10.333	1.33				ug/L
⌈	Mo	98	109.467	0.00	0.0677	0.005	7.243	ug/L
|	Ag	107	19.667	0.00	0.0090	0.000	3.439	ug/L
|	Cd	114	0.438	-0.00	0.0023	0.006	279.144	ug/L
⌊>	In	115	331010.191	331010.19				ug/L
|	Sn	118	228.669	0.00	0.0395	0.004	9.279	ug/L
⌊	Sb	123	273.293	0.00	0.0686	0.006	8.570	ug/L
⌈	Ba	135	30.667	0.00	0.0256	0.002	8.940	ug/L
|	Ce	140	13.335	-0.00				ug/L
⌊>	Tb	159	456713.124	456713.12				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	36.000	0.00	0.0094	0.000	4.638	ug/L
|	Tl	205	76.675	0.00	0.0290	0.001	2.881	ug/L
|	Pb	206	364.010	0.00	0.0206	0.007	33.973	ug/L
|	Pb	207	319.675	0.00	0.0142	0.002	11.198	ug/L
|	Pb	208	1473.058	0.00	0.0126	0.004	31.256	ug/L
|	U	238	120.335	0.00	0.0124	0.000	2.094	ug/L
⌊>	Bi	209	428953.170	428953.17				ug/L

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⌈	Na	23	17493.714	0.00	0.0012	0.000	21.120	mg/L
|	Mg	24	383.379	0.00	0.0007	0.000	4.353	mg/L
|	K	39	552314.183	0.23	0.0045	0.001	13.353	mg/L
|	Ca	43	173.352	-0.00	-0.0005	0.003	583.099	mg/L
|	Fe	54	42918.952	0.00	0.0049	0.001	30.107	mg/L
|	Fe	57	7360.112	0.00	0.0044	0.001	23.122	mg/L
⌊>	Sc-1	45	256553.483	256553.48				mg/L
	Cl	35	16090.275	-826.04				mg/L
	Kr	83	44.334	-4.00				mg/L
	Br	81	7604.224	-1443.87				mg/L
	P	31	10494.283	-833.53				mg/L
	S	34	198313.495	-1216.61				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.450			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		92.500			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		94.345			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		94.770			
⌈	Na	23					

Sample ID: QC Std 7
Report Date/Time: Thursday, February 24, 2011 14:52:01

Approved: February 25, 2011

Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Thursday, February 24, 2011 14:52:01
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Method 6020 - Summary Report

Sample ID: QCMRL WG357403-03

Sample Date/Time: Thursday, February 24, 2011 14:56:34
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 12
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19151.779	-0.00				ug/L
|	Be	9	3.333	-0.00	0.0353	0.004	12.407	ug/L
|	Al	27	5451.504	0.00	0.3774	0.205	54.245	ug/L
⌊>	Sc	45	263949.699	263949.70				ug/L
⌈	Ti	49	56.673	0.00	-0.0348	0.042	119.856	ug/L
|	V	51	4347.439	0.00	0.2233	0.021	9.227	ug/L
|	Cr	52	11400.944	0.01	0.4896	0.048	9.816	ug/L
|	Cr	53	616.747	0.00	0.4086	0.068	16.742	ug/L
|	Mn	55	3685.049	0.01	0.2677	0.009	3.534	ug/L
|	Co	59	2132.916	0.00	0.2117	0.004	1.717	ug/L
|	Ni	60	1866.860	0.00	0.8704	0.022	2.578	ug/L
|	Cu	65	1090.737	0.00	0.4591	0.017	3.713	ug/L
|	Zn	66	6267.027	0.01	4.6615	0.044	0.946	ug/L
| >	Ge	72	434835.537	434835.54				ug/L
|	As	75	33.172	0.00	0.1855	0.045	24.401	ug/L
|	Se	77	85.334	0.00	0.2923	0.101	34.575	ug/L
|	Se	82	19.954	0.00	0.1803	0.120	66.501	ug/L
⌊	Rb	85	34.000	0.00				mg/L
	Y	89	273411.511	-14798.20				ug/L
	Rh	103	9.333	0.33				ug/L
⌈	Mo	98	78.832	0.00	0.0541	0.004	7.693	ug/L
|	Ag	107	935.386	0.00	0.2197	0.006	2.596	ug/L
|	Cd	114	94.947	0.00	0.0932	0.005	5.539	ug/L
| >	In	115	328255.498	328255.50				ug/L
|	Sn	118	143.734	0.00	0.0170	0.002	11.766	ug/L
⌊	Sb	123	877.248	0.00	0.2444	0.004	1.785	ug/L
⌈	Ba	135	648.361	0.00	0.4381	0.028	6.436	ug/L
|	Ce	140	20.002	0.00				ug/L
⌊>	Tb	159	452193.569	452193.57				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	304.008	0.00	0.0490	0.002	4.597	ug/L
|	Tl	205	780.108	0.00	0.0711	0.002	3.432	ug/L
|	Pb	206	1472.123	0.00	0.2205	0.002	1.025	ug/L
|	Pb	207	1352.772	0.00	0.2172	0.010	4.459	ug/L
|	Pb	208	6080.791	0.01	0.2155	0.002	0.987	ug/L
|	U	238	6972.500	0.02	0.2094	0.006	2.719	ug/L
⌊>	Bi	209	436443.239	436443.24				ug/L

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⌈	Na	23	60968.080	0.17	0.0091	0.001	10.859	mg/L
|	Mg	24	1810.347	0.01	0.0011	0.000	10.707	mg/L
|	K	39	585257.023	0.30	0.0067	0.005	72.339	mg/L
|	Ca	43	260.029	0.00	0.0040	0.001	25.115	mg/L
|	Fe	54	41546.558	-0.01	0.0007	0.004	555.833	mg/L
|	Fe	57	7700.416	0.00	0.0050	0.004	76.795	mg/L
⌊>	Sc-1	45	263949.699	263949.70				mg/L
	Cl	35	16722.638	-193.67				mg/L
	Kr	83	43.667	-4.67				mg/L
	Br	81	8013.214	-1034.88				mg/L
	P	31	10665.735	-662.08				mg/L
	S	34	195145.335	-4384.77				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.117			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		91.730			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		93.411			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		96.425			
⌈	Na	23					

Sample ID: QCMRL WG357403-03
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QCMRL WG357403-03
Report Date/Time: Thursday, February 24, 2011 14:58:45

Approved: February 25, 2011

Method 6020 - Summary Report

Sample ID: PBW 78 WG357315-02

Sample Date/Time: Thursday, February 24, 2011 15:03:19
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 13
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22141.547	0.00				ug/L
|	Be	9	8.000	0.00	0.0495	0.011	22.388	ug/L
|	Al	27	56040.002	0.18	8.7204	0.130	1.492	ug/L
⌊>	Sc	45	279434.571	279434.57				ug/L
⌈	Ti	49	373.378	0.00	0.4810	0.040	8.222	ug/L
|	V	51	2645.218	0.00	0.0437	0.010	22.053	ug/L
|	Cr	52	9847.279	0.01	0.2839	0.013	4.468	ug/L
|	Cr	53	643.418	0.00	0.4318	0.029	6.631	ug/L
|	Mn	55	1679.491	0.00	0.1003	0.007	7.324	ug/L
|	Co	59	127.335	0.00	0.0113	0.001	11.008	ug/L
|	Ni	60	130.669	0.00	0.0383	0.008	21.933	ug/L
|	Cu	65	229.005	0.00	0.0561	0.004	6.849	ug/L
|	Zn	66	2413.982	0.00	1.5559	0.005	0.330	ug/L
|>	Ge	72	437846.667	437846.67				ug/L
|	As	75	-158.144	0.00	-0.0072	0.045	628.277	ug/L
|	Se	77	70.667	0.00	0.0788	0.139	176.053	ug/L
|	Se	82	-1.719	-0.00	-0.0622	0.036	57.611	ug/L
⌊	Rb	85	105.668	0.00				mg/L
	Y	89	277663.464	-10546.25				ug/L
	Rh	103	9.333	0.33				ug/L
⌈	Mo	98	66.832	0.00	0.0471	0.003	5.331	ug/L
|	Ag	107	50.001	0.00	0.0155	0.001	8.246	ug/L
|	Cd	114	1.069	-0.00	0.0029	0.003	97.827	ug/L
|>	In	115	345118.568	345118.57				ug/L
|	Sn	118	1309.819	0.00	0.3169	0.011	3.535	ug/L
⌊	Sb	123	203.163	0.00	0.0460	0.001	2.935	ug/L
⌈	Ba	135	386.345	0.00	0.2491	0.029	11.706	ug/L
|	Ce	140	83.342	0.00				ug/L
⌊>	Tb	159	478368.366	478368.37				ug/L
⌈	Ho	165	13.335	0.00				ug/L
|	Tl	203	21.667	-0.00	0.0071	0.000	6.338	ug/L
|	Tl	205	63.340	0.00	0.0281	0.001	5.162	ug/L
|	Pb	206	434.014	0.00	0.0305	0.002	7.732	ug/L
|	Pb	207	378.011	0.00	0.0230	0.003	12.608	ug/L
|	Pb	208	1737.077	0.00	0.0215	0.003	12.011	ug/L
|	U	238	53.001	0.00	0.0103	0.000	1.288	ug/L
⌊>	Bi	209	446245.704	446245.70				ug/L

Sample ID: PBW 78 WG357315-02
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⌈	Na	23	103806.470	0.31	0.0159	0.000	1.797	mg/L
|	Mg	24	34238.628	0.12	0.0100	0.000	2.723	mg/L
|	K	39	659981.150	0.44	0.0111	0.001	8.957	mg/L
|	Ca	43	693.427	0.00	0.0258	0.004	16.224	mg/L
|	Fe	54	98918.279	0.19	0.0881	0.006	6.372	mg/L
|	Fe	57	9952.653	0.01	0.0118	0.005	38.965	mg/L
⌊>	Sc-1	45	279434.571	279434.57				mg/L
	Cl	35	80281.673	63365.36				mg/L
	Kr	83	44.334	-4.00				mg/L
	Br	81	8626.389	-421.70				mg/L
	P	31	25291.294	13963.48				mg/L
	S	34	205089.393	5559.29				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.768			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.442			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.818			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.590			
⌈	Na	23					

Sample ID: PBW 78 WG357315-02
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 78 WG357315-02
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Approved: February 25, 2011

Method 6020 - Summary Report

Sample ID: LCSW 78 WG357315-03

Sample Date/Time: Thursday, February 24, 2011 15:10:03
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 14
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22007.736	0.01				ug/L
|	Be	9	7502.816	0.03	25.4730	0.735	2.885	ug/L
|	Al	27	374370.488	1.40	65.2999	4.668	7.149	ug/L
⌊>	Sc	45	264232.166	264232.17				ug/L
⌈	Ti	49	1526.938	0.00	2.3780	0.356	14.987	ug/L
|	V	51	244473.222	0.56	25.2802	0.680	2.688	ug/L
|	Cr	52	216621.571	0.48	26.4585	0.563	2.129	ug/L
|	Cr	53	25317.889	0.06	27.0733	1.066	3.938	ug/L
|	Mn	55	326009.609	0.75	27.0318	0.324	1.200	ug/L
|	Co	59	255277.917	0.59	25.5178	0.282	1.105	ug/L
|	Ni	60	53328.734	0.12	25.5475	0.635	2.484	ug/L
|	Cu	65	55257.473	0.13	25.7481	0.456	1.770	ug/L
|	Zn	66	32669.278	0.07	25.8767	0.412	1.594	ug/L
|>	Ge	72	434496.467	434496.47				ug/L
|	As	75	23387.640	0.05	23.8652	0.387	1.620	ug/L
|	Se	77	1630.133	0.00	22.1533	0.706	3.186	ug/L
|	Se	82	1951.839	0.00	21.7681	0.181	0.832	ug/L
⌊	Rb	85	816.708	0.00				mg/L
	Y	89	262989.349	-25220.36				ug/L
	Rh	103	17.667	8.67				ug/L
⌈	Mo	98	56.014	0.00	0.0422	0.003	8.029	ug/L
|	Ag	107	107150.346	0.31	23.2870	0.662	2.842	ug/L
|	Cd	114	25652.903	0.07	23.2921	0.788	3.383	ug/L
|>	In	115	347588.842	347588.84				ug/L
|	Sn	118	641.087	0.00	0.1426	0.003	2.198	ug/L
⌊	Sb	123	86133.922	0.25	23.5773	0.304	1.289	ug/L
⌈	Ba	135	39586.606	0.08	24.8426	0.460	1.851	ug/L
|	Ce	140	2193.794	0.00				ug/L
⌊>	Tb	159	480868.566	480868.57				ug/L
⌈	Ho	165	20.002	0.00				ug/L
|	Tl	203	175031.301	0.39	25.3247	0.236	0.933	ug/L
|	Tl	205	432605.769	0.97	25.2550	0.995	3.942	ug/L
|	Pb	206	148166.308	0.33	26.1849	0.710	2.710	ug/L
|	Pb	207	128967.697	0.29	24.7916	0.558	2.249	ug/L
|	Pb	208	606764.620	1.35	26.1540	0.646	2.470	ug/L
|	U	238	876712.567	1.96	24.6012	0.494	2.006	ug/L
⌊>	Bi	209	447541.262	447541.26				ug/L

Sample ID: LCSW 78 WG357315-03
Report Date/Time: Thursday, February 24, 2011 15:12:15
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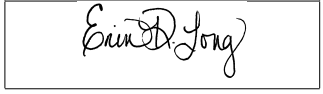
Na	23	179267.078	0.61	0.0308	0.002	5.056	mg/L
Mg	24	132748.595	0.50	0.0394	0.002	4.374	mg/L
K	39	771808.775	1.00	0.0290	0.004	12.420	mg/L
Ca	43	1566.947	0.01	0.0762	0.011	14.238	mg/L
Fe	54	125652.612	0.31	0.1421	0.003	2.101	mg/L
Fe	57	20513.071	0.05	0.0571	0.005	7.892	mg/L
> Sc-1	45	264232.166	264232.17				mg/L
Cl	35	48558.966	31642.66				mg/L
Kr	83	43.667	-4.67				mg/L
Br	81	9091.465	43.37				mg/L
P	31	22120.472	10792.66				mg/L
S	34	200193.632	663.53				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		94.043			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		97.133			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		99.335			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		98.877			
Na	23					

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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 25, 2011

Method 6020 - Summary Report

Sample ID: FBLK WG357258-01

Sample Date/Time: Thursday, February 24, 2011 15:16:49
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 15
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23460.933	0.01				ug/L
|	Be	9	8.000	0.00	0.0503	0.007	13.472	ug/L
|	Al	27	143438.727	0.51	23.9884	0.316	1.315	ug/L
⌊>	Sc	45	270938.780	270938.78				ug/L
⌈	Ti	49	693.427	0.00	1.0060	0.102	10.125	ug/L
|	V	51	2951.960	0.00	0.0765	0.013	16.499	ug/L
|	Cr	52	9910.007	0.01	0.2959	0.011	3.752	ug/L
|	Cr	53	596.744	0.00	0.3837	0.041	10.713	ug/L
|	Mn	55	6136.611	0.01	0.4691	0.008	1.626	ug/L
|	Co	59	263.006	0.00	0.0249	0.002	9.216	ug/L
|	Ni	60	302.008	0.00	0.1203	0.014	11.686	ug/L
|	Cu	65	1146.744	0.00	0.4829	0.020	4.166	ug/L
|	Zn	66	3191.541	0.01	2.1841	0.050	2.299	ug/L
| >	Ge	72	436441.686	436441.69				ug/L
|	As	75	-118.616	0.00	0.0323	0.013	41.447	ug/L
|	Se	77	68.000	0.00	0.0437	0.151	344.891	ug/L
|	Se	82	10.368	0.00	0.0723	0.036	49.184	ug/L
⌊	Rb	85	514.685	0.00				mg/L
	Y	89	268116.856	-20092.86				ug/L
	Rh	103	7.333	-1.67				ug/L
⌈	Mo	98	40.676	0.00	0.0355	0.002	4.985	ug/L
|	Ag	107	56.001	0.00	0.0167	0.001	5.015	ug/L
|	Cd	114	9.076	0.00	0.0101	0.006	56.425	ug/L
| >	In	115	348341.338	348341.34				ug/L
|	Sn	118	491.879	0.00	0.1040	0.007	6.948	ug/L
⌊	Sb	123	301.124	0.00	0.0724	0.016	22.722	ug/L
⌈	Ba	135	534.686	0.00	0.3345	0.010	3.073	ug/L
|	Ce	140	2967.408	0.01				ug/L
⌊>	Tb	159	490157.719	490157.72				ug/L
⌈	Ho	165	36.670	0.00				ug/L
|	Tl	203	82.334	0.00	0.0157	0.001	7.116	ug/L
|	Tl	205	193.355	0.00	0.0355	0.003	9.406	ug/L
|	Pb	206	1262.426	0.00	0.1738	0.005	3.088	ug/L
|	Pb	207	1066.734	0.00	0.1525	0.006	3.985	ug/L
|	Pb	208	4990.207	0.01	0.1587	0.002	0.957	ug/L
|	U	238	307.674	0.00	0.0174	0.000	1.086	ug/L
⌊>	Bi	209	453820.438	453820.44				ug/L

Sample ID: FBLK WG357258-01
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⌈	Na	23	187045.994	0.63	0.0313	0.002	4.804	mg/L
|	Mg	24	142438.153	0.53	0.0411	0.001	1.642	mg/L
|	K	39	806334.746	1.05	0.0307	0.002	7.789	mg/L
|	Ca	43	1840.354	0.01	0.0887	0.010	11.423	mg/L
|	Fe	54	110380.492	0.24	0.1118	0.003	2.677	mg/L
|	Fe	57	13667.379	0.03	0.0278	0.003	12.268	mg/L
⌊>	Sc-1	45	270938.780	270938.78				mg/L
	Cl	35	119070.069	102153.76				mg/L
	Kr	83	34.334	-14.00				mg/L
	Br	81	10544.894	1496.80				mg/L
	P	31	23392.093	12064.28				mg/L
	S	34	204887.105	5357.00				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.464			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.343			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		101.254			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.264			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102054202

Sample Date/Time: Thursday, February 24, 2011 15:23:34
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 16
Method File: C:\elandata\Method\6020a.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21707.230	0.00				ug/L
|	Be	9	40.000	0.00	0.1516	0.014	9.279	ug/L
|	Al	27	9362292.913	33.34	1548.5562	17.063	1.102	ug/L
⌊>	Sc	45	280650.705	280650.70				ug/L
⌈	Ti	49	12392.266	0.03	20.0137	1.154	5.764	ug/L
|	V	51	37082.906	0.08	3.5995	0.024	0.669	ug/L
|	Cr	52	28555.682	0.05	2.6239	0.039	1.494	ug/L
|	Cr	53	2877.369	0.01	2.8161	0.125	4.430	ug/L
|	Mn	55	2405638.320	5.48	197.6888	8.928	4.516	ug/L
|	Co	59	3397.278	0.01	0.3348	0.006	1.790	ug/L
|	Ni	60	2386.975	0.01	1.1092	0.017	1.520	ug/L
|	Cu	65	72686.605	0.17	33.5478	0.796	2.372	ug/L
|	Zn	66	73769.553	0.17	58.2990	0.991	1.700	ug/L
|>	Ge	72	438954.789	438954.79				ug/L
|	As	75	4320.912	0.01	4.4883	0.063	1.399	ug/L
|	Se	77	78.000	0.00	0.1800	0.197	109.328	ug/L
|	Se	82	20.629	0.00	0.1844	0.185	100.623	ug/L
⌊	Rb	85	34047.212	0.08				mg/L
	Y	89	265662.452	-22547.26				ug/L
	Rh	103	21.334	12.33				ug/L
⌈	Mo	98	811.242	0.00	0.3788	0.011	2.833	ug/L
|	Ag	107	301.341	0.00	0.0717	0.003	4.588	ug/L
|	Cd	114	195.868	0.00	0.1844	0.029	15.465	ug/L
|>	In	115	338783.596	338783.60				ug/L
|	Sn	118	1226.209	0.00	0.3011	0.007	2.179	ug/L
⌊	Sb	123	1112.010	0.00	0.3024	0.012	4.076	ug/L
⌈	Ba	135	27854.352	0.06	18.0533	0.441	2.440	ug/L
|	Ce	140	33412.472	0.07				ug/L
⌊>	Tb	159	465715.342	465715.34				ug/L
⌈	Ho	165	416.717	0.00				ug/L
|	Tl	203	289.007	0.00	0.0467	0.002	3.246	ug/L
|	Tl	205	730.100	0.00	0.0680	0.005	7.631	ug/L
|	Pb	206	204617.462	0.47	37.0072	0.735	1.987	ug/L
|	Pb	207	181327.937	0.41	35.6770	0.734	2.058	ug/L
|	Pb	208	848965.645	1.94	37.4519	0.858	2.292	ug/L
|	U	238	2397.979	0.01	0.0776	0.005	6.521	ug/L
⌊>	Bi	209	437371.684	437371.68				ug/L

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⌈	Na	23	58620393.758	208.83	10.1134	0.543	5.369	mg/L
|	Mg	24	2427153.194	8.65	0.6678	0.009	1.312	mg/L
|	K	39	9726385.326	32.73	1.0397	0.005	0.491	mg/L
|	Ca	43	43820.299	0.16	2.2641	0.076	3.360	mg/L
|	Fe	54	651972.109	2.16	0.9646	0.023	2.361	mg/L
|	Fe	57	250238.780	0.87	0.9326	0.038	4.125	mg/L
⌊>	Sc-1	45	280650.705	280650.70				mg/L
	Cl	35	166415.086	149498.78				mg/L
	Kr	83	42.667	-5.67				mg/L
	Br	81	10488.832	1440.74				mg/L
	P	31	55249.335	43921.52				mg/L
	S	34	201084.111	1554.00				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		95.008			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		94.672			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.204			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		96.630			
⌈	Na	23					

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

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Method 6020 - Summary Report

Sample ID: L1102057902 WG357315-01

Sample Date/Time: Thursday, February 24, 2011 15:30:20
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 17
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21189.104	0.01				ug/L
|	Be	9	5.333	0.00	0.0430	0.015	35.972	ug/L
|	Al	27	107828.637	0.41	19.2656	1.160	6.019	ug/L
⌊>	Sc	45	252431.467	252431.47				ug/L
⌈	Ti	49	553.404	0.00	0.7797	0.147	18.893	ug/L
|	V	51	2457.017	0.00	0.0259	0.039	151.112	ug/L
|	Cr	52	9537.642	0.00	0.2527	0.024	9.624	ug/L
|	Cr	53	2127.106	0.00	2.0351	0.161	7.898	ug/L
|	Mn	55	14459.593	0.03	1.1609	0.025	2.188	ug/L
|	Co	59	343.343	0.00	0.0330	0.003	8.347	ug/L
|	Ni	60	574.022	0.00	0.2509	0.004	1.569	ug/L
|	Cu	65	450.681	0.00	0.1601	0.005	3.323	ug/L
|	Zn	66	3351.929	0.01	2.3207	0.087	3.748	ug/L
| >	Ge	72	435127.289	435127.29				ug/L
|	As	75	224.038	0.00	0.3788	0.028	7.391	ug/L
|	Se	77	137.334	0.00	1.0258	0.233	22.745	ug/L
|	Se	82	121.608	0.00	1.3137	0.063	4.816	ug/L
⌊	Rb	85	1834.520	0.00				mg/L
	Y	89	264477.962	-23731.75				ug/L
	Rh	103	30.667	21.67				ug/L
⌈	Mo	98	162.245	0.00	0.0921	0.007	7.803	ug/L
|	Ag	107	43.001	0.00	0.0144	0.002	14.643	ug/L
|	Cd	114	14.726	0.00	0.0160	0.003	21.661	ug/L
| >	In	115	329512.510	329512.51				ug/L
|	Sn	118	128.267	0.00	0.0126	0.002	14.024	ug/L
⌊	Sb	123	162.828	0.00	0.0370	0.001	3.812	ug/L
⌈	Ba	135	12822.013	0.03	8.6265	0.172	1.994	ug/L
|	Ce	140	753.437	0.00				ug/L
⌊>	Tb	159	448612.381	448612.38				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	265.340	0.00	0.0458	0.001	1.776	ug/L
|	Tl	205	656.754	0.00	0.0662	0.005	7.180	ug/L
|	Pb	206	498.684	0.00	0.0497	0.003	5.734	ug/L
|	Pb	207	445.348	0.00	0.0435	0.003	6.103	ug/L
|	Pb	208	1945.759	0.00	0.0379	0.003	6.690	ug/L
|	U	238	270.006	0.00	0.0171	0.000	2.562	ug/L
⌊>	Bi	209	410185.979	410185.98				ug/L

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⌈	Na	23	210908318.991	836.52	40.5095	2.724	6.725	mg/L
|	Mg	24	8871029.994	35.18	2.7149	0.156	5.742	mg/L
|	K	39	1988135.762	5.95	0.1867	0.006	2.952	mg/L
|	Ca	43	33305.384	0.13	1.9122	0.010	0.510	mg/L
|	Fe	54	93060.555	0.20	0.0946	0.005	5.587	mg/L
|	Fe	57	24211.717	0.07	0.0767	0.003	3.630	mg/L
⌊>	Sc-1	45	252431.467	252431.47				mg/L
	Cl	35	1189778.181	1172861.87				mg/L
	Kr	83	45.334	-3.00				mg/L
	Br	81	76871.707	67823.61				mg/L
	P	31	47320.433	35992.62				mg/L
	S	34	231874.239	32344.13				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.180			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		92.081			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		92.671			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		90.624			
⌈	Na	23					

Sample ID: L1102057902 WG357315-01
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102057902 WG357315-01
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Method 6020 - Summary Report

Sample ID: L1102057902S WG357315-04

Sample Date/Time: Thursday, February 24, 2011 15:37:06
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 18
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20621.385	-0.00				ug/L
|	Be	9	1620.131	0.01	5.0880	0.240	4.719	ug/L
|	Al	27	56911.723	0.18	8.6266	0.526	6.102	ug/L
⌊>	Sc	45	286857.801	286857.80				ug/L
⌈	Ti	49	166.685	0.00	0.1364	0.145	106.269	ug/L
|	V	51	53747.315	0.11	5.1982	0.121	2.337	ug/L
|	Cr	52	52951.068	0.10	5.5332	0.202	3.649	ug/L
|	Cr	53	7310.077	0.02	7.3779	0.513	6.960	ug/L
|	Mn	55	78684.547	0.17	6.2866	0.176	2.792	ug/L
|	Co	59	54423.582	0.12	5.2651	0.102	1.944	ug/L
|	Ni	60	11767.375	0.03	5.4371	0.174	3.203	ug/L
|	Cu	65	12268.648	0.03	5.4944	0.201	3.661	ug/L
|	Zn	66	9878.310	0.02	7.3129	0.201	2.754	ug/L
|>	Ge	72	448908.598	448908.60				ug/L
|	As	75	5548.303	0.01	5.5963	0.054	0.968	ug/L
|	Se	77	518.013	0.00	6.1807	0.477	7.720	ug/L
|	Se	82	604.642	0.00	6.4968	0.217	3.340	ug/L
⌊	Rb	85	1634.483	0.00				mg/L
	Y	89	279147.239	-9062.47				ug/L
	Rh	103	38.000	29.00				ug/L
⌈	Mo	98	163.724	0.00	0.0898	0.003	3.633	ug/L
|	Ag	107	22482.814	0.07	4.9490	0.056	1.123	ug/L
|	Cd	114	5983.014	0.02	5.4984	0.233	4.233	ug/L
|>	In	115	343380.875	343380.88				ug/L
|	Sn	118	115.867	0.00	0.0080	0.002	20.596	ug/L
⌊	Sb	123	19502.691	0.06	5.3961	0.033	0.606	ug/L
⌈	Ba	135	21534.716	0.05	13.6165	0.363	2.669	ug/L
|	Ce	140	213.357	0.00				ug/L
⌊>	Tb	159	477386.690	477386.69				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	36739.405	0.08	5.2096	0.287	5.500	ug/L
|	Tl	205	91442.150	0.20	5.2454	0.155	2.948	ug/L
|	Pb	206	31092.911	0.07	5.3409	0.195	3.643	ug/L
|	Pb	207	27350.973	0.06	5.1069	0.232	4.540	ug/L
|	Pb	208	126032.621	0.27	5.2743	0.222	4.216	ug/L
|	U	238	189818.708	0.42	5.2178	0.127	2.427	ug/L
⌊>	Bi	209	457601.149	457601.15				ug/L

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⌈	Na	23	221535680.498	772.72	37.4200	2.246	6.002	mg/L
|	Mg	24	9318600.693	32.50	2.5081	0.109	4.327	mg/L
|	K	39	2026706.966	5.14	0.1609	0.009	5.370	mg/L
|	Ca	43	33348.896	0.12	1.6835	0.049	2.911	mg/L
|	Fe	54	79335.847	0.11	0.0535	0.002	3.938	mg/L
|	Fe	57	20269.302	0.05	0.0495	0.005	9.440	mg/L
⌊>	Sc-1	45	286857.801	286857.80				mg/L
	Cl	35	1228859.186	1211942.88				mg/L
	Kr	83	44.334	-4.00				mg/L
	Br	81	85975.548	76927.45				mg/L
	P	31	50111.275	38783.46				mg/L
	S	34	257708.246	58178.14				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		97.163			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		95.957			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.615			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		101.099			
⌈	Na	23					

Sample ID: L1102057902S WG357315-04
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102057902S WG357315-04
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Method 6020 - Summary Report

Sample ID: L1102057902SD WG357315-05

Sample Date/Time: Thursday, February 24, 2011 15:43:53
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 19
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20654.852	0.00				ug/L
|	Be	9	1476.776	0.01	4.9368	0.424	8.593	ug/L
|	Al	27	58353.148	0.20	9.4728	0.313	3.301	ug/L
⌊>	Sc	45	269347.662	269347.66				ug/L
⌈	Ti	49	136.681	0.00	0.1000	0.009	8.635	ug/L
|	V	51	51918.042	0.12	5.2665	0.130	2.466	ug/L
|	Cr	52	50474.641	0.10	5.5287	0.207	3.744	ug/L
|	Cr	53	7063.205	0.02	7.4795	0.469	6.268	ug/L
|	Mn	55	74463.353	0.17	6.2365	0.123	1.974	ug/L
|	Co	59	50623.067	0.12	5.1340	0.155	3.028	ug/L
|	Ni	60	11136.655	0.03	5.3950	0.301	5.587	ug/L
|	Cu	65	11534.767	0.03	5.4140	0.108	1.991	ug/L
|	Zn	66	9329.779	0.02	7.2368	0.204	2.812	ug/L
| >	Ge	72	428165.614	428165.61				ug/L
|	As	75	5335.025	0.01	5.6410	0.117	2.083	ug/L
|	Se	77	507.346	0.00	6.3706	0.283	4.447	ug/L
|	Se	82	528.288	0.00	5.9484	0.253	4.258	ug/L
⌊	Rb	85	1600.144	0.00				mg/L
	Y	89	264916.471	-23293.24				ug/L
	Rh	103	28.667	19.67				ug/L
⌈	Mo	98	141.093	0.00	0.0850	0.005	5.735	ug/L
|	Ag	107	20965.523	0.07	4.9946	0.112	2.243	ug/L
|	Cd	114	5366.142	0.02	5.3389	0.096	1.791	ug/L
| >	In	115	317234.861	317234.86				ug/L
|	Sn	118	99.334	0.00	0.0058	0.001	16.066	ug/L
⌊	Sb	123	18105.387	0.06	5.4225	0.014	0.265	ug/L
⌈	Ba	135	20438.747	0.05	13.7019	0.176	1.287	ug/L
|	Ce	140	230.026	0.00				ug/L
⌊>	Tb	159	450107.714	450107.71				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	33491.772	0.08	5.4119	0.133	2.466	ug/L
|	Tl	205	81721.078	0.20	5.3480	0.043	0.808	ug/L
|	Pb	206	28062.017	0.07	5.4969	0.113	2.047	ug/L
|	Pb	207	24534.397	0.06	5.2219	0.161	3.087	ug/L
|	Pb	208	114108.092	0.28	5.4450	0.132	2.429	ug/L
|	U	238	174103.063	0.43	5.4563	0.166	3.035	ug/L
⌊>	Bi	209	400745.821	400745.82				ug/L

Sample ID: L1102057902SD WG357315-05
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⌈	Na	23	208341693.907	773.63	37.4643	2.061	5.502	mg/L
|	Mg	24	8795951.489	32.65	2.5194	0.039	1.567	mg/L
|	K	39	1967239.644	5.38	0.1686	0.005	3.032	mg/L
|	Ca	43	32666.608	0.12	1.7561	0.034	1.951	mg/L
|	Fe	54	77594.867	0.12	0.0589	0.011	17.962	mg/L
|	Fe	57	19113.497	0.05	0.0499	0.003	6.626	mg/L
⌊>	Sc-1	45	269347.662	269347.66				mg/L
	Cl	35	1143654.795	1126738.48				mg/L
	Kr	83	46.001	-2.33				mg/L
	Br	81	48462.483	39414.39				mg/L
	P	31	45501.376	34173.56				mg/L
	S	34	223816.706	24286.60				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		92.673			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		88.650			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		92.980			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		88.538			
⌈	Na	23					

Sample ID: L1102057902SD WG357315-05
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102057902SD WG357315-05
Report Date/Time: Thursday, February 24, 2011 15:46:05
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Method 6020 - Summary Report

Sample ID: L1102057902PS WG357403-01

Sample Date/Time: Thursday, February 24, 2011 15:50:40
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 20
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23059.899	0.01				ug/L
|	Be	9	12922.355	0.05	41.7736	1.552	3.716	ug/L
|	Al	27	320817.111	1.14	53.1319	1.048	1.972	ug/L
|>	Sc	45	277274.957	277274.96				ug/L
⌈	Ti	49	586.743	0.00	0.7969	0.131	16.376	ug/L
|	V	51	406481.063	0.89	40.4468	0.971	2.402	ug/L
|	Cr	52	342691.884	0.74	40.6343	1.762	4.336	ug/L
|	Cr	53	41352.942	0.09	42.5484	2.208	5.189	ug/L
|	Mn	55	531012.782	1.17	42.2472	0.499	1.182	ug/L
|	Co	59	421321.806	0.93	40.3854	2.146	5.314	ug/L
|	Ni	60	88962.696	0.20	40.8879	0.972	2.377	ug/L
|	Cu	65	90031.531	0.20	40.2606	0.917	2.278	ug/L
|	Zn	66	53347.488	0.12	40.7324	0.330	0.811	ug/L
|>	Ge	72	453031.937	453031.94				ug/L
|	As	75	42320.854	0.09	41.3005	0.850	2.059	ug/L
|	Se	77	3052.466	0.01	40.5050	1.019	2.515	ug/L
|	Se	82	3882.719	0.01	41.5666	0.699	1.681	ug/L
⌊	Rb	85	1804.848	0.00				mg/L
	Y	89	271456.964	-16752.75				ug/L
	Rh	103	36.667	27.67				ug/L
⌈	Mo	98	167.053	0.00	0.0907	0.004	4.666	ug/L
|	Ag	107	174143.617	0.50	38.0118	0.666	1.751	ug/L
|	Cd	114	45817.873	0.13	41.7324	1.522	3.648	ug/L
|>	In	115	346172.794	346172.79				ug/L
|	Sn	118	355.873	0.00	0.0696	0.003	4.089	ug/L
⌊	Sb	123	148646.907	0.43	40.8579	0.263	0.644	ug/L
⌈	Ba	135	76718.691	0.16	48.5002	1.633	3.367	ug/L
|	Ce	140	850.122	0.00				ug/L
|>	Tb	159	477407.718	477407.72				ug/L
⌈	Ho	165	33.337	0.00				ug/L
|	Tl	203	283713.739	0.64	41.2453	0.855	2.073	ug/L
|	Tl	205	678577.772	1.52	39.8093	0.718	1.805	ug/L
|	Pb	206	234017.422	0.52	41.5786	1.013	2.437	ug/L
|	Pb	207	206544.010	0.46	39.9138	0.841	2.107	ug/L
|	Pb	208	961494.791	2.16	41.6621	1.063	2.552	ug/L
|	U	238	1467893.196	3.30	41.3770	0.841	2.032	ug/L
|>	Bi	209	445501.165	445501.16				ug/L

Sample ID: L1102057902PS WG357403-01
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⌈	Na	23	213132125.961	768.47	37.2142	1.552	4.170	mg/L
|	Mg	24	8636103.126	31.14	2.4034	0.062	2.576	mg/L
|	K	39	2009492.029	5.33	0.1667	0.005	2.942	mg/L
|	Ca	43	32469.252	0.12	1.6960	0.070	4.139	mg/L
|	Fe	54	92904.497	0.17	0.0796	0.006	8.046	mg/L
|	Fe	57	24302.064	0.06	0.0678	0.007	11.053	mg/L
⌊>	Sc-1	45	277274.957	277274.96				mg/L
	Cl	35	1182636.929	1165720.62				mg/L
	Kr	83	49.001	0.67				mg/L
	Br	81	64179.377	55131.28				mg/L
	P	31	48723.822	37396.01				mg/L
	S	34	260215.907	60685.80				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		98.055			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.737			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.620			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.426			
⌈	Na	23					

Sample ID: L1102057902PS WG357403-01
Report Date/Time: Thursday, February 24, 2011 15:52:53
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102057902PS WG357403-01
Report Date/Time: Thursday, February 24, 2011 15:52:53
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Approved: February 25, 2011

Method 6020 - Summary Report

Sample ID: L1102057902SDL WG357403-02

Sample Date/Time: Thursday, February 24, 2011 15:57:27
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 21
Method File: C:\elandata\Method\6020a.mth
Sample Description: 25

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22375.092	0.01				ug/L
|	Be	9	10.667	0.00	0.0592	0.003	5.250	ug/L
|	Al	27	21105.637	0.06	3.0380	0.185	6.084	ug/L
⌊>	Sc	45	269997.731	269997.73				ug/L
⌈	Ti	49	160.017	0.00	0.1228	0.031	24.900	ug/L
|	V	51	2482.297	0.00	0.0168	0.008	50.150	ug/L
|	Cr	52	8815.306	0.00	0.1111	0.014	12.977	ug/L
|	Cr	53	900.131	0.00	0.6688	0.115	17.250	ug/L
|	Mn	55	3403.613	0.01	0.2314	0.003	1.484	ug/L
|	Co	59	162.003	0.00	0.0141	0.001	7.132	ug/L
|	Ni	60	212.338	0.00	0.0732	0.004	5.055	ug/L
|	Cu	65	173.670	0.00	0.0273	0.007	26.716	ug/L
|	Zn	66	2072.902	0.00	1.2194	0.019	1.553	ug/L
|>	Ge	72	455650.414	455650.41				ug/L
|	As	75	-60.857	0.00	0.0931	0.026	27.686	ug/L
|	Se	77	82.000	0.00	0.1920	0.008	4.110	ug/L
|	Se	82	36.293	0.00	0.3440	0.088	25.664	ug/L
⌊	Rb	85	408.012	0.00				mg/L
	Y	89	274158.591	-14051.12				ug/L
	Rh	103	14.000	5.00				ug/L
⌈	Mo	98	42.160	0.00	0.0359	0.002	6.027	ug/L
|	Ag	107	67.668	0.00	0.0190	0.000	2.098	ug/L
|	Cd	114	3.777	0.00	0.0052	0.007	127.615	ug/L
|>	In	115	353840.124	353840.12				ug/L
|	Sn	118	67.200	-0.00	-0.0052	0.001	9.833	ug/L
⌊	Sb	123	414.961	0.00	0.1015	0.008	7.997	ug/L
⌈	Ba	135	2623.704	0.01	1.6537	0.041	2.483	ug/L
|	Ce	140	163.351	0.00				ug/L
⌊>	Tb	159	480016.581	480016.58				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	138.336	0.00	0.0237	0.002	8.729	ug/L
|	Tl	205	360.043	0.00	0.0451	0.002	3.620	ug/L
|	Pb	206	434.347	0.00	0.0292	0.001	2.681	ug/L
|	Pb	207	382.678	0.00	0.0226	0.003	14.121	ug/L
|	Pb	208	1707.407	0.00	0.0189	0.001	4.150	ug/L
|	U	238	195.004	0.00	0.0142	0.001	5.218	ug/L
⌊>	Bi	209	453935.958	453935.96				ug/L

Sample ID: L1102057902SDL WG357403-02
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⌈	Na	23	44534779.355	164.89	7.9858	0.083	1.045	mg/L
|	Mg	24	1946397.089	7.21	0.5569	0.012	2.105	mg/L
|	K	39	873016.375	1.31	0.0389	0.002	6.293	mg/L
|	Ca	43	6652.881	0.02	0.3488	0.021	5.881	mg/L
|	Fe	54	53588.158	0.03	0.0188	0.004	20.215	mg/L
|	Fe	57	10796.907	0.01	0.0165	0.000	2.571	mg/L
⌊>	Sc-1	45	269997.731	269997.73				mg/L
	Cl	35	258167.498	241251.19				mg/L
	Kr	83	43.001	-5.33				mg/L
	Br	81	25062.705	16014.61				mg/L
	P	31	20109.549	8781.73				mg/L
	S	34	215980.872	16450.77				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		98.622			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		98.879			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.159			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.290			
⌈	Na	23					

Sample ID: L1102057902SDL WG357403-02
Report Date/Time: Thursday, February 24, 2011 15:59:40

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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102057902SDL WG357403-02
Report Date/Time: Thursday, February 24, 2011 15:59:40
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 24, 2011 16:04:14
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

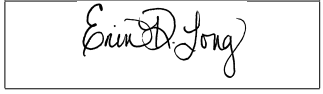
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22659.021	0.01				ug/L
|	Be	9	15899.322	0.06	50.5782	3.117	6.163	ug/L
|	Al	27	309493.023	1.08	50.3582	1.729	3.433	ug/L
⌊>	Sc	45	281990.768	281990.77				ug/L
⌈	Ti	49	65386.422	0.14	99.1845	3.536	3.565	ug/L
|	V	51	509765.269	1.08	48.9640	0.738	1.507	ug/L
|	Cr	52	422107.482	0.88	48.4429	0.286	0.590	ug/L
|	Cr	53	49252.583	0.10	48.9055	0.619	1.265	ug/L
|	Mn	55	640747.344	1.36	49.1704	0.305	0.620	ug/L
|	Co	59	530495.985	1.13	49.0499	1.310	2.670	ug/L
|	Ni	60	111080.105	0.24	49.2372	1.000	2.031	ug/L
|	Cu	65	113814.780	0.24	49.0924	1.404	2.861	ug/L
|	Zn	66	67127.225	0.14	49.5071	0.456	0.921	ug/L
| >	Ge	72	469782.179	469782.18				ug/L
|	As	75	52020.313	0.11	48.9290	0.317	0.648	ug/L
|	Se	77	3872.750	0.01	49.7638	0.384	0.771	ug/L
|	Se	82	4682.158	0.01	48.3465	1.035	2.140	ug/L
⌊	Rb	85	1936.207	0.00				mg/L
	Y	89	279372.679	-8837.03				ug/L
	Rh	103	25.000	16.00				ug/L
⌈	Mo	98	235412.697	0.65	98.1029	2.289	2.333	ug/L
|	Ag	107	235490.561	0.65	49.1634	0.652	1.326	ug/L
|	Cd	114	56235.383	0.16	49.0375	0.736	1.501	ug/L
| >	In	115	361835.822	361835.82				ug/L
|	Sn	118	194851.436	0.54	48.0797	0.454	0.945	ug/L
⌊	Sb	123	184368.316	0.51	48.4885	0.124	0.256	ug/L
⌈	Ba	135	79501.984	0.16	49.1527	1.793	3.648	ug/L
|	Ce	140	46.671	0.00				ug/L
⌊>	Tb	159	488332.322	488332.32				ug/L
⌈	Ho	165	23.336	0.00				ug/L
|	Tl	203	360220.604	0.74	48.1603	1.371	2.848	ug/L
|	Tl	205	855072.592	1.77	46.1367	1.708	3.702	ug/L
|	Pb	206	286870.104	0.59	46.8865	1.494	3.186	ug/L
|	Pb	207	266019.890	0.55	47.3036	1.025	2.166	ug/L
|	Pb	208	1203500.475	2.48	47.9797	1.146	2.389	ug/L
|	U	238	1857941.022	3.84	48.1940	1.434	2.975	ug/L
⌊>	Bi	209	483967.485	483967.49				ug/L

Sample ID: QC Std 6
Report Date/Time: Thursday, February 24, 2011 16:06:27
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⌈	Na	23	29165100.616	103.44	5.0100	0.176	3.519	mg/L
|	Mg	24	17821147.081	63.26	4.8814	0.222	4.540	mg/L
|	K	39	43898739.223	153.80	4.8956	0.162	3.314	mg/L
|	Ca	43	98001.422	0.35	5.0555	0.186	3.674	mg/L
|	Fe	54	3193435.540	11.16	4.9739	0.162	3.264	mg/L
|	Fe	57	1350906.991	4.77	5.1379	0.398	7.740	mg/L
⌊>	Sc-1	45	281990.768	281990.77				mg/L
	Cl	35	19788.897	2872.59				mg/L
	Kr	83	38.667	-9.67				mg/L
	Br	81	12162.062	3113.97				mg/L
	P	31	15188.226	3860.41				mg/L
	S	34	248838.324	49308.22				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	97.928				
|	Cr	52	96.886				
|	Cr	53					
|	Mn	55	98.341				
|	Co	59	98.100				
|	Ni	60	98.474				
|	Cu	65	98.185				
|	Zn	66	99.014				
|>	Ge	72		101.680			
|	As	75	97.858				
|	Se	77					
|	Se	82	96.693				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	98.327				
|	Cd	114	98.075				
|>	In	115		101.114			
|	Sn	118					
⌊	Sb	123	96.977				
⌈	Ba	135	98.305				
|	Ce	140					
⌊>	Tb	159		100.877			
⌈	Ho	165					
|	Tl	203	96.321				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	95.959				
|	U	238	96.388				
⌊>	Bi	209		106.924			
⌈	Na	23					

Sample ID: QC Std 6
Report Date/Time: Thursday, February 24, 2011 16:06:27

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\└>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Thursday, February 24, 2011 16:06:27

Approved: February 25, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 24, 2011 16:11:30
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22274.785	0.00				ug/L
|	Be	9	6.667	0.00	0.0444	0.025	55.635	ug/L
|	Al	27	2416.963	-0.01	-0.1973	0.065	33.083	ug/L
⌊>	Sc	45	285452.795	285452.79				ug/L
⌈	Ti	49	53.339	0.00	-0.0455	0.017	37.981	ug/L
|	V	51	2510.806	0.00	0.0161	0.005	29.066	ug/L
|	Cr	52	8340.227	0.00	0.0394	0.026	67.070	ug/L
|	Cr	53	373.378	0.00	0.1211	0.061	50.056	ug/L
|	Mn	55	360.677	0.00	-0.0100	0.001	7.711	ug/L
|	Co	59	103.335	0.00	0.0084	0.001	15.964	ug/L
|	Ni	60	41.000	-0.00	-0.0054	0.001	23.338	ug/L
|	Cu	65	111.335	-0.00	-0.0011	0.002	184.285	ug/L
|	Zn	66	494.684	0.00	0.0049	0.023	475.678	ug/L
| >	Ge	72	462366.886	462366.89				ug/L
|	As	75	-129.354	0.00	0.0289	0.009	30.717	ug/L
|	Se	77	63.334	0.00	-0.0726	0.194	266.666	ug/L
|	Se	82	17.334	0.00	0.1393	0.072	51.484	ug/L
⌊	Rb	85	17.000	0.00				mg/L
	Y	89	280544.039	-7665.67				ug/L
	Rh	103	8.667	-0.33				ug/L
⌈	Mo	98	78.165	0.00	0.0510	0.003	6.675	ug/L
|	Ag	107	30.667	0.00	0.0111	0.002	14.051	ug/L
|	Cd	114	-1.976	-0.00	0.0002	0.004	2841.817	ug/L
| >	In	115	355888.839	355888.84				ug/L
|	Sn	118	230.803	0.00	0.0358	0.004	9.965	ug/L
⌊	Sb	123	100.370	-0.00	0.0168	0.004	21.487	ug/L
⌈	Ba	135	30.667	0.00	0.0240	0.001	3.569	ug/L
|	Ce	140	10.001	-0.00				ug/L
⌊>	Tb	159	496639.122	496639.12				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	33.334	0.00	0.0086	0.001	15.200	ug/L
|	Tl	205	70.007	0.00	0.0283	0.003	10.673	ug/L
|	Pb	206	407.679	0.00	0.0229	0.001	2.981	ug/L
|	Pb	207	354.010	0.00	0.0156	0.001	9.500	ug/L
|	Pb	208	1641.736	0.00	0.0145	0.002	13.729	ug/L
|	U	238	148.669	0.00	0.0129	0.001	4.532	ug/L
⌊>	Bi	209	464890.586	464890.59				ug/L

Sample ID: QC Std 7
Report Date/Time: Thursday, February 24, 2011 16:13:41
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⌈	Na	23	20315.980	0.01	0.0013	0.000	10.281	mg/L
|	Mg	24	450.055	0.00	0.0007	0.000	1.931	mg/L
|	K	39	564709.011	0.06	-0.0011	0.001	71.788	mg/L
|	Ca	43	216.691	0.00	0.0007	0.003	399.994	mg/L
|	Fe	54	46960.488	0.00	0.0038	0.005	120.136	mg/L
|	Fe	57	7903.918	0.00	0.0033	0.002	71.425	mg/L
⌊>	Sc-1	45	285452.795	285452.79				mg/L
	Cl	35	17274.909	358.60				mg/L
	Kr	83	38.334	-10.00				mg/L
	Br	81	10784.481	1736.39				mg/L
	P	31	12124.710	796.90				mg/L
	S	34	224340.037	24809.93				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		100.075			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.452			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.592			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		102.710			
⌈	Na	23					

Sample ID: QC Std 7
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Thursday, February 24, 2011 16:13:41

Approved: February 25, 2011

Method 6020 - Summary Report

Sample ID: L1102054202

Sample Date/Time: Thursday, February 24, 2011 16:18:15
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 26
Method File: C:\elandata\Method\6020a.mth
Sample Description: 100

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20571.191	-0.00				ug/L
|	Be	9	12.000	0.00	0.0624	0.006	9.270	ug/L
|	Al	27	239552.171	0.84	39.3787	1.150	2.920	ug/L
⌊>	Sc	45	278459.550	278459.55				ug/L
⌈	Ti	49	350.041	0.00	0.4118	0.009	2.119	ug/L
|	V	51	3305.547	0.00	0.0936	0.011	12.158	ug/L
|	Cr	52	8869.354	0.00	0.1012	0.032	32.083	ug/L
|	Cr	53	330.039	0.00	0.0763	0.065	85.698	ug/L
|	Mn	55	57066.956	0.12	4.4108	0.119	2.691	ug/L
|	Co	59	178.670	0.00	0.0154	0.001	8.180	ug/L
|	Ni	60	128.002	0.00	0.0337	0.005	16.132	ug/L
|	Cu	65	1748.170	0.00	0.7164	0.041	5.782	ug/L
|	Zn	66	3677.380	0.01	2.4052	0.108	4.492	ug/L
| >	Ge	72	462900.931	462900.93				ug/L
|	As	75	-84.966	0.00	0.0713	0.027	37.395	ug/L
|	Se	77	78.000	0.00	0.1224	0.093	75.702	ug/L
|	Se	82	1.652	-0.00	-0.0262	0.082	314.645	ug/L
⌊	Rb	85	798.707	0.00				mg/L
	Y	89	283251.768	-4957.94				ug/L
	Rh	103	10.333	1.33				ug/L
⌈	Mo	98	54.571	0.00	0.0408	0.003	6.575	ug/L
|	Ag	107	24.000	0.00	0.0096	0.001	9.435	ug/L
|	Cd	114	8.943	0.00	0.0097	0.004	38.082	ug/L
| >	In	115	359479.992	359479.99				ug/L
|	Sn	118	165.335	0.00	0.0189	0.002	11.683	ug/L
⌊	Sb	123	94.952	-0.00	0.0151	0.003	19.541	ug/L
⌈	Ba	135	641.694	0.00	0.4160	0.007	1.764	ug/L
|	Ce	140	713.430	0.00				ug/L
⌊>	Tb	159	471452.824	471452.82				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	32.334	0.00	0.0083	0.001	7.721	ug/L
|	Tl	205	80.008	0.00	0.0287	0.002	6.218	ug/L
|	Pb	206	4918.594	0.01	0.7759	0.031	3.950	ug/L
|	Pb	207	4463.374	0.01	0.7627	0.029	3.806	ug/L
|	Pb	208	20359.769	0.04	0.7773	0.027	3.437	ug/L
|	U	238	95.001	0.00	0.0114	0.000	1.076	ug/L
⌊>	Bi	209	473692.840	473692.84				ug/L

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⌈	Na	23	1336454.275	4.74	0.2303	0.005	2.084	mg/L
|	Mg	24	60364.455	0.22	0.0173	0.000	2.044	mg/L
|	K	39	790760.515	0.92	0.0264	0.002	8.318	mg/L
|	Ca	43	1186.856	0.00	0.0517	0.002	3.518	mg/L
|	Fe	54	61026.385	0.06	0.0281	0.006	21.398	mg/L
|	Fe	57	13196.718	0.02	0.0245	0.004	15.379	mg/L
⌊>	Sc-1	45	278459.550	278459.55				mg/L
	Cl	35	20537.745	3621.43				mg/L
	Kr	83	40.000	-8.33				mg/L
	Br	81	10173.186	1125.09				mg/L
	P	31	13943.768	2615.95				mg/L
	S	34	224002.878	24472.77				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		100.191			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.455			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.390			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		104.654			
⌈	Na	23					

Sample ID: L1102054202
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Approved: February 25, 2011

|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 25, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Thursday, February 24, 2011 16:25:01
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20471.065	-0.00				ug/L
|	Be	9	15210.930	0.05	48.7344	5.820	11.941	ug/L
|	Al	27	297702.458	1.05	48.7260	3.397	6.972	ug/L
⌊>	Sc	45	280967.241	280967.24				ug/L
⌈	Ti	49	62511.157	0.14	97.1461	3.770	3.881	ug/L
|	V	51	491353.858	1.07	48.3472	1.234	2.553	ug/L
|	Cr	52	416491.155	0.89	48.9801	1.061	2.165	ug/L
|	Cr	53	49212.398	0.11	50.0753	1.503	3.001	ug/L
|	Mn	55	619786.137	1.35	48.7280	1.007	2.066	ug/L
|	Co	59	512827.339	1.12	48.5752	0.753	1.549	ug/L
|	Ni	60	107208.780	0.23	48.6778	0.188	0.387	ug/L
|	Cu	65	110856.929	0.24	48.9801	0.135	0.277	ug/L
|	Zn	66	64917.358	0.14	49.0427	0.253	0.516	ug/L
⌊>	Ge	72	458589.573	458589.57				ug/L
|	As	75	51181.131	0.11	49.3168	0.623	1.264	ug/L
|	Se	77	3790.718	0.01	49.9091	1.135	2.274	ug/L
|	Se	82	4788.811	0.01	50.6579	1.136	2.242	ug/L
⌊	Rb	85	1925.205	0.00				mg/L
	Y	89	275558.933	-12650.78				ug/L
	Rh	103	22.334	13.33				ug/L
⌈	Mo	98	234422.541	0.67	101.5865	2.105	2.072	ug/L
|	Ag	107	233199.076	0.67	50.6400	1.231	2.432	ug/L
|	Cd	114	54461.993	0.16	49.4164	3.154	6.382	ug/L
⌊>	In	115	347950.779	347950.78				ug/L
|	Sn	118	189468.544	0.54	48.6263	0.999	2.054	ug/L
⌊	Sb	123	177612.201	0.51	48.5848	0.623	1.282	ug/L
⌈	Ba	135	78582.379	0.16	49.0934	0.341	0.695	ug/L
|	Ce	140	26.669	0.00				ug/L
⌊>	Tb	159	482895.940	482895.94				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	350143.131	0.75	48.6214	0.800	1.645	ug/L
|	Tl	205	853570.443	1.83	47.8153	0.997	2.084	ug/L
|	Pb	206	283248.433	0.61	48.0743	0.682	1.419	ug/L
|	Pb	207	260517.466	0.56	48.1104	1.383	2.875	ug/L
|	Pb	208	1172659.270	2.51	48.5529	0.963	1.983	ug/L
|	U	238	1780421.646	3.82	47.9319	1.002	2.091	ug/L
⌊>	Bi	209	466244.335	466244.34				ug/L

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Na	23	28372709.627	101.10	4.8968	0.239	4.873	mg/L
Mg	24	17056025.431	60.81	4.6924	0.222	4.722	mg/L
K	39	43030846.545	151.55	4.8239	0.349	7.231	mg/L
Ca	43	94009.303	0.33	4.8727	0.224	4.599	mg/L
Fe	54	3121145.445	10.96	4.8847	0.249	5.088	mg/L
Fe	57	1256095.326	4.46	4.7940	0.272	5.665	mg/L
> Sc-1	45	280967.241	280967.24				mg/L
Cl	35	19134.958	2218.65				mg/L
Kr	83	46.667	-1.67				mg/L
Br	81	10024.358	976.26				mg/L
P	31	14338.445	3010.63				mg/L
S	34	246770.192	47240.09				mg/L

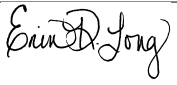
QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	96.694				
Cr	52	97.960				
Cr	53					
Mn	55	97.456				
Co	59	97.150				
Ni	60	97.356				
Cu	65	97.960				
Zn	66	98.085				
> Ge	72		99.258			
As	75	98.634				
Se	77					
Se	82	101.316				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	101.280				
Cd	114	98.833				
> In	115		97.234			
Sn	118					
Sb	123	97.170				
Ba	135	98.187				
Ce	140					
> Tb	159		99.754			
Ho	165					
Tl	203	97.243				
Tl	205					
Pb	206					
Pb	207					
Pb	208	97.106				
U	238	95.864				
> Bi	209		103.009			
Na	23					

Sample ID: QC Std 6
Report Date/Time: Thursday, February 24, 2011 16:27:14



Approved: February 25, 2011



|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Thursday, February 24, 2011 16:27:14

Approved: February 25, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Thursday, February 24, 2011 16:32:17
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19552.498	-0.01				ug/L
|	Be	9	5.333	0.00	0.0406	0.004	8.989	ug/L
|	Al	27	2066.893	-0.01	-0.2551	0.102	40.009	ug/L
⌊>	Sc	45	285535.830	285535.83				ug/L
⌈	Ti	49	46.671	0.00	-0.0557	0.023	41.955	ug/L
|	V	51	2460.493	0.00	0.0113	0.005	39.721	ug/L
|	Cr	52	8210.451	0.00	0.0248	0.013	54.195	ug/L
|	Cr	53	296.701	-0.00	0.0438	0.016	37.512	ug/L
|	Mn	55	367.010	0.00	-0.0094	0.003	36.673	ug/L
|	Co	59	111.668	0.00	0.0092	0.001	6.614	ug/L
|	Ni	60	37.667	-0.00	-0.0069	0.002	33.617	ug/L
|	Cu	65	96.001	-0.00	-0.0078	0.003	42.876	ug/L
|	Zn	66	499.351	0.00	0.0089	0.011	127.488	ug/L
|>	Ge	72	461914.660	461914.66				ug/L
|	As	75	-158.143	0.00	0.0013	0.019	1492.515	ug/L
|	Se	77	70.000	0.00	0.0177	0.077	435.380	ug/L
|	Se	82	4.890	0.00	0.0086	0.052	607.718	ug/L
⌊	Rb	85	18.667	0.00				mg/L
	Y	89	281093.990	-7115.72				ug/L
	Rh	103	5.333	-3.67				ug/L
⌈	Mo	98	82.937	0.00	0.0526	0.003	5.621	ug/L
|	Ag	107	27.667	0.00	0.0104	0.002	18.729	ug/L
|	Cd	114	1.297	-0.00	0.0030	0.004	127.608	ug/L
|>	In	115	360314.020	360314.02				ug/L
|	Sn	118	237.336	0.00	0.0366	0.007	18.072	ug/L
⌊	Sb	123	68.036	-0.00	0.0079	0.002	23.543	ug/L
⌈	Ba	135	30.667	0.00	0.0245	0.001	6.035	ug/L
|	Ce	140	13.335	-0.00				ug/L
⌊>	Tb	159	483369.693	483369.69				ug/L
⌈	Ho	165	26.669	0.00				ug/L
|	Tl	203	27.334	0.00	0.0077	0.000	3.201	ug/L
|	Tl	205	86.676	0.00	0.0292	0.000	0.942	ug/L
|	Pb	206	412.346	0.00	0.0232	0.003	15.046	ug/L
|	Pb	207	350.010	0.00	0.0145	0.004	28.809	ug/L
|	Pb	208	1617.067	0.00	0.0131	0.004	28.313	ug/L
|	U	238	124.002	0.00	0.0122	0.000	3.059	ug/L
⌊>	Bi	209	467587.169	467587.17				ug/L

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⌈	Na	23	18575.771	0.00	0.0010	0.000	10.223	mg/L
|	Mg	24	346.707	0.00	0.0006	0.000	0.950	mg/L
|	K	39	571545.706	0.08	-0.0004	0.001	168.981	mg/L
|	Ca	43	166.685	-0.00	-0.0019	0.002	83.903	mg/L
|	Fe	54	45524.103	-0.00	0.0014	0.004	259.493	mg/L
|	Fe	57	8280.937	0.00	0.0047	0.003	55.302	mg/L
⌊>	Sc-1	45	285535.830	285535.83				mg/L
	Cl	35	16948.355	32.04				mg/L
	Kr	83	51.001	2.67				mg/L
	Br	81	9333.025	284.93				mg/L
	P	31	12818.964	1491.15				mg/L
	S	34	224050.924	24520.82				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		99.978			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.689			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.851			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		103.306			
⌈	Na	23					

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
_>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
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Instrument Tuning Report

File Name: 06302008.tun
File Path: C:\Elandata\Tuning\06302008.tun

Sample Information

Sample Date/Time: Friday, February 25, 2011 08:54:19

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	2.976	617	2060	0.730	
Li	7.016	7.029	1593	2060	0.707	
Co	58.933	58.928	14283	1972	0.707	
Ce	139.905	139.878	33990	2015	0.731	
Tl	204.975	204.926	49689	2255	0.721	

Relative Std. Dev.

Mass	Meas. Intens. RSD
2.000	1.372
3.000	2.310
4.000	40.457
5.000	10.495
6.000	2.345
7.000	1.698
8.000	23.880
9.000	2.006
58.000	2.406
59.000	1.574
60.000	4.667
139.000	2.893
140.000	1.202
141.000	4.495
204.000	1.831
205.000	1.407
206.000	0.887

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Daily Performance Report

Sample ID: Sample
Sample Date/Time: Friday, February 25, 2011 09:00:11
Sample Description:
Method File: C:\Elandata\Method\6020 DAILY.mth
Dataset File: C:\elandata\Dataset\021011\Sample.815
Tuning File: C:\Elandata\Tuning\06302008.tun
Optimization File: C:\Elandata\Optimize\Default.dac
Dual Detector Mode: Dual

Acq. Dead Time(ns): 50
Current Dead Time (ns): 50

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	45466.3	45466.341	638.856	1.4
	Rh	102.9	287544.9	287544.934	2909.261	1.0
	In	114.9	520692.1	520692.090	4493.011	0.9
	Pb	208.0	188498.2	188498.202	1689.136	0.9
	U	238.1	63.1	63.100	6.417	10.2
⌈>	Ba	137.9	238009.1	238009.097	2056.165	0.9
⌊	Ba++	69.0	3370.6	0.014	0.000	1.4
⌈>	Ce	139.9	302207.3	302207.290	2297.089	0.8
⌊	CeO	155.9	7506.8	0.025	0.001	3.7
	Bkgd	220.0	3.9	3.900	1.194	30.6
	Ar2	79.9	3627562.8	3627562.840	30626.080	0.8

Current Optimization File Data

Current Value	Description
0.95	Nebulizer Gas Flow
6.70	Lens Voltage
1500.00	ICP RF Power
-1834.38	Analog Stage Voltage
1000.00	Pulse Stage Voltage
20.00	Discriminator Threshold
-10.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	33	7.5	4793.5
Co	59	33	8.0	129402.2
Rh	103	33	9.0	140311.8
Pb	208	33	11.3	172960.6

Sample ID: Sample
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Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: Blank

Sample Date/Time: Friday, February 25, 2011 09:36:12
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

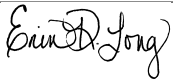
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19402.385					ug/L
|	Be	9	3.333					ug/L
|	Al	27	1700.150					ug/L
|>	Sc	45	307198.640					ug/L
⌈	Ti	49	56.673					ug/L
|	V	51	2537.754					ug/L
|	Cr	52	8536.728					ug/L
|	Cr	53	600.079					ug/L
|	Mn	55	469.349					ug/L
|	Co	59	90.335					ug/L
|	Ni	60	60.001					ug/L
|	Cu	65	93.668					ug/L
|	Zn	66	489.684					ug/L
|>	Ge	72	464977.945					ug/L
|	As	75	-110.681					ug/L
|	Se	77	63.334					ug/L
|	Se	82	16.021					ug/L
⌊	Rb	85	14.667					mg/L
	Y	89	290697.189					ug/L
	Rh	103	8.333					ug/L
⌈	Mo	98	10.899					ug/L
|	Ag	107	12.667					ug/L
|	Cd	114	1.201					ug/L
|>	In	115	358477.734					ug/L
|	Sn	118	60.667					ug/L
⌊	Sb	123	43.581					ug/L
⌈	Ba	135	10.333					ug/L
|	Ce	140	13.335					ug/L
⌊>	Tb	159	500683.467					ug/L
⌈	Ho	165	3.334					ug/L
|	Tl	203	22.000					ug/L
|	Tl	205	33.337					ug/L
|	Pb	206	362.677					ug/L
|	Pb	207	326.675					ug/L
|	Pb	208	1504.394					ug/L
|	U	238	12.667					ug/L
⌊>	Bi	209	512565.900					ug/L

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⌈	Na	23	106969.863	mg/L
|	Mg	24	253.362	mg/L
|	K	39	579572.814	mg/L
|	Ca	43	156.684	mg/L
|	Fe	54	43375.214	mg/L
|	Fe	57	6762.968	mg/L
⌊>	Sc-1	45	307198.640	mg/L
	Cl	35	19784.888	mg/L
	Kr	83	36.000	mg/L
	Br	81	7160.564	mg/L
	P	31	10123.137	mg/L
	S	34	201766.505	mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Blank
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Method 6020 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Friday, February 25, 2011 09:42:56
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19586.020	0.00				ug/L
|	Be	9	6.667	0.00				ug/L
|	Al	27	2033.540	0.00				ug/L
⌊>	Sc	45	293307.601	293307.60				ug/L
⌈	Ti	49	60.006	0.00				ug/L
|	V	51	2420.784	-0.00				ug/L
|	Cr	52	8086.684	-0.00				ug/L
|	Cr	53	573.407	-0.00				ug/L
|	Mn	55	448.348	-0.00				ug/L
|	Co	59	85.335	-0.00				ug/L
|	Ni	60	77.334	0.00				ug/L
|	Cu	65	101.668	0.00				ug/L
|	Zn	66	491.684	0.00				ug/L
|>	Ge	72	464752.655	464752.66				ug/L
|	As	75	-143.242	-0.00				ug/L
|	Se	77	68.000	0.00				ug/L
|	Se	82	7.273	-0.00				ug/L
⌊	Rb	85	15.000	0.00				mg/L
	Y	89	285509.406	-5187.78				ug/L
	Rh	103	8.333	0.00				ug/L
⌈	Mo	98	6.936	-0.00				ug/L
|	Ag	107	14.667	0.00				ug/L
|	Cd	114	2.140	0.00				ug/L
|>	In	115	362335.501	362335.50				ug/L
|	Sn	118	58.534	-0.00				ug/L
⌊	Sb	123	35.122	-0.00				ug/L
⌈	Ba	135	9.000	-0.00				ug/L
|	Ce	140	30.003	0.00				ug/L
⌊>	Tb	159	497247.995	497248.00				ug/L
⌈	Ho	165	13.335	0.00				ug/L
|	Tl	203	17.667	-0.00				ug/L
|	Tl	205	33.337	0.00				ug/L
|	Pb	206	396.345	0.00				ug/L
|	Pb	207	322.675	0.00				ug/L
|	Pb	208	1524.394	0.00				ug/L
|	U	238	9.333	-0.00				ug/L
⌊>	Bi	209	504667.595	504667.59				ug/L

Sample ID: Standard 1
Report Date/Time: Friday, February 25, 2011 09:45:07
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⌈	Na	23	100152.423	-0.01		mg/L
|	Mg	24	193.355	-0.00		mg/L
|	K	39	560098.260	0.02		mg/L
|	Ca	43	156.684	0.00		mg/L
|	Fe	54	40823.310	-0.00		mg/L
|	Fe	57	6282.607	-0.00		mg/L
⌊>	Sc-1	45	293307.601	293307.60		mg/L
	Cl	35	18068.977	-1715.91		mg/L
	Kr	83	45.334	9.33		mg/L
	Br	81	6940.409	-220.15		mg/L
	P	31	10402.777	279.64		mg/L
	S	34	192197.921	-9568.58		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

Sample ID: Standard 1
Report Date/Time: Friday, February 25, 2011 09:45:07

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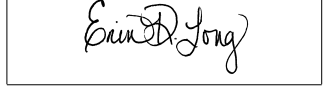
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
_>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 1
Report Date/Time: Friday, February 25, 2011 09:45:07

Approved: February 28, 2011



Method 6020 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Friday, February 25, 2011 09:49:41
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 2
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21907.629	0.01				ug/L
|	Be	9	105.334	0.00				ug/L
|	Al	27	4400.969	0.01				ug/L
|>	Sc	45	312147.334	312147.33				ug/L
⌈	Ti	49	496.729	0.00				ug/L
|	V	51	5998.599	0.01				ug/L
|	Cr	52	11001.492	0.01				ug/L
|	Cr	53	886.795	0.00				ug/L
|	Mn	55	5971.842	0.01				ug/L
|	Co	59	3923.476	0.01				ug/L
|	Ni	60	871.047	0.00				ug/L
|	Cu	65	903.717	0.00				ug/L
|	Zn	66	1107.739	0.00				ug/L
|>	Ge	72	467402.594	467402.59				ug/L
|	As	75	220.443	0.00				ug/L
|	Se	77	97.334	0.00				ug/L
|	Se	82	41.957	0.00				ug/L
⌊	Rb	85	31.334	0.00				mg/L
	Y	89	283850.627	-6846.56				ug/L
	Rh	103	3.667	-4.67				ug/L
⌈	Mo	98	1567.070	0.00				ug/L
|	Ag	107	1684.826	0.00				ug/L
|	Cd	114	368.065	0.00				ug/L
|>	In	115	362838.488	362838.49				ug/L
|	Sn	118	1429.035	0.00				ug/L
⌊	Sb	123	1359.892	0.00				ug/L
⌈	Ba	135	542.353	0.00				ug/L
|	Ce	140	10.001	-0.00				ug/L
|>	Tb	159	512663.004	512663.00				ug/L
⌈	Ho	165	3.334	0.00				ug/L
|	Tl	203	2611.701	0.01				ug/L
|	Tl	205	6452.733	0.01				ug/L
|	Pb	206	2611.367	0.00				ug/L
|	Pb	207	2406.981	0.00				ug/L
|	Pb	208	10665.331	0.02				ug/L
|	U	238	16333.163	0.03				ug/L
|>	Bi	209	503178.757	503178.76				ug/L

Sample ID: Standard 2
Report Date/Time: Friday, February 25, 2011 09:51:52
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⌈	Na	23	301044.388	0.62		mg/L
|	Mg	24	142296.959	0.46		mg/L
|	K	39	889155.333	0.96		mg/L
|	Ca	43	893.463	0.00		mg/L
|	Fe	54	66867.741	0.07		mg/L
|	Fe	57	16538.660	0.03		mg/L
⌊>	Sc-1	45	312147.334	312147.33		mg/L
	Cl	35	17151.367	-2633.52		mg/L
	Kr	83	43.334	7.33		mg/L
	Br	81	7064.495	-96.07		mg/L
	P	31	10943.327	820.19		mg/L
	S	34	191541.057	-10225.45		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

Sample ID: Standard 2
Report Date/Time: Friday, February 25, 2011 09:51:52

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 2
Report Date/Time: Friday, February 25, 2011 09:51:52
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Method 6020 - Summary Report

Sample ID: Standard 3

Sample Date/Time: Friday, February 25, 2011 09:56:26
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 3
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19352.062	0.00				ug/L
|	Be	9	13395.652	0.05	50.0000	2.698	5.397	ug/L
|	Al	27	265991.355	0.93	50.0000	0.765	1.531	ug/L
⌊>	Sc	45	285606.032	285606.03				ug/L
⌈	Ti	49	54560.556	0.12	100.0000	0.790	0.790	ug/L
|	V	51	439180.247	0.96	50.0000	0.439	0.877	ug/L
|	Cr	52	365702.825	0.79	50.0000	0.620	1.240	ug/L
|	Cr	53	43555.664	0.09	50.0000	0.468	0.936	ug/L
|	Mn	55	561614.137	1.23	50.0000	0.439	0.878	ug/L
|	Co	59	458659.737	1.01	50.0000	0.471	0.941	ug/L
|	Ni	60	94661.304	0.21	50.0000	1.014	2.029	ug/L
|	Cu	65	97898.438	0.21	50.0000	1.524	3.047	ug/L
|	Zn	66	58380.177	0.13	50.0000	0.663	1.326	ug/L
|>	Ge	72	455156.724	455156.72				ug/L
|	As	75	44180.851	0.10	50.0000	0.187	0.374	ug/L
|	Se	77	3229.855	0.01	50.0000	1.411	2.822	ug/L
|	Se	82	4076.485	0.01	50.0000	0.966	1.932	ug/L
⌊	Rb	85	1665.489	0.00				mg/L
	Y	89	274637.349	-16059.84				ug/L
	Rh	103	23.000	14.67				ug/L
⌈	Mo	98	193618.256	0.55	100.0000	1.837	1.837	ug/L
|	Ag	107	198202.711	0.56	50.0000	1.066	2.133	ug/L
|	Cd	114	47250.869	0.13	50.0000	0.466	0.932	ug/L
|>	In	115	350842.705	350842.71				ug/L
|	Sn	118	164126.356	0.47	50.0000	0.689	1.378	ug/L
⌊	Sb	123	161507.781	0.46	50.0000	1.224	2.448	ug/L
⌈	Ba	135	66429.917	0.13	50.0000	0.249	0.499	ug/L
|	Ce	140	36.670	0.00				ug/L
⌊>	Tb	159	492603.181	492603.18				ug/L
⌈	Ho	165	13.335	0.00				ug/L
|	Tl	203	309630.850	0.64	50.0000	0.369	0.739	ug/L
|	Tl	205	768008.680	1.58	50.0000	0.459	0.918	ug/L
|	Pb	206	252236.252	0.52	50.0000	0.489	0.978	ug/L
|	Pb	207	238284.402	0.49	50.0000	0.565	1.130	ug/L
|	Pb	208	1056644.848	2.17	50.0000	0.308	0.617	ug/L
|	U	238	1968212.465	4.04	50.0000	1.203	2.406	ug/L
⌊>	Bi	209	486761.621	486761.62				ug/L

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Na	23	24532635.361	85.59	5.0000	0.141	2.811	mg/L
Mg	24	15217754.365	53.32	5.0000	0.204	4.085	mg/L
K	39	38705982.812	133.71	5.0000	0.183	3.660	mg/L
Ca	43	84272.091	0.29	5.0000	0.218	4.368	mg/L
Fe	54	2750991.530	9.50	5.0000	0.221	4.430	mg/L
Fe	57	1152220.528	4.01	5.0000	0.137	2.736	mg/L
> Sc-1	45	285606.032	285606.03				mg/L
Cl	35	17837.229	-1947.66				mg/L
Kr	83	46.667	10.67				mg/L
Br	81	6724.271	-436.29				mg/L
P	31	9757.425	-365.71				mg/L
S	34	198870.485	-2896.02				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72					
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115					
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159					
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209					
Na	23					

Sample ID: Standard 3
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 3
Report Date/Time: Friday, February 25, 2011 09:58:38

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Method 6020 - Summary Report

Sample ID: Standard 4

Sample Date/Time: Friday, February 25, 2011 10:03:12
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 4
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21907.495	0.02				ug/L
|	Be	9	25614.779	0.09	99.0138	1.804	1.822	ug/L
|	Al	27	516791.526	1.85	100.0131	3.635	3.634	ug/L
⌊>	Sc	45	278354.389	278354.39				ug/L
⌈	Ti	49	106642.925	0.24	199.1369	1.375	0.691	ug/L
|	V	51	846405.745	1.88	98.9762	1.730	1.748	ug/L
|	Cr	52	708570.847	1.56	99.6440	1.520	1.525	ug/L
|	Cr	53	83011.705	0.18	98.5773	3.602	3.654	ug/L
|	Mn	55	1066429.669	2.37	98.1649	2.114	2.153	ug/L
|	Co	59	857202.704	1.91	97.3211	1.460	1.500	ug/L
|	Ni	60	178726.584	0.40	97.8468	1.647	1.683	ug/L
|	Cu	65	187117.717	0.42	98.4538	0.469	0.476	ug/L
|	Zn	66	112223.323	0.25	98.9734	0.137	0.138	ug/L
|>	Ge	72	448893.699	448893.70				ug/L
|	As	75	85217.874	0.19	98.8106	0.999	1.011	ug/L
|	Se	77	6143.887	0.01	98.7220	2.562	2.595	ug/L
|	Se	82	7544.963	0.02	96.8817	1.189	1.227	ug/L
⌊	Rb	85	3109.515	0.01				mg/L
	Y	89	263147.352	-27549.84				ug/L
	Rh	103	35.000	26.67				ug/L
⌈	Mo	98	372723.731	1.08	197.4544	1.840	0.932	ug/L
|	Ag	107	377190.583	1.09	98.1797	2.920	2.974	ug/L
|	Cd	114	91012.250	0.26	98.7644	2.864	2.900	ug/L
|>	In	115	346381.830	346381.83				ug/L
|	Sn	118	317849.926	0.92	99.0396	0.122	0.123	ug/L
⌊	Sb	123	313991.405	0.91	99.2296	1.706	1.719	ug/L
⌈	Ba	135	130229.294	0.27	99.4019	3.005	3.023	ug/L
|	Ce	140	70.007	0.00				ug/L
⌊>	Tb	159	488836.609	488836.61				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	608803.350	1.28	100.2314	0.579	0.578	ug/L
|	Tl	205	1452851.841	3.05	98.3091	1.538	1.564	ug/L
|	Pb	206	481195.069	1.01	98.7677	0.332	0.336	ug/L
|	Pb	207	453365.047	0.95	98.6456	2.648	2.684	ug/L
|	Pb	208	2028880.795	4.26	99.0915	1.037	1.046	ug/L
|	U	238	3796133.073	7.97	99.2691	2.298	2.315	ug/L
⌊>	Bi	209	476397.909	476397.91				ug/L

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⌈	Na	23	48029294.639	172.21	10.0279	0.090	0.897	mg/L
|	Mg	24	29942033.355	107.57	10.0449	0.126	1.255	mg/L
|	K	39	74887926.017	267.17	9.9936	0.306	3.066	mg/L
|	Ca	43	162007.901	0.58	9.9320	0.058	0.586	mg/L
|	Fe	54	5253518.339	18.74	9.9305	0.326	3.282	mg/L
|	Fe	57	2096964.166	7.51	9.6696	0.529	5.471	mg/L
⌊>	Sc-1	45	278354.389	278354.39				mg/L
	Cl	35	17289.605	-2495.28				mg/L
	Kr	83	36.667	0.67				mg/L
	Br	81	6721.594	-438.97				mg/L
	P	31	9543.889	-579.25				mg/L
	S	34	186916.691	-14849.81				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					
⌈	Na	23					

Sample ID: Standard 4
Report Date/Time: Friday, February 25, 2011 10:05:24

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 4
Report Date/Time: Friday, February 25, 2011 10:05:24
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Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Friday, February 25, 2011 10:09:58
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 11
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21556.688	0.02				ug/L
|	Be	9	13114.595	0.05	51.6443	0.952	1.844	ug/L
|	Al	27	267641.012	0.97	52.5431	2.403	4.574	ug/L
|>	Sc	45	273386.815	273386.81				ug/L
⌈	Ti	49	53431.132	0.12	99.4251	3.552	3.573	ug/L
|	V	51	431109.075	0.95	50.1155	0.814	1.625	ug/L
|	Cr	52	367211.972	0.80	50.9496	1.222	2.398	ug/L
|	Cr	53	42554.666	0.09	50.0879	2.115	4.223	ug/L
|	Mn	55	545062.338	1.21	49.9523	0.134	0.268	ug/L
|	Co	59	438070.605	0.97	49.5662	0.584	1.177	ug/L
|	Ni	60	92628.070	0.21	50.5255	1.222	2.418	ug/L
|	Cu	65	95971.996	0.21	50.3124	0.345	0.685	ug/L
|	Zn	66	57202.043	0.13	50.0259	0.276	0.552	ug/L
|>	Ge	72	450290.040	450290.04				ug/L
|	As	75	43167.232	0.10	49.9711	0.580	1.162	ug/L
|	Se	77	3165.835	0.01	50.1568	0.933	1.860	ug/L
|	Se	82	3924.502	0.01	50.1821	0.759	1.513	ug/L
⌊	Rb	85	1642.485	0.00				mg/L
	Y	89	272253.545	-18443.64				ug/L
	Rh	103	18.667	10.33				ug/L
⌈	Mo	98	190104.179	0.54	99.5652	1.971	1.980	ug/L
|	Ag	107	192608.304	0.55	49.5356	0.223	0.450	ug/L
|	Cd	114	44432.588	0.13	47.6649	0.751	1.575	ug/L
|>	In	115	350389.773	350389.77				ug/L
|	Sn	118	160940.927	0.46	49.5629	0.345	0.695	ug/L
⌊	Sb	123	156901.462	0.45	49.0098	1.066	2.175	ug/L
⌈	Ba	135	66148.121	0.13	49.8071	1.678	3.368	ug/L
|	Ce	140	60.006	0.00				ug/L
|>	Tb	159	495503.772	495503.77				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	313251.244	0.63	49.4976	1.018	2.056	ug/L
|	Tl	205	770298.831	1.55	50.0246	2.058	4.114	ug/L
|	Pb	206	260789.262	0.52	51.3259	0.976	1.902	ug/L
|	Pb	207	228797.424	0.46	47.7206	0.269	0.565	ug/L
|	Pb	208	1071819.964	2.16	50.1955	0.560	1.116	ug/L
|	U	238	1930034.591	3.89	48.4265	0.574	1.185	ug/L
|>	Bi	209	496352.405	496352.41				ug/L

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⌈	Na	23	24828843.326	90.47	5.2701	0.021	0.400	mg/L
|	Mg	24	15629738.393	57.17	5.3373	0.054	1.005	mg/L
|	K	39	38196670.771	137.84	5.1577	0.123	2.379	mg/L
|	Ca	43	83082.076	0.30	5.1823	0.141	2.722	mg/L
|	Fe	54	2739326.170	9.88	5.2372	0.059	1.129	mg/L
|	Fe	57	1125388.905	4.09	5.2696	0.090	1.700	mg/L
⌊>	Sc-1	45	273386.815	273386.81				mg/L
	Cl	35	17884.647	-1900.24				mg/L
	Kr	83	37.000	1.00				mg/L
	Br	81	6646.876	-513.69				mg/L
	P	31	10558.974	435.84				mg/L
	S	34	195456.843	-6309.66				mg/L

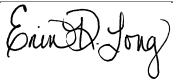
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9	103.289				
|	Al	27	105.086				
⌊>	Sc	45					
⌈	Ti	49	99.425				
|	V	51	100.231				
|	Cr	52	101.899				
|	Cr	53					
|	Mn	55	99.905				
|	Co	59	99.132				
|	Ni	60	101.051				
|	Cu	65	100.625				
|	Zn	66	100.052				
|>	Ge	72		96.841			
|	As	75	99.942				
|	Se	77					
|	Se	82	100.364				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	99.071				
|	Cd	114	95.330				
|>	In	115		97.744			
|	Sn	118					
⌊	Sb	123	98.020				
⌈	Ba	135	99.614				
|	Ce	140					
⌊>	Tb	159		98.965			
⌈	Ho	165					
|	Tl	203	98.995				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	100.391				
|	U	238	96.853				
⌊>	Bi	209		96.837			
⌈	Na	23	105.402				

Sample ID: QC Std 1
Report Date/Time: Friday, February 25, 2011 10:12:09



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|	Mg	24	106.747
|	K	39	103.154
|	Ca	43	103.645
|	Fe	54	104.744
|	Fe	57	105.392
|>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 1
Report Date/Time: Friday, February 25, 2011 10:12:09

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Friday, February 25, 2011 10:17:22
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19552.495	0.01				ug/L
|	Be	9	3.333	0.00	0.0503	0.004	8.291	ug/L
|	Al	27	1416.772	-0.00	-0.0874	0.063	72.594	ug/L
|>	Sc	45	277175.478	277175.48				ug/L
⌈	Ti	49	43.338	-0.00	-0.0118	0.039	331.239	ug/L
|	V	51	2191.705	-0.00	-0.0193	0.015	76.706	ug/L
|	Cr	52	7522.572	-0.00	-0.0365	0.028	76.250	ug/L
|	Cr	53	413.383	-0.00	-0.1262	0.014	11.251	ug/L
|	Mn	55	387.011	-0.00	-0.0932	0.002	2.167	ug/L
|	Co	59	97.668	0.00	-0.0170	0.001	7.252	ug/L
|	Ni	60	54.334	-0.00	-0.0289	0.005	15.973	ug/L
|	Cu	65	109.668	0.00	0.0005	0.005	1068.225	ug/L
|	Zn	66	494.351	0.00	-0.1070	0.015	13.908	ug/L
|>	Ge	72	450434.581	450434.58				ug/L
|	As	75	-163.968	-0.00	-0.0340	0.033	95.950	ug/L
|	Se	77	58.000	-0.00	-0.1834	0.140	76.419	ug/L
|	Se	82	2.258	-0.00	-0.0880	0.063	71.742	ug/L
⌊	Rb	85	13.333	-0.00				mg/L
	Y	89	267192.625	-23504.56				ug/L
	Rh	103	7.000	-1.33				ug/L
⌈	Mo	98	78.197	0.00	0.0484	0.009	17.713	ug/L
|	Ag	107	21.334	0.00	-0.0132	0.001	6.594	ug/L
|	Cd	114	-1.771	-0.00	0.0170	0.003	16.643	ug/L
|>	In	115	349713.173	349713.17				ug/L
|	Sn	118	187.068	0.00	0.0324	0.004	12.554	ug/L
⌊	Sb	123	300.250	0.00	0.0837	0.006	7.676	ug/L
⌈	Ba	135	9.333	-0.00	0.0127	0.002	12.233	ug/L
|	Ce	140	10.001	-0.00				ug/L
|>	Tb	159	487156.546	487156.55				ug/L
⌈	Ho	165	13.335	0.00				ug/L
|	Tl	203	25.667	0.00	-0.0029	0.001	33.528	ug/L
|	Tl	205	76.675	0.00	-0.0085	0.002	23.056	ug/L
|	Pb	206	376.344	0.00	-0.0321	0.008	25.846	ug/L
|	Pb	207	330.675	0.00	-0.0255	0.007	28.244	ug/L
|	Pb	208	1522.394	0.00	-0.0206	0.005	22.488	ug/L
|	U	238	81.334	0.00	-0.0022	0.000	21.453	ug/L
|>	Bi	209	485648.664	485648.66				ug/L

Sample ID: QC Std 2
Report Date/Time: Friday, February 25, 2011 10:19:33
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⌈	Na	23	82880.336	-0.05	0.0013	0.000	33.565	mg/L
|	Mg	24	516.732	0.00	-0.0024	0.000	0.202	mg/L
|	K	39	557219.229	0.13	0.0087	0.002	27.299	mg/L
|	Ca	43	133.348	-0.00	-0.0007	0.004	578.446	mg/L
|	Fe	54	39597.393	0.00	0.0022	0.003	142.952	mg/L
|	Fe	57	6029.095	-0.00	-0.0001	0.003	3178.732	mg/L
⌊>	Sc-1	45	277175.478	277175.48				mg/L
	Cl	35	16352.695	-3432.19				mg/L
	Kr	83	47.001	11.00				mg/L
	Br	81	6406.719	-753.84				mg/L
	P	31	9099.506	-1023.63				mg/L
	S	34	190755.502	-11011.00				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		96.872			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.555			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.298			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		94.749			
⌈	Na	23					

Sample ID: QC Std 2
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 2
Report Date/Time: Friday, February 25, 2011 10:19:33

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Friday, February 25, 2011 10:24:09
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 9
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21055.533	0.01				ug/L
|	Be	9	2.000	-0.00	0.0452	0.000	0.194	ug/L
|	Al	27	1850.175	0.00	-0.0024	0.065	2704.057	ug/L
⌊>	Sc	45	277549.281	277549.28				ug/L
⌈	Ti	49	50.005	-0.00	0.0005	0.067	12539.122	ug/L
|	V	51	5676.149	0.01	0.3889	0.030	7.655	ug/L
|	Cr	52	13489.229	0.01	0.8118	0.042	5.146	ug/L
|	Cr	53	1123.509	0.00	0.7216	0.087	12.053	ug/L
|	Mn	55	5963.505	0.01	0.4198	0.018	4.250	ug/L
|	Co	59	3721.063	0.01	0.3937	0.007	1.879	ug/L
|	Ni	60	3082.839	0.01	1.6268	0.037	2.244	ug/L
|	Cu	65	1660.488	0.00	0.8154	0.029	3.525	ug/L
|	Zn	66	7611.639	0.02	6.1925	0.013	0.203	ug/L
|>	Ge	72	449789.687	449789.69				ug/L
|	As	75	205.477	0.00	0.3923	0.056	14.210	ug/L
|	Se	77	84.667	0.00	0.2509	0.107	42.573	ug/L
|	Se	82	29.305	0.00	0.2584	0.167	64.687	ug/L
⌊	Rb	85	15.333	0.00				mg/L
	Y	89	271103.245	-19593.94				ug/L
	Rh	103	5.667	-2.67				ug/L
⌈	Mo	98	41.124	0.00	0.0288	0.004	13.993	ug/L
|	Ag	107	1608.145	0.00	0.3904	0.010	2.627	ug/L
|	Cd	114	172.260	0.00	0.2017	0.044	21.602	ug/L
|>	In	115	354409.025	354409.03				ug/L
|	Sn	118	136.801	0.00	0.0164	0.002	12.890	ug/L
⌊	Sb	123	1377.894	0.00	0.4152	0.020	4.715	ug/L
⌈	Ba	135	1014.395	0.00	0.7754	0.010	1.317	ug/L
|	Ce	140	16.668	0.00				ug/L
⌊>	Tb	159	491364.106	491364.11				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	531.353	0.00	0.0800	0.004	5.323	ug/L
|	Tl	205	1300.215	0.00	0.0740	0.010	13.522	ug/L
|	Pb	206	2472.997	0.00	0.3977	0.018	4.551	ug/L
|	Pb	207	2255.610	0.00	0.3927	0.020	5.208	ug/L
|	Pb	208	10183.816	0.02	0.4018	0.012	2.993	ug/L
|	U	238	15807.310	0.03	0.4070	0.006	1.388	ug/L
⌊>	Bi	209	478723.106	478723.11				ug/L

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⌈	Na	23	77906.973	-0.07	0.0002	0.000	204.479	mg/L
|	Mg	24	300.035	0.00	-0.0025	0.000	0.214	mg/L
|	K	39	544621.187	0.08	0.0069	0.000	7.171	mg/L
|	Ca	43	160.017	0.00	0.0009	0.002	248.022	mg/L
|	Fe	54	40453.272	0.00	0.0037	0.003	73.862	mg/L
|	Fe	57	6235.903	0.00	0.0007	0.001	118.551	mg/L
⌊>	Sc-1	45	277549.281	277549.28				mg/L
	Cl	35	15576.134	-4208.75				mg/L
	Kr	83	41.667	5.67				mg/L
	Br	81	6788.303	-372.26				mg/L
	P	31	8791.219	-1331.92				mg/L
	S	34	175468.137	-26298.37				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	97.221				
|	Cr	52	101.474				
|	Cr	53					
|	Mn	55	83.959				
|	Co	59	98.432				
|	Ni	60	101.678				
|	Cu	65	101.919				
|	Zn	66	99.081				
|>	Ge	72		96.734			
|	As	75	98.078				
|	Se	77					
|	Se	82	64.595				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	97.590				
|	Cd	114	100.862				
|>	In	115		98.865			
|	Sn	118					
⌊	Sb	123	103.801				
⌈	Ba	135	103.392				
|	Ce	140					
⌊>	Tb	159		98.139			
⌈	Ho	165					
|	Tl	203	99.986				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	100.460				
|	U	238	101.743				
⌊>	Bi	209		93.397			
⌈	Na	23					

Sample ID: QC Std 3
Report Date/Time: Friday, February 25, 2011 10:26:23

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 3	Se	82	LLICV IS OUT OF LIMITS (+/-20%)

Sample ID: QC Std 3
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Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Friday, February 25, 2011 10:30:58
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20771.689	0.01				ug/L
|	Be	9	4.000	0.00	0.0535	0.001	1.253	ug/L
|	Al	27	21768367.555	81.02	4379.4682	225.658	5.153	ug/L
⌊>	Sc	45	268990.648	268990.65				ug/L
⌈	Ti	49	52298.364	0.12	100.0275	1.649	1.648	ug/L
|	V	51	1779.949	-0.00	-0.0617	0.015	23.747	ug/L
|	Cr	52	7851.160	-0.00	0.0419	0.033	78.109	ug/L
|	Cr	53	1466.921	0.00	1.1788	0.134	11.346	ug/L
|	Mn	55	3378.271	0.01	0.1904	0.003	1.836	ug/L
|	Co	59	1749.837	0.00	0.1757	0.003	1.637	ug/L
|	Ni	60	1019.396	0.00	0.5136	0.046	8.997	ug/L
|	Cu	65	736.034	0.00	0.3402	0.020	5.740	ug/L
|	Zn	66	891.382	0.00	0.2663	0.019	7.029	ug/L
| >	Ge	72	437994.813	437994.81				ug/L
|	As	75	-120.603	-0.00	0.0122	0.042	344.444	ug/L
|	Se	77	125.334	0.00	0.9624	0.417	43.319	ug/L
|	Se	82	7.310	-0.00	-0.0208	0.055	264.631	ug/L
⌊	Rb	85	1442.118	0.00				mg/L
	Y	89	252103.554	-38593.64				ug/L
	Rh	103	7.667	-0.67				ug/L
⌈	Mo	98	186438.423	0.55	100.4059	2.018	2.010	ug/L
|	Ag	107	59.667	0.00	-0.0029	0.002	71.135	ug/L
|	Cd	114	62.148	0.00	0.0877	0.025	28.200	ug/L
| >	In	115	340786.901	340786.90				ug/L
|	Sn	118	423.342	0.00	0.1086	0.020	18.796	ug/L
⌊	Sb	123	194.039	0.00	0.0521	0.004	7.943	ug/L
⌈	Ba	135	72.334	0.00	0.0624	0.008	12.953	ug/L
|	Ce	140	173.352	0.00				ug/L
⌊>	Tb	159	474533.625	474533.62				ug/L
⌈	Ho	165	20.002	0.00				ug/L
|	Tl	203	143.669	0.00	0.0173	0.002	9.341	ug/L
|	Tl	205	430.052	0.00	0.0165	0.004	25.589	ug/L
|	Pb	206	426.680	0.00	-0.0176	0.009	49.469	ug/L
|	Pb	207	370.344	0.00	-0.0130	0.003	26.072	ug/L
|	Pb	208	1708.408	0.00	-0.0075	0.001	13.198	ug/L
|	U	238	28.667	0.00	-0.0035	0.000	0.856	ug/L
⌊>	Bi	209	461958.042	461958.04				ug/L

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⌈	Na	23	59467132.172	221.20	12.8794	0.967	7.510	mg/L
|	Mg	24	14954204.371	55.65	5.1952	0.185	3.569	mg/L
|	K	39	37086231.931	136.08	5.0921	0.154	3.024	mg/L
|	Ca	43	233181.169	0.87	14.8059	0.313	2.114	mg/L
|	Fe	54	6561481.165	24.29	12.8758	0.779	6.053	mg/L
|	Fe	57	2559454.173	9.50	12.2265	0.375	3.068	mg/L
⌊>	Sc-1	45	268990.648	268990.65				mg/L
	Cl	35	1806653.222	1786868.33				mg/L
	Kr	83	41.000	5.00				mg/L
	Br	81	6458.755	-701.81				mg/L
	P	31	1431970.274	1421847.14				mg/L
	S	34	336667.604	134901.10				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.197			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		95.065			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		94.777			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		90.127			
⌈	Na	23					

Sample ID: QC Std 4
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\└>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 4
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Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Friday, February 25, 2011 10:37:46
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	25449.043	0.03				ug/L
|	Be	9	28142.885	0.11	115.7076	3.325	2.873	ug/L
|	Al	27	21254470.276	81.20	4389.0768	137.540	3.134	ug/L
⌊>	Sc	45	261782.622	261782.62				ug/L
⌈	Ti	49	49299.519	0.12	101.4993	1.371	1.350	ug/L
|	V	51	761986.631	1.87	98.2955	0.988	1.006	ug/L
|	Cr	52	654260.279	1.59	101.5172	0.747	0.736	ug/L
|	Cr	53	96280.872	0.24	126.3148	1.918	1.519	ug/L
|	Mn	55	1012861.824	2.49	102.8634	1.781	1.732	ug/L
|	Co	59	815267.739	2.00	102.1206	1.648	1.614	ug/L
|	Ni	60	171388.657	0.42	103.5078	0.846	0.818	ug/L
|	Cu	65	171653.478	0.42	99.6360	0.294	0.295	ug/L
|	Zn	66	102544.497	0.25	99.7698	0.767	0.769	ug/L
| >	Ge	72	406922.390	406922.39				ug/L
|	As	75	77816.092	0.19	99.5308	0.473	0.475	ug/L
|	Se	77	6698.243	0.02	118.9527	0.763	0.642	ug/L
|	Se	82	6839.374	0.02	96.8761	0.169	0.175	ug/L
⌊	Rb	85	1312.766	0.00				mg/L
	Y	89	226952.474	-63744.71				ug/L
	Rh	103	24.334	16.00				ug/L
⌈	Mo	98	167320.373	0.52	94.8553	1.005	1.059	ug/L
|	Ag	107	408961.187	1.26	113.8895	1.718	1.508	ug/L
|	Cd	114	90016.009	0.28	104.5088	2.379	2.276	ug/L
| >	In	115	323698.315	323698.32				ug/L
|	Sn	118	729.627	0.00	0.2181	0.007	3.203	ug/L
⌊	Sb	123	298239.965	0.92	100.8551	2.196	2.177	ug/L
⌈	Ba	135	121129.947	0.26	97.8616	3.108	3.175	ug/L
|	Ce	140	170.019	0.00				ug/L
⌊>	Tb	159	461781.082	461781.08				ug/L
⌈	Ho	165	6.667	0.00				ug/L
|	Tl	203	561823.722	1.26	98.7644	1.196	1.211	ug/L
|	Tl	205	1394405.142	3.13	100.7443	3.068	3.045	ug/L
|	Pb	206	479432.664	1.07	105.0765	0.318	0.303	ug/L
|	Pb	207	420193.149	0.94	97.5945	0.832	0.852	ug/L
|	Pb	208	1942063.738	4.35	101.2668	0.733	0.723	ug/L
|	U	238	3480652.208	7.80	97.1665	1.394	1.434	ug/L
⌊>	Bi	209	446184.314	446184.31				ug/L

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Na	23	57680862.816	220.03	12.8117	0.381	2.977	mg/L
Mg	24	14190553.115	54.22	5.0617	0.157	3.094	mg/L
K	39	35546169.329	133.90	5.0104	0.167	3.333	mg/L
Ca	43	220070.718	0.84	14.3495	0.155	1.078	mg/L
Fe	54	6051322.059	22.98	12.1784	0.252	2.068	mg/L
Fe	57	2476167.249	9.44	12.1451	0.282	2.322	mg/L
> Sc-1	45	261782.622	261782.62				mg/L
Cl	35	31404976.033	31385191.15				mg/L
Kr	83	45.667	9.67				mg/L
Br	81	15863.913	8703.35				mg/L
P	31	1324292.817	1314169.68				mg/L
S	34	292297.126	90530.62				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	98.295				
Cr	52	101.517				
Cr	53					
Mn	55	102.863				
Co	59	102.121				
Ni	60	103.508				
Cu	65	99.636				
Zn	66	99.770				
> Ge	72		87.514			
As	75	99.531				
Se	77					
Se	82	96.876				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	113.890				
Cd	114	104.509				
> In	115		90.298			
Sn	118					
Sb	123	100.855				
Ba	135	97.862				
Ce	140					
> Tb	159		92.230			
Ho	165					
Tl	203	98.764				
Tl	205					
Pb	206					
Pb	207					
Pb	208	101.267				
U	238	97.167				
> Bi	209		87.049			
Na	23					

Sample ID: QC Std 5
Report Date/Time: Friday, February 25, 2011 10:39:59

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 5
Report Date/Time: Friday, February 25, 2011 10:39:59

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 25, 2011 10:44:33
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23059.966	0.02				ug/L
|	Be	9	12874.288	0.05	50.6890	1.108	2.187	ug/L
|	Al	27	247838.756	0.90	48.6396	2.274	4.676	ug/L
⌊>	Sc	45	273369.774	273369.77				ug/L
⌈	Ti	49	51748.772	0.12	102.1140	2.727	2.670	ug/L
|	V	51	406028.794	0.95	50.0587	0.999	1.996	ug/L
|	Cr	52	344046.224	0.79	50.6120	0.722	1.426	ug/L
|	Cr	53	42554.675	0.10	53.1469	2.144	4.034	ug/L
|	Mn	55	520130.718	1.22	50.5535	1.358	2.687	ug/L
|	Co	59	418735.851	0.99	50.2466	1.054	2.098	ug/L
|	Ni	60	86834.322	0.20	50.2249	0.816	1.625	ug/L
|	Cu	65	90721.322	0.21	50.4348	0.812	1.609	ug/L
|	Zn	66	53589.415	0.13	49.6949	0.260	0.523	ug/L
|>	Ge	72	424616.497	424616.50				ug/L
|	As	75	40026.583	0.09	49.1429	1.139	2.319	ug/L
|	Se	77	2939.099	0.01	49.3653	0.693	1.403	ug/L
|	Se	82	3622.706	0.01	49.1199	1.088	2.214	ug/L
⌊	Rb	85	1441.452	0.00				mg/L
	Y	89	251641.788	-39055.40				ug/L
	Rh	103	13.667	5.33				ug/L
⌈	Mo	98	181959.044	0.54	98.6793	1.318	1.335	ug/L
|	Ag	107	184972.649	0.55	49.2731	1.506	3.057	ug/L
|	Cd	114	43966.310	0.13	48.8448	0.944	1.933	ug/L
|>	In	115	338386.958	338386.96				ug/L
|	Sn	118	155543.697	0.46	49.6075	0.888	1.790	ug/L
⌊	Sb	123	153340.391	0.45	49.6003	1.020	2.056	ug/L
⌈	Ba	135	62141.098	0.13	47.6352	1.503	3.156	ug/L
|	Ce	140	36.670	0.00				ug/L
⌊>	Tb	159	486934.942	486934.94				ug/L
⌈	Ho	165	13.335	0.00				ug/L
|	Tl	203	295842.848	0.63	49.6715	0.345	0.694	ug/L
|	Tl	205	720767.481	1.54	49.7422	1.332	2.677	ug/L
|	Pb	206	238701.219	0.51	49.9222	1.078	2.158	ug/L
|	Pb	207	225376.167	0.48	49.9549	0.856	1.714	ug/L
|	Pb	208	1010823.163	2.16	50.3038	0.600	1.193	ug/L
|	U	238	1871537.694	4.01	49.9164	1.906	3.818	ug/L
⌊>	Bi	209	467127.119	467127.12				ug/L

Sample ID: QC Std 6
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Na	23	23465083.810	85.49	4.9805	0.151	3.023	mg/L	
Mg	24	14545710.134	53.21	4.9672	0.224	4.518	mg/L	
K	39	36722437.616	132.45	4.9563	0.072	1.445	mg/L	
Ca	43	80380.097	0.29	5.0127	0.176	3.503	mg/L	
Fe	54	2534464.113	9.13	4.8403	0.120	2.477	mg/L	
Fe	57	1051064.073	3.82	4.9203	0.098	1.988	mg/L	
Sc-1	45	273369.774	273369.77				mg/L	
Cl	35	45675.434	25890.55				mg/L	
Kr	83	38.334	2.33				mg/L	
Br	81	6014.475	-1146.09				mg/L	
P	31	9413.770	-709.37				mg/L	
S	34	178862.385	-22904.12				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51	100.117				
Cr	52	101.224				
Cr	53					
Mn	55	101.107				
Co	59	100.493				
Ni	60	100.450				
Cu	65	100.870				
Zn	66	99.390				
Ge	72		91.320			
As	75	98.286				
Se	77					
Se	82	98.240				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	98.546				
Cd	114	97.690				
In	115		94.396			
Sn	118					
Sb	123	99.201				
Ba	135	95.270				
Ce	140					
Tb	159		97.254			
Ho	165					
Tl	203	99.343				
Tl	205					
Pb	206					
Pb	207					
Pb	208	100.608				
U	238	99.833				
Bi	209		91.135			
Na	23					

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 10:46:46

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 10:46:46

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 25, 2011 10:51:49
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19619.301	0.01				ug/L
|	Be	9	3.333	0.00	0.0504	0.005	8.966	ug/L
|	Al	27	1583.461	0.00	-0.0547	0.056	103.295	ug/L
⌊>	Sc	45	278337.160	278337.16				ug/L
⌈	Ti	49	63.340	0.00	0.0328	0.099	302.807	ug/L
|	V	51	1972.836	-0.00	-0.0307	0.010	32.748	ug/L
|	Cr	52	7307.743	-0.00	-0.0030	0.020	651.519	ug/L
|	Cr	53	1346.892	0.00	1.0847	0.087	8.058	ug/L
|	Mn	55	351.676	-0.00	-0.0944	0.001	0.873	ug/L
|	Co	59	82.001	-0.00	-0.0182	0.000	2.697	ug/L
|	Ni	60	48.667	-0.00	-0.0303	0.004	13.942	ug/L
|	Cu	65	93.335	0.00	-0.0051	0.008	152.531	ug/L
|	Zn	66	501.018	0.00	-0.0736	0.060	81.887	ug/L
| >	Ge	72	424233.090	424233.09				ug/L
|	As	75	-116.274	-0.00	0.0127	0.049	390.664	ug/L
|	Se	77	43.333	-0.00	-0.3771	0.236	62.590	ug/L
|	Se	82	2.600	-0.00	-0.0816	0.076	92.944	ug/L
⌊	Rb	85	15.667	0.00				mg/L
	Y	89	262720.234	-27976.96				ug/L
	Rh	103	7.333	-1.00				ug/L
⌈	Mo	98	74.567	0.00	0.0483	0.011	21.919	ug/L
|	Ag	107	83.335	0.00	0.0037	0.002	47.524	ug/L
|	Cd	114	2.678	0.00	0.0219	0.006	27.253	ug/L
| >	In	115	335550.139	335550.14				ug/L
|	Sn	118	150.534	0.00	0.0231	0.004	16.908	ug/L
⌊	Sb	123	192.708	0.00	0.0526	0.005	8.998	ug/L
⌈	Ba	135	10.667	0.00	0.0138	0.003	22.254	ug/L
|	Ce	140	0.000	-0.00				ug/L
⌊>	Tb	159	480396.297	480396.30				ug/L
⌈	Ho	165	3.334	0.00				ug/L
|	Tl	203	55.334	0.00	0.0021	0.001	56.246	ug/L
|	Tl	205	123.346	0.00	-0.0052	0.003	53.364	ug/L
|	Pb	206	382.678	0.00	-0.0293	0.003	10.626	ug/L
|	Pb	207	310.341	0.00	-0.0285	0.002	6.878	ug/L
|	Pb	208	1485.058	0.00	-0.0209	0.001	4.749	ug/L
|	U	238	83.335	0.00	-0.0021	0.000	14.515	ug/L
⌊>	Bi	209	475487.333	475487.33				ug/L

Sample ID: QC Std 7
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⌈	Na	23	69705.804	-0.10	-0.0016	0.000	26.237	mg/L
|	Mg	24	340.040	0.00	-0.0025	0.000	0.615	mg/L
|	K	39	544904.682	0.07	0.0067	0.001	19.618	mg/L
|	Ca	43	173.352	0.00	0.0017	0.002	108.800	mg/L
|	Fe	54	36812.538	-0.01	-0.0034	0.003	79.786	mg/L
|	Fe	57	5822.278	-0.00	-0.0013	0.001	76.100	mg/L
⌊>	Sc-1	45	278337.160	278337.16				mg/L
	Cl	35	25855.388	6070.50				mg/L
	Kr	83	46.001	10.00				mg/L
	Br	81	6067.173	-1093.39				mg/L
	P	31	8571.693	-1551.44				mg/L
	S	34	178605.082	-23161.42				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		91.237			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		93.604			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		95.948			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		92.766			
⌈	Na	23					

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 10:54:00

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\└>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 10:54:00

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: PBW 17 WG357433-03

Sample Date/Time: Friday, February 25, 2011 11:09:14
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 54
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18851.146	0.00				ug/L
|	Be	9	5.333	0.00	0.0578	0.005	8.556	ug/L
|	Al	27	18166.516	0.06	3.1067	0.270	8.696	ug/L
⌊>	Sc	45	283498.436	283498.44				ug/L
⌈	Ti	49	146.683	0.00	0.1976	0.139	70.221	ug/L
|	V	51	2320.585	0.00	0.0128	0.011	85.951	ug/L
|	Cr	52	8891.377	0.00	0.2366	0.046	19.312	ug/L
|	Cr	53	853.455	0.00	0.4620	0.130	28.209	ug/L
|	Mn	55	1942.208	0.00	0.0609	0.003	5.230	ug/L
|	Co	59	118.002	0.00	-0.0138	0.002	14.447	ug/L
|	Ni	60	204.004	0.00	0.0598	0.005	7.979	ug/L
|	Cu	65	180.337	0.00	0.0435	0.008	18.831	ug/L
|	Zn	66	2594.696	0.01	1.8933	0.043	2.285	ug/L
| >	Ge	72	423780.012	423780.01				ug/L
|	As	75	-119.246	-0.00	0.0089	0.019	212.024	ug/L
|	Se	77	60.667	0.00	-0.0782	0.089	113.223	ug/L
|	Se	82	3.293	-0.00	-0.0722	0.089	123.514	ug/L
⌊	Rb	85	43.334	0.00				mg/L
	Y	89	268213.176	-22484.01				ug/L
	Rh	103	5.333	-3.00				ug/L
⌈	Mo	98	60.201	0.00	0.0409	0.005	11.642	ug/L
|	Ag	107	63.668	0.00	-0.0013	0.003	215.232	ug/L
|	Cd	114	4.012	0.00	0.0235	0.005	20.665	ug/L
| >	In	115	330688.235	330688.23				ug/L
|	Sn	118	164.935	0.00	0.0285	0.001	4.810	ug/L
⌊	Sb	123	184.999	0.00	0.0509	0.002	4.347	ug/L
⌈	Ba	135	80.668	0.00	0.0688	0.009	12.775	ug/L
|	Ce	140	76.675	0.00				ug/L
⌊>	Tb	159	474831.436	474831.44				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	38.667	0.00	-0.0008	0.001	167.828	ug/L
|	Tl	205	43.338	0.00	-0.0107	0.002	20.097	ug/L
|	Pb	206	613.692	0.00	0.0159	0.008	49.651	ug/L
|	Pb	207	530.353	0.00	0.0174	0.002	12.618	ug/L
|	Pb	208	2484.481	0.00	0.0258	0.002	9.485	ug/L
|	U	238	70.668	0.00	-0.0025	0.000	16.899	ug/L
⌊>	Bi	209	484342.056	484342.06				ug/L

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⌈	Na	23	138310.411	0.14	0.0123	0.001	8.400	mg/L
|	Mg	24	28777.555	0.10	0.0069	0.000	4.793	mg/L
|	K	39	610040.776	0.27	0.0140	0.002	15.361	mg/L
|	Ca	43	723.432	0.00	0.0348	0.007	20.911	mg/L
|	Fe	54	84098.421	0.16	0.0838	0.007	7.974	mg/L
|	Fe	57	7413.492	0.00	0.0055	0.001	16.012	mg/L
⌊>	Sc-1	45	283498.436	283498.44				mg/L
	Cl	35	36900.648	17115.76				mg/L
	Kr	83	43.001	7.00				mg/L
	Br	81	7124.540	-36.02				mg/L
	P	31	17860.087	7736.95				mg/L
	S	34	187348.649	-14417.86				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		91.140			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		92.248			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		94.837			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		94.494			
⌈	Na	23					

Sample ID: PBW 17 WG357433-03
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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 17 WG357433-03
Report Date/Time: Friday, February 25, 2011 11:11:27
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Method 6020 - Summary Report

Sample ID: LCSW 17 WG357433-04

Sample Date/Time: Friday, February 25, 2011 11:16:02
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 55
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

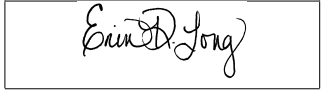
User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21723.884	0.01				ug/L
|	Be	9	6341.351	0.02	23.8823	1.115	4.670	ug/L
|	Al	27	138453.032	0.48	25.8151	0.448	1.737	ug/L
⌊>	Sc	45	285829.425	285829.42				ug/L
⌈	Ti	49	93.343	0.00	0.0910	0.070	77.023	ug/L
|	V	51	217194.893	0.50	26.4979	0.305	1.150	ug/L
|	Cr	52	191117.576	0.43	27.4641	0.147	0.534	ug/L
|	Cr	53	22607.794	0.05	27.7816	0.602	2.165	ug/L
|	Mn	55	287395.268	0.67	27.7182	0.440	1.588	ug/L
|	Co	59	225948.883	0.53	26.9500	0.483	1.792	ug/L
|	Ni	60	47008.716	0.11	27.0098	0.188	0.696	ug/L
|	Cu	65	48868.278	0.11	26.9889	0.099	0.366	ug/L
|	Zn	66	30670.943	0.07	28.0479	0.268	0.956	ug/L
⌊>	Ge	72	427007.359	427007.36				ug/L
|	As	75	19911.540	0.05	24.3858	0.429	1.761	ug/L
|	Se	77	1427.435	0.00	23.2629	0.803	3.454	ug/L
|	Se	82	1664.783	0.00	22.3808	0.212	0.947	ug/L
⌊	Rb	85	89.001	0.00				mg/L
	Y	89	263222.766	-27474.42				ug/L
	Rh	103	14.000	5.67				ug/L
⌈	Mo	98	50.827	0.00	0.0346	0.002	5.218	ug/L
|	Ag	107	92056.706	0.27	24.0688	0.182	0.755	ug/L
|	Cd	114	23431.734	0.07	25.5691	0.693	2.712	ug/L
⌊>	In	115	344539.717	344539.72				ug/L
|	Sn	118	192.935	0.00	0.0351	0.003	8.530	ug/L
⌊	Sb	123	78424.888	0.23	24.9053	0.346	1.389	ug/L
⌈	Ba	135	33737.517	0.07	26.1610	1.107	4.232	ug/L
|	Ce	140	96.677	0.00				ug/L
⌊>	Tb	159	481250.231	481250.23				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	161978.201	0.34	26.6954	0.440	1.647	ug/L
|	Tl	205	407153.324	0.86	27.5779	0.542	1.964	ug/L
|	Pb	206	138588.739	0.29	28.4103	0.906	3.188	ug/L
|	Pb	207	120720.566	0.25	26.2240	0.361	1.378	ug/L
|	Pb	208	562610.328	1.18	27.4475	0.570	2.076	ug/L
|	U	238	993809.530	2.09	26.0031	0.279	1.073	ug/L
⌊>	Bi	209	475870.228	475870.23				ug/L

Sample ID: LCSW 17 WG357433-04
Report Date/Time: Friday, February 25, 2011 11:18:15
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⌈	Na	23	420136.691	1.12	0.0695	0.003	3.945	mg/L
|	Mg	24	11808.148	0.04	0.0013	0.000	6.798	mg/L
|	K	39	633164.640	0.33	0.0163	0.002	12.909	mg/L
|	Ca	43	623.416	0.00	0.0283	0.006	22.890	mg/L
|	Fe	54	79338.210	0.14	0.0737	0.006	8.401	mg/L
|	Fe	57	6229.231	-0.00	-0.0001	0.002	1386.991	mg/L
⌊>	Sc-1	45	285829.425	285829.42				mg/L
	Cl	35	89047.382	69262.49				mg/L
	Kr	83	43.667	7.67				mg/L
	Br	81	7772.353	611.79				mg/L
	P	31	19153.818	9030.68				mg/L
	S	34	176984.673	-24781.83				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		91.834			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.112			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.119			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		92.841			
⌈	Na	23					

Sample ID: LCSW 17 WG357433-04
Report Date/Time: Friday, February 25, 2011 11:18:15

Approved: February 28, 2011

Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 17 WG357433-04
Report Date/Time: Friday, February 25, 2011 11:18:15
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Approved: February 28, 2011



Method 6020 - Summary Report

Sample ID: L1102062101 WG357433-02

Sample Date/Time: Friday, February 25, 2011 11:22:50
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 56
Method File: C:\elandata\Method\6020a.mth
Sample Description: 2

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21422.994	0.01				ug/L
|	Be	9	15.333	0.00	0.0955	0.017	18.246	ug/L
|	Al	27	500077.175	1.74	94.0893	5.480	5.825	ug/L
⌊>	Sc	45	286693.773	286693.77				ug/L
⌈	Ti	49	2237.142	0.00	4.1991	0.318	7.581	ug/L
|	V	51	39336.988	0.08	4.4614	0.035	0.779	ug/L
|	Cr	52	18144.295	0.02	1.5468	0.023	1.516	ug/L
|	Cr	53	2007.069	0.00	1.8445	0.056	3.046	ug/L
|	Mn	55	180276.127	0.41	16.9338	0.206	1.219	ug/L
|	Co	59	4300.968	0.01	0.4736	0.015	3.220	ug/L
|	Ni	60	3321.252	0.01	1.8098	0.073	4.039	ug/L
|	Cu	65	2486.001	0.01	1.2870	0.014	1.114	ug/L
|	Zn	66	3920.475	0.01	3.0265	0.140	4.612	ug/L
|>	Ge	72	437122.105	437122.10				ug/L
|	As	75	9039.720	0.02	10.9016	0.087	0.795	ug/L
|	Se	77	98.667	0.00	0.5240	0.255	48.735	ug/L
|	Se	82	51.618	0.00	0.5642	0.183	32.411	ug/L
⌊	Rb	85	6996.517	0.02				mg/L
	Y	89	264399.521	-26297.67				ug/L
	Rh	103	53.001	44.67				ug/L
⌈	Mo	98	9369.527	0.03	5.0584	0.118	2.342	ug/L
|	Ag	107	38.000	0.00	-0.0086	0.004	41.086	ug/L
|	Cd	114	35.233	0.00	0.0577	0.010	16.761	ug/L
|>	In	115	340442.942	340442.94				ug/L
|	Sn	118	155.201	0.00	0.0239	0.003	13.825	ug/L
⌊	Sb	123	881.500	0.00	0.2732	0.009	3.116	ug/L
⌈	Ba	135	33944.208	0.07	25.3792	0.309	1.218	ug/L
|	Ce	140	3671.041	0.01				ug/L
⌊>	Tb	159	498890.281	498890.28				ug/L
⌈	Ho	165	100.011	0.00				ug/L
|	Tl	203	1568.806	0.00	0.2518	0.014	5.641	ug/L
|	Tl	205	3754.416	0.01	0.2412	0.023	9.569	ug/L
|	Pb	206	1296.097	0.00	0.1589	0.017	10.594	ug/L
|	Pb	207	1081.069	0.00	0.1397	0.008	5.554	ug/L
|	Pb	208	5003.538	0.01	0.1515	0.006	3.862	ug/L
|	U	238	11792.734	0.02	0.3047	0.004	1.262	ug/L
⌊>	Bi	209	475433.264	475433.26				ug/L

Sample ID: L1102062101 WG357433-02
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⌈	Na	23	42944140.631	149.70	8.7178	0.401	4.600	mg/L
|	Mg	24	7252423.281	25.35	2.3652	0.137	5.800	mg/L
|	K	39	6714549.515	21.57	0.8106	0.038	4.646	mg/L
|	Ca	43	191305.224	0.67	11.4054	0.451	3.959	mg/L
|	Fe	54	124956.025	0.30	0.1578	0.010	6.373	mg/L
|	Fe	57	42604.950	0.13	0.1631	0.002	1.276	mg/L
⌊>	Sc-1	45	286693.773	286693.77				mg/L
	Cl	35	256542.462	236757.57				mg/L
	Kr	83	44.001	8.00				mg/L
	Br	81	13899.656	6739.09				mg/L
	P	31	19618.799	9495.66				mg/L
	S	34	408408.407	206641.90				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.009			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		94.969			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.642			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		92.756			
⌈	Na	23					

Sample ID: L1102062101 WG357433-02
Report Date/Time: Friday, February 25, 2011 11:25:03
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

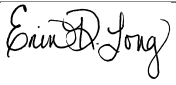
QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102062101 WG357433-02
Report Date/Time: Friday, February 25, 2011 11:25:03
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Method 6020 - Summary Report

Sample ID: L1102062101S WG357433-07

Sample Date/Time: Friday, February 25, 2011 11:29:38
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 57
Method File: C:\elandata\Method\6020a.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22893.102	0.02				ug/L
|	Be	9	3221.853	0.01	12.7463	0.352	2.763	ug/L
|	Al	27	551000.130	2.01	108.7643	12.153	11.174	ug/L
⌊>	Sc	45	272667.818	272667.82				ug/L
⌈	Ti	49	1616.961	0.00	3.1026	0.465	14.972	ug/L
|	V	51	141024.949	0.33	17.2162	0.053	0.308	ug/L
|	Cr	52	105045.941	0.23	14.6960	0.165	1.122	ug/L
|	Cr	53	11834.858	0.03	14.3449	0.791	5.515	ug/L
|	Mn	55	311488.599	0.73	30.2407	0.508	1.679	ug/L
|	Co	59	110461.289	0.26	13.2429	0.321	2.425	ug/L
|	Ni	60	25219.692	0.06	14.5560	0.458	3.144	ug/L
|	Cu	65	24435.409	0.06	13.5529	0.457	3.374	ug/L
|	Zn	66	16344.176	0.04	14.7882	0.212	1.435	ug/L
|>	Ge	72	424379.317	424379.32				ug/L
|	As	75	19033.826	0.05	23.4628	0.129	0.548	ug/L
|	Se	77	759.362	0.00	11.9314	0.336	2.819	ug/L
|	Se	82	911.732	0.00	12.2802	0.420	3.419	ug/L
⌊	Rb	85	6673.960	0.02				mg/L
	Y	89	252318.713	-38378.48				ug/L
	Rh	103	50.001	41.67				ug/L
⌈	Mo	98	9095.125	0.03	5.0822	0.075	1.485	ug/L
|	Ag	107	43179.469	0.13	11.8178	0.159	1.347	ug/L
|	Cd	114	11173.900	0.03	12.7851	0.151	1.180	ug/L
|>	In	115	328868.478	328868.48				ug/L
|	Sn	118	143.868	0.00	0.0219	0.003	12.143	ug/L
⌊	Sb	123	38804.880	0.12	12.9059	0.265	2.057	ug/L
⌈	Ba	135	47792.080	0.10	38.1096	0.091	0.238	ug/L
|	Ce	140	3637.694	0.01				ug/L
⌊>	Tb	159	467779.231	467779.23				ug/L
⌈	Ho	165	83.342	0.00				ug/L
|	Tl	203	76443.313	0.17	13.3643	0.536	4.011	ug/L
|	Tl	205	188417.898	0.42	13.5305	0.420	3.107	ug/L
|	Pb	206	64743.949	0.14	14.0230	0.373	2.661	ug/L
|	Pb	207	56263.485	0.12	12.9161	0.398	3.084	ug/L
|	Pb	208	260796.552	0.58	13.4475	0.312	2.317	ug/L
|	U	238	494948.261	1.10	13.7398	0.093	0.676	ug/L
⌊>	Bi	209	448557.793	448557.79				ug/L

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Na	23	41936732.829	153.46	8.9368	0.248	2.779	mg/L	
Mg	24	6916082.841	25.37	2.3670	0.052	2.204	mg/L	
K	39	6637811.652	22.46	0.8438	0.019	2.293	mg/L	
Ca	43	193527.328	0.71	12.1150	0.211	1.740	mg/L	
Fe	54	120032.615	0.30	0.1597	0.003	1.981	mg/L	
Fe	57	41948.684	0.13	0.1699	0.007	4.123	mg/L	
Sc-1	45	272667.818	272667.82				mg/L	
Cl	35	253912.608	234127.72				mg/L	
Kr	83	37.000	1.00				mg/L	
Br	81	13675.345	6514.78				mg/L	
P	31	18389.058	8265.92				mg/L	
S	34	391048.649	189282.14				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72		91.269			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
In	115		91.740			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
Tb	159		93.428			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
Bi	209		87.512			
Na	23					

Sample ID: L1102062101S WG357433-07
Report Date/Time: Friday, February 25, 2011 11:31:51

Approved: February 28, 2011

|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

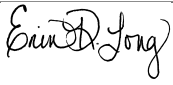
QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102062101S WG357433-07
Report Date/Time: Friday, February 25, 2011 11:31:51
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Approved: February 28, 2011



Method 6020 - Summary Report

Sample ID: L11020652101DUP WG357433-08

Sample Date/Time: Friday, February 25, 2011 11:36:26
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 58
Method File: C:\elandata\Method\6020a.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21957.515	0.02				ug/L
|	Be	9	16.667	0.00	0.1023	0.018	17.116	ug/L
|	Al	27	457666.031	1.64	88.6111	3.372	3.806	ug/L
⌊>	Sc	45	277876.646	277876.65				ug/L
⌈	Ti	49	1686.979	0.00	3.2462	0.359	11.061	ug/L
|	V	51	37659.789	0.08	4.4035	0.116	2.637	ug/L
|	Cr	52	17458.736	0.02	1.5272	0.017	1.117	ug/L
|	Cr	53	1950.386	0.00	1.8515	0.164	8.836	ug/L
|	Mn	55	173573.144	0.41	16.8196	0.246	1.461	ug/L
|	Co	59	4119.223	0.01	0.4676	0.013	2.749	ug/L
|	Ni	60	3140.525	0.01	1.7641	0.071	4.021	ug/L
|	Cu	65	2386.642	0.01	1.2743	0.048	3.758	ug/L
|	Zn	66	3287.573	0.01	2.5444	0.054	2.121	ug/L
|>	Ge	72	423776.613	423776.61				ug/L
|	As	75	8880.656	0.02	11.0462	0.102	0.920	ug/L
|	Se	77	85.334	0.00	0.3435	0.270	78.522	ug/L
|	Se	82	45.033	0.00	0.4949	0.132	26.636	ug/L
⌊	Rb	85	6693.976	0.02				mg/L
	Y	89	251929.729	-38767.46				ug/L
	Rh	103	42.001	33.67				ug/L
⌈	Mo	98	9043.339	0.03	5.0643	0.041	0.812	ug/L
|	Ag	107	43.334	0.00	-0.0068	0.001	11.231	ug/L
|	Cd	114	33.255	0.00	0.0570	0.016	27.745	ug/L
|>	In	115	328140.477	328140.48				ug/L
|	Sn	118	661.889	0.00	0.1924	0.004	1.935	ug/L
⌊	Sb	123	929.087	0.00	0.2998	0.014	4.523	ug/L
⌈	Ba	135	32613.429	0.07	26.0652	0.516	1.979	ug/L
|	Ce	140	3370.907	0.01				ug/L
⌊>	Tb	159	466846.503	466846.50				ug/L
⌈	Ho	165	130.014	0.00				ug/L
|	Tl	203	1451.787	0.00	0.2419	0.006	2.447	ug/L
|	Tl	205	3607.684	0.01	0.2407	0.031	12.701	ug/L
|	Pb	206	1310.766	0.00	0.1724	0.006	3.435	ug/L
|	Pb	207	1056.400	0.00	0.1434	0.011	7.714	ug/L
|	Pb	208	5057.888	0.01	0.1638	0.003	2.066	ug/L
|	U	238	11508.737	0.03	0.3090	0.003	0.996	ug/L
⌊>	Bi	209	457521.481	457521.48				ug/L

Sample ID: L11020652101DUP WG357433-08
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⌈	Na	23	42232940.795	151.72	8.8353	0.351	3.976	mg/L
|	Mg	24	7074703.294	25.46	2.3755	0.017	0.702	mg/L
|	K	39	6518712.322	21.58	0.8109	0.015	1.863	mg/L
|	Ca	43	190629.778	0.69	11.7081	0.057	0.488	mg/L
|	Fe	54	120264.064	0.29	0.1559	0.004	2.393	mg/L
|	Fe	57	41717.773	0.13	0.1653	0.013	7.978	mg/L
⌊>	Sc-1	45	277876.646	277876.65				mg/L
	Cl	35	251986.903	232202.02				mg/L
	Kr	83	34.667	-1.33				mg/L
	Br	81	13559.858	6399.29				mg/L
	P	31	18183.866	8060.73				mg/L
	S	34	380585.832	178819.33				mg/L

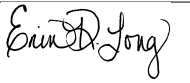
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		91.139			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		91.537			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		93.242			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		89.261			
⌈	Na	23					

Sample ID: L11020652101DUP WG357433-08
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L11020652101DUP WG357433-08
Report Date/Time: Friday, February 25, 2011 11:38:40
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Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102061203

Sample Date/Time: Friday, February 25, 2011 11:43:13
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 59
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18049.640	0.01				ug/L
|	Be	9	14.667	0.00	0.0993	0.011	11.000	ug/L
|	Al	27	714956.355	2.79	150.7206	1.677	1.112	ug/L
⌊>	Sc	45	255780.950	255780.95				ug/L
⌈	Ti	49	8974.932	0.02	20.0625	0.734	3.658	ug/L
|	V	51	67581.813	0.18	9.2557	0.080	0.861	ug/L
|	Cr	52	97434.122	0.24	15.5602	0.267	1.715	ug/L
|	Cr	53	9508.806	0.02	13.0506	0.524	4.019	ug/L
|	Mn	55	2753494.592	7.38	305.0798	3.980	1.305	ug/L
|	Co	59	99553.578	0.27	13.5703	0.209	1.542	ug/L
|	Ni	60	63317.581	0.17	41.6469	0.257	0.618	ug/L
|	Cu	65	13430.826	0.04	8.4440	0.181	2.148	ug/L
|	Zn	66	73482.186	0.20	77.8200	0.668	0.858	ug/L
|>	Ge	72	373286.133	373286.13				ug/L
|	As	75	10588.871	0.03	14.8980	0.130	0.873	ug/L
|	Se	77	84.667	0.00	0.5347	0.260	48.690	ug/L
|	Se	82	42.317	0.00	0.5414	0.266	49.045	ug/L
⌊	Rb	85	9997.433	0.03				mg/L
	Y	89	231367.682	-59329.51				ug/L
	Rh	103	149.003	140.67				ug/L
⌈	Mo	98	837.911	0.00	0.5597	0.037	6.561	ug/L
|	Ag	107	210.004	0.00	0.0494	0.005	11.063	ug/L
|	Cd	114	5.005	0.00	0.0257	0.009	36.541	ug/L
|>	In	115	278280.274	278280.27				ug/L
|	Sn	118	676.023	0.00	0.2370	0.004	1.768	ug/L
⌊	Sb	123	1328.179	0.00	0.5119	0.031	6.134	ug/L
⌈	Ba	135	89426.593	0.22	81.5774	0.242	0.297	ug/L
|	Ce	140	12799.474	0.03				ug/L
⌊>	Tb	159	408844.203	408844.20				ug/L
⌈	Ho	165	330.039	0.00				ug/L
|	Tl	203	31.000	0.00	-0.0007	0.000	72.914	ug/L
|	Tl	205	66.674	0.00	-0.0079	0.001	10.798	ug/L
|	Pb	206	6576.898	0.02	1.5792	0.043	2.701	ug/L
|	Pb	207	5415.521	0.01	1.3769	0.049	3.564	ug/L
|	Pb	208	25647.544	0.06	1.4723	0.042	2.859	ug/L
|	U	238	26945.903	0.07	0.8753	0.009	0.976	ug/L
⌊>	Bi	209	381613.923	381613.92				ug/L

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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	30821838.075	120.47	11.2498	0.188	1.667	mg/L
|	K	39	11137790.340	41.65	1.5612	0.028	1.820	mg/L
|	Ca	43	944111.788	3.69	63.0318	0.331	0.524	mg/L
|	Fe	54	248714.254	0.83	0.4416	0.011	2.442	mg/L
|	Fe	57	112976.033	0.42	0.5404	0.018	3.335	mg/L
⌊>	Sc-1	45	255780.950	255780.95				mg/L
	Cl	35	85488.161	65703.27				mg/L
	Kr	83	40.334	4.33				mg/L
	Br	81	12479.116	5318.55				mg/L
	P	31	180507.385	170384.25				mg/L
	S	34	1793296.534	1591530.03				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		80.280			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		77.628			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		81.657			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		74.452			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102061202

Sample Date/Time: Friday, February 25, 2011 11:49:59
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 60
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19318.771	0.01				ug/L
|	Be	9	18.000	0.00	0.1136	0.031	27.253	ug/L
|	Al	27	805596.914	3.14	169.5273	7.500	4.424	ug/L
⌊>	Sc	45	256568.655	256568.65				ug/L
⌈	Ti	49	8758.047	0.02	19.2818	0.576	2.988	ug/L
|	V	51	66214.380	0.17	8.9210	0.078	0.877	ug/L
|	Cr	52	96004.615	0.23	15.0674	0.227	1.509	ug/L
|	Cr	53	9542.176	0.02	12.8960	0.762	5.911	ug/L
|	Mn	55	2699382.148	7.12	294.5807	3.389	1.150	ug/L
|	Co	59	98965.617	0.26	13.2867	0.221	1.664	ug/L
|	Ni	60	62725.089	0.17	40.6385	0.192	0.471	ug/L
|	Cu	65	17592.304	0.05	10.9143	0.138	1.262	ug/L
|	Zn	66	80354.049	0.21	83.8591	0.418	0.498	ug/L
|>	Ge	72	378996.143	378996.14				ug/L
|	As	75	10743.060	0.03	14.8868	0.151	1.014	ug/L
|	Se	77	69.334	0.00	0.2120	0.326	153.869	ug/L
|	Se	82	45.270	0.00	0.5741	0.150	26.203	ug/L
⌊	Rb	85	10167.935	0.03				mg/L
	Y	89	232580.822	-58116.37				ug/L
	Rh	103	154.003	145.67				ug/L
⌈	Mo	98	847.168	0.00	0.5642	0.022	3.918	ug/L
|	Ag	107	189.004	0.00	0.0424	0.003	7.536	ug/L
|	Cd	114	8.273	0.00	0.0301	0.008	25.282	ug/L
|>	In	115	279255.898	279255.90				ug/L
|	Sn	118	677.356	0.00	0.2366	0.008	3.254	ug/L
⌊	Sb	123	1529.039	0.01	0.5890	0.008	1.374	ug/L
⌈	Ba	135	91342.240	0.22	82.6404	1.195	1.446	ug/L
|	Ce	140	13817.594	0.03				ug/L
⌊>	Tb	159	412256.676	412256.68				ug/L
⌈	Ho	165	320.037	0.00				ug/L
|	Tl	203	43.334	0.00	0.0020	0.000	15.366	ug/L
|	Tl	205	93.343	0.00	-0.0055	0.002	35.662	ug/L
|	Pb	206	9745.511	0.03	2.4329	0.102	4.183	ug/L
|	Pb	207	8142.063	0.02	2.1535	0.104	4.813	ug/L
|	Pb	208	38402.801	0.10	2.2881	0.076	3.305	ug/L
|	U	238	26415.784	0.07	0.8716	0.015	1.672	ug/L
⌊>	Bi	209	375697.736	375697.74				ug/L

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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	31181003.638	121.63	11.3578	0.426	3.749	mg/L
|	K	39	10790588.726	40.18	1.5064	0.042	2.811	mg/L
|	Ca	43	981269.870	3.82	65.3115	1.010	1.547	mg/L
|	Fe	54	272654.718	0.92	0.4900	0.018	3.767	mg/L
|	Fe	57	127489.532	0.48	0.6124	0.061	9.926	mg/L
⌊>	Sc-1	45	256568.655	256568.65				mg/L
	Cl	35	82039.854	62254.97				mg/L
	Kr	83	45.667	9.67				mg/L
	Br	81	10925.299	3764.73				mg/L
	P	31	181412.837	171289.70				mg/L
	S	34	1944927.283	1743160.78				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		81.508			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		77.900			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		82.339			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		73.297			
⌈	Na	23					

Sample ID: L1102061202
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1102061202
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Method 6020 - Summary Report

Sample ID: L1102061202PS WG357485-01

Sample Date/Time: Friday, February 25, 2011 11:56:45
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 61
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19619.299	0.01				ug/L
|	Be	9	12242.835	0.05	50.2439	1.984	3.949	ug/L
|	Al	27	1057714.529	4.03	217.8759	13.932	6.394	ug/L
⌊>	Sc	45	262314.527	262314.53				ug/L
⌈	Ti	49	9141.758	0.02	19.9471	0.316	1.586	ug/L
|	V	51	467692.151	1.22	64.0696	1.343	2.096	ug/L
|	Cr	52	427337.851	1.10	70.1881	0.977	1.392	ug/L
|	Cr	53	48120.331	0.12	66.8471	0.880	1.316	ug/L
|	Mn	55	3274547.320	8.56	353.9770	2.564	0.724	ug/L
|	Co	59	497483.003	1.30	66.2618	1.348	2.034	ug/L
|	Ni	60	146075.583	0.38	93.8161	1.029	1.097	ug/L
|	Cu	65	100912.418	0.26	62.2740	0.734	1.178	ug/L
|	Zn	66	126657.995	0.33	131.2489	1.517	1.156	ug/L
| >	Ge	72	382588.861	382588.86				ug/L
|	As	75	51440.130	0.13	70.0312	1.000	1.428	ug/L
|	Se	77	2750.378	0.01	51.3179	0.616	1.201	ug/L
|	Se	82	3464.884	0.01	52.1493	0.603	1.156	ug/L
⌊	Rb	85	10077.844	0.03				mg/L
	Y	89	234395.203	-56301.99				ug/L
	Rh	103	171.337	163.00				ug/L
⌈	Mo	98	877.020	0.00	0.5638	0.038	6.662	ug/L
|	Ag	107	151070.833	0.52	47.0268	0.563	1.198	ug/L
|	Cd	114	38704.504	0.13	50.2385	0.328	0.653	ug/L
| >	In	115	289542.985	289542.99				ug/L
|	Sn	118	1049.255	0.00	0.3654	0.029	8.034	ug/L
⌊	Sb	123	145377.521	0.50	54.9609	0.904	1.644	ug/L
⌈	Ba	135	156020.209	0.37	137.1025	0.906	0.661	ug/L
|	Ce	140	13854.315	0.03				ug/L
⌊>	Tb	159	424448.703	424448.70				ug/L
⌈	Ho	165	396.714	0.00				ug/L
|	Tl	203	274680.074	0.71	56.0166	0.878	1.567	ug/L
|	Tl	205	687328.762	1.79	57.6052	1.426	2.475	ug/L
|	Pb	206	241669.975	0.63	61.4062	0.914	1.488	ug/L
|	Pb	207	216160.216	0.56	58.1966	0.188	0.323	ug/L
|	Pb	208	994091.293	2.58	60.0871	0.262	0.436	ug/L
|	U	238	1882415.668	4.89	60.9424	0.334	0.549	ug/L
⌊>	Bi	209	384681.166	384681.17				ug/L

Sample ID: L1102061202PS WG357485-01
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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	31467732.449	120.07	11.2122	0.507	4.525	mg/L
|	K	39	10982176.238	39.99	1.4992	0.028	1.850	mg/L
|	Ca	43	1022231.790	3.90	66.5607	0.822	1.235	mg/L
|	Fe	54	279422.934	0.92	0.4913	0.022	4.461	mg/L
|	Fe	57	129928.290	0.47	0.6097	0.024	3.897	mg/L
⌊>	Sc-1	45	262314.527	262314.53				mg/L
	Cl	35	82560.083	62775.20				mg/L
	Kr	83	50.001	14.00				mg/L
	Br	81	10647.666	3487.10				mg/L
	P	31	182577.351	172454.21				mg/L
	S	34	1853591.091	1651824.59				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		82.281			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		80.770			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		84.774			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		75.050			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Zn 66 Upper, S, EEE	Zn	66	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1102061202PS WG357485-01
Report Date/Time: Friday, February 25, 2011 11:58:57
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Method 6020 - Summary Report

Sample ID: L1102061202SDL WG357485-02

Sample Date/Time: Friday, February 25, 2011 12:03:32
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 62
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21890.871	0.02				ug/L
|	Be	9	4.667	0.00	0.0557	0.011	20.599	ug/L
|	Al	27	204130.489	0.74	39.9968	1.511	3.779	ug/L
⌊>	Sc	45	273490.876	273490.88				ug/L
⌈	Ti	49	2227.138	0.00	4.1996	0.159	3.783	ug/L
|	V	51	16899.096	0.03	1.7690	0.034	1.924	ug/L
|	Cr	52	28207.011	0.05	3.0353	0.063	2.092	ug/L
|	Cr	53	2397.197	0.00	2.3367	0.384	16.438	ug/L
|	Mn	55	663514.005	1.52	62.9631	0.488	0.775	ug/L
|	Co	59	23577.338	0.05	2.7344	0.055	2.015	ug/L
|	Ni	60	15581.286	0.04	8.7467	0.120	1.368	ug/L
|	Cu	65	4378.336	0.01	2.3209	0.071	3.044	ug/L
|	Zn	66	21875.120	0.05	19.4688	0.172	0.883	ug/L
| >	Ge	72	435110.862	435110.86				ug/L
|	As	75	2416.727	0.01	3.0414	0.077	2.518	ug/L
|	Se	77	50.667	-0.00	-0.2732	0.036	13.084	ug/L
|	Se	82	18.383	0.00	0.1269	0.101	79.618	ug/L
⌊	Rb	85	2377.973	0.01				mg/L
	Y	89	268969.862	-21727.33				ug/L
	Rh	103	46.334	38.00				ug/L
⌈	Mo	98	207.863	0.00	0.1171	0.001	0.933	ug/L
|	Ag	107	82.001	0.00	0.0026	0.001	38.514	ug/L
|	Cd	114	5.564	0.00	0.0249	0.002	9.103	ug/L
| >	In	115	347833.587	347833.59				ug/L
|	Sn	118	224.269	0.00	0.0443	0.001	2.975	ug/L
⌊	Sb	123	640.980	0.00	0.1914	0.016	8.433	ug/L
⌈	Ba	135	21734.150	0.04	16.5630	0.157	0.949	ug/L
|	Ce	140	3277.532	0.01				ug/L
⌊>	Tb	159	489580.836	489580.84				ug/L
⌈	Ho	165	100.011	0.00				ug/L
|	Tl	203	28.000	0.00	-0.0024	0.001	50.991	ug/L
|	Tl	205	60.006	0.00	-0.0094	0.001	7.150	ug/L
|	Pb	206	2705.727	0.01	0.4563	0.030	6.582	ug/L
|	Pb	207	2260.278	0.00	0.4034	0.027	6.682	ug/L
|	Pb	208	10601.984	0.02	0.4324	0.020	4.536	ug/L
|	U	238	6357.751	0.01	0.1644	0.003	1.663	ug/L
⌊>	Bi	209	469338.047	469338.05				ug/L

Approved: February 28, 2011

⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	7342214.672	26.86	2.5060	0.071	2.847	mg/L
|	K	39	2962785.297	8.95	0.3387	0.011	3.285	mg/L
|	Ca	43	228336.757	0.83	14.2578	0.421	2.952	mg/L
|	Fe	54	94269.801	0.20	0.1092	0.007	6.007	mg/L
|	Fe	57	34275.398	0.10	0.1332	0.004	3.240	mg/L
⌊>	Sc-1	45	273490.876	273490.88				mg/L
	Cl	35	31088.250	11303.36				mg/L
	Kr	83	32.667	-3.33				mg/L
	Br	81	7639.584	479.02				mg/L
	P	31	51145.214	41022.08				mg/L
	S	34	624484.667	422718.16				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.577			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.031			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.783			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		91.566			
⌈	Na	23					

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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102061202SDL WG357485-02
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 25, 2011 12:10:18
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20788.276	0.01				ug/L
|	Be	9	12968.421	0.05	49.6450	2.936	5.913	ug/L
|	Al	27	264092.063	0.93	50.3996	0.748	1.484	ug/L
⌊>	Sc	45	281285.901	281285.90				ug/L
⌈	Ti	49	53434.450	0.12	101.0659	2.383	2.358	ug/L
|	V	51	417056.552	0.94	49.2817	0.881	1.788	ug/L
|	Cr	52	352539.389	0.78	49.6922	1.116	2.246	ug/L
|	Cr	53	41687.599	0.09	49.8615	1.417	2.841	ug/L
|	Mn	55	529051.301	1.19	49.2872	0.505	1.025	ug/L
|	Co	59	429277.122	0.97	49.3770	0.286	0.580	ug/L
|	Ni	60	88976.088	0.20	49.3323	0.994	2.014	ug/L
|	Cu	65	92916.627	0.21	49.5169	0.375	0.757	ug/L
|	Zn	66	55359.029	0.12	49.2067	0.330	0.671	ug/L
|>	Ge	72	442953.674	442953.67				ug/L
|	As	75	42304.080	0.10	49.7838	0.544	1.092	ug/L
|	Se	77	3055.800	0.01	49.1984	1.118	2.273	ug/L
|	Se	82	3768.087	0.01	48.9745	1.120	2.287	ug/L
⌊	Rb	85	1543.135	0.00				mg/L
	Y	89	268325.591	-22371.60				ug/L
	Rh	103	20.667	12.33				ug/L
⌈	Mo	98	189064.210	0.54	99.5296	3.307	3.323	ug/L
|	Ag	107	192340.399	0.55	49.7174	0.749	1.506	ug/L
|	Cd	114	45024.382	0.13	48.5336	0.180	0.371	ug/L
|>	In	115	348682.480	348682.48				ug/L
|	Sn	118	157383.525	0.45	48.7069	0.379	0.779	ug/L
⌊	Sb	123	156807.358	0.45	49.2186	0.734	1.492	ug/L
⌈	Ba	135	64321.178	0.13	49.2868	1.216	2.467	ug/L
|	Ce	140	43.338	0.00				ug/L
⌊>	Tb	159	486924.437	486924.44				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	296361.468	0.62	48.2654	0.451	0.933	ug/L
|	Tl	205	733961.003	1.52	49.1180	0.529	1.078	ug/L
|	Pb	206	240035.501	0.50	48.6941	1.049	2.154	ug/L
|	Pb	207	228038.386	0.47	49.0242	0.014	0.029	ug/L
|	Pb	208	1021394.823	2.12	49.3006	0.479	0.972	ug/L
|	U	238	1927425.020	4.00	49.8541	0.847	1.700	ug/L
⌊>	Bi	209	481566.946	481566.95				ug/L

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⌈	Na	23	24857411.607	88.07	5.1303	0.178	3.471	mg/L
|	Mg	24	15308300.305	54.43	5.0816	0.059	1.169	mg/L
|	K	39	37491602.740	131.46	4.9192	0.143	2.908	mg/L
|	Ca	43	81912.273	0.29	4.9663	0.097	1.959	mg/L
|	Fe	54	2614501.061	9.15	4.8528	0.018	0.362	mg/L
|	Fe	57	1077294.178	3.81	4.9003	0.017	0.343	mg/L
⌊>	Sc-1	45	281285.901	281285.90				mg/L
	Cl	35	17378.422	-2406.47				mg/L
	Kr	83	39.334	3.33				mg/L
	Br	81	5768.331	-1392.23				mg/L
	P	31	8849.917	-1273.22				mg/L
	S	34	192289.934	-9476.57				mg/L

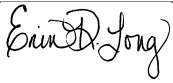
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	98.563				
|	Cr	52	99.384				
|	Cr	53					
|	Mn	55	98.574				
|	Co	59	98.754				
|	Ni	60	98.665				
|	Cu	65	99.034				
|	Zn	66	98.413				
|>	Ge	72		95.263			
|	As	75	99.568				
|	Se	77					
|	Se	82	97.949				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	99.435				
|	Cd	114	97.067				
|>	In	115		97.268			
|	Sn	118					
⌊	Sb	123	98.437				
⌈	Ba	135	98.574				
|	Ce	140					
⌊>	Tb	159		97.252			
⌈	Ho	165					
|	Tl	203	96.531				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	98.601				
|	U	238	99.708				
⌊>	Bi	209		93.952			
⌈	Na	23					

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 12:12:31



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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\└>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 12:12:31

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 25, 2011 12:17:34
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22659.004	0.02				ug/L
|	Be	9	2.667	-0.00	0.0474	0.009	18.149	ug/L
|	Al	27	1216.741	-0.00	-0.1353	0.020	15.054	ug/L
⌊>	Sc	45	290185.958	290185.96				ug/L
⌈	Ti	49	46.671	-0.00	-0.0084	0.063	746.654	ug/L
|	V	51	2255.422	-0.00	-0.0199	0.013	65.184	ug/L
|	Cr	52	7777.769	-0.00	-0.0340	0.029	84.066	ug/L
|	Cr	53	343.374	-0.00	-0.2222	0.084	38.010	ug/L
|	Mn	55	375.344	-0.00	-0.0953	0.001	1.404	ug/L
|	Co	59	80.001	-0.00	-0.0192	0.001	3.692	ug/L
|	Ni	60	52.001	-0.00	-0.0310	0.004	11.365	ug/L
|	Cu	65	123.002	0.00	0.0055	0.006	108.958	ug/L
|	Zn	66	464.015	-0.00	-0.1464	0.031	21.108	ug/L
| >	Ge	72	464712.411	464712.41				ug/L
|	As	75	-94.621	0.00	0.0493	0.032	64.137	ug/L
|	Se	77	51.333	-0.00	-0.3171	0.059	18.456	ug/L
|	Se	82	10.751	-0.00	0.0164	0.167	1021.581	ug/L
⌊	Rb	85	14.333	-0.00				mg/L
	Y	89	280264.917	-10432.27				ug/L
	Rh	103	4.667	-3.67				ug/L
⌈	Mo	98	78.006	0.00	0.0457	0.008	17.067	ug/L
|	Ag	107	20.667	0.00	-0.0137	0.001	5.770	ug/L
|	Cd	114	0.176	-0.00	0.0191	0.002	9.299	ug/L
| >	In	115	374017.208	374017.21				ug/L
|	Sn	118	193.335	0.00	0.0304	0.006	19.531	ug/L
⌊	Sb	123	89.868	0.00	0.0161	0.004	26.382	ug/L
⌈	Ba	135	11.333	0.00	0.0136	0.001	4.993	ug/L
|	Ce	140	23.336	0.00				ug/L
⌊>	Tb	159	521531.061	521531.06				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	27.334	0.00	-0.0029	0.001	24.888	ug/L
|	Tl	205	50.005	0.00	-0.0104	0.001	10.018	ug/L
|	Pb	206	397.679	0.00	-0.0317	0.008	24.942	ug/L
|	Pb	207	338.342	0.00	-0.0274	0.006	22.464	ug/L
|	Pb	208	1579.065	0.00	-0.0215	0.004	18.708	ug/L
|	U	238	96.335	0.00	-0.0020	0.000	6.791	ug/L
⌊>	Bi	209	510364.247	510364.25				ug/L

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⌈	Na	23	147734.915	0.16	0.0135	0.001	9.086	mg/L
|	Mg	24	476.726	0.00	-0.0024	0.000	1.398	mg/L
|	K	39	560434.254	0.05	0.0057	0.002	34.735	mg/L
|	Ca	43	180.020	0.00	0.0016	0.006	371.734	mg/L
|	Fe	54	40875.650	-0.00	0.0011	0.002	153.303	mg/L
|	Fe	57	6259.255	-0.00	-0.0004	0.001	158.635	mg/L
⌊>	Sc-1	45	290185.958	290185.96				mg/L
	Cl	35	17302.291	-2482.60				mg/L
	Kr	83	28.667	-7.33				mg/L
	Br	81	6450.747	-709.82				mg/L
	P	31	9867.547	-255.59				mg/L
	S	34	211474.192	9707.69				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		99.943			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		104.335			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		104.164			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.570			
⌈	Na	23					

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 12:19:45
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 12:19:45

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102060901

Sample Date/Time: Friday, February 25, 2011 12:24:20
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 63
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	25733.287	0.03				ug/L
|	Be	9	4.000	0.00	0.0535	0.009	15.987	ug/L
|	Al	27	21623.519	0.07	3.9401	0.300	7.626	ug/L
⌊>	Sc	45	271284.028	271284.03				ug/L
⌈	Ti	49	7516.916	0.02	14.8728	0.794	5.337	ug/L
|	V	51	3393.377	0.00	0.1486	0.006	3.716	ug/L
|	Cr	52	15173.321	0.02	1.1975	0.037	3.115	ug/L
|	Cr	53	1473.590	0.00	1.2582	0.124	9.825	ug/L
|	Mn	55	4009.844	0.01	0.2654	0.018	6.664	ug/L
|	Co	59	636.693	0.00	0.0491	0.002	3.603	ug/L
|	Ni	60	2819.092	0.01	1.5883	0.074	4.679	ug/L
|	Cu	65	3418.285	0.01	1.8613	0.019	1.001	ug/L
|	Zn	66	10490.938	0.02	9.3739	0.148	1.575	ug/L
| >	Ge	72	421155.748	421155.75				ug/L
|	As	75	795.799	0.00	1.1369	0.330	29.040	ug/L
|	Se	77	1871.509	0.00	31.3104	1.479	4.724	ug/L
|	Se	82	2381.317	0.01	32.5347	1.671	5.137	ug/L
⌊	Rb	85	3439.293	0.01				mg/L
	Y	89	235473.461	-55223.73				ug/L
	Rh	103	211.338	203.00				ug/L
⌈	Mo	98	419.730	0.00	0.2647	0.016	5.888	ug/L
|	Ag	107	24.667	0.00	-0.0112	0.003	22.843	ug/L
|	Cd	114	4.026	0.00	0.0240	0.005	20.836	ug/L
| >	In	115	299485.249	299485.25				ug/L
|	Sn	118	1037.387	0.00	0.3486	0.009	2.645	ug/L
⌊	Sb	123	87.206	0.00	0.0216	0.006	27.357	ug/L
⌈	Ba	135	1298.431	0.00	1.1268	0.066	5.853	ug/L
|	Ce	140	140.015	0.00				ug/L
⌊>	Tb	159	431788.662	431788.66				ug/L
⌈	Ho	165	113.345	0.00				ug/L
|	Tl	203	201.671	0.00	0.0304	0.002	7.516	ug/L
|	Tl	205	513.398	0.00	0.0256	0.003	9.911	ug/L
|	Pb	206	394.012	0.00	-0.0167	0.007	39.593	ug/L
|	Pb	207	344.009	0.00	-0.0117	0.002	16.848	ug/L
|	Pb	208	1580.065	0.00	-0.0065	0.001	8.412	ug/L
|	U	238	294678.335	0.70	8.6875	0.263	3.023	ug/L
⌊>	Bi	209	422399.374	422399.37				ug/L

Sample ID: L1102060901
Report Date/Time: Friday, February 25, 2011 12:26:32
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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	232049626.675	856.35	79.9834	3.562	4.453	mg/L
|	K	39	10843046.567	38.12	1.4293	0.055	3.854	mg/L
|	Ca	43	509374.352	1.88	32.0893	1.126	3.508	mg/L
|	Fe	54	47092.463	0.03	0.0186	0.005	28.994	mg/L
|	Fe	57	30446.007	0.09	0.1164	0.006	5.386	mg/L
⌊>	Sc-1	45	271284.028	271284.03				mg/L
	Cl	35	691523.457	671738.57				mg/L
	Kr	83	38.334	2.33				mg/L
	Br	81	89820.267	82659.70				mg/L
	P	31	9945.611	-177.53				mg/L
	S	34	8424697.821	8222931.32				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		90.575			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		83.544			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		86.240			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		82.409			
⌈	Na	23					

Sample ID: L1102060901
Report Date/Time: Friday, February 25, 2011 12:26:32
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102060902

Sample Date/Time: Friday, February 25, 2011 12:31:07
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 64
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

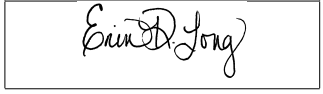
User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	26017.175	0.03				ug/L
|	Be	9	2.000	-0.00	0.0451	0.008	16.940	ug/L
|	Al	27	19803.041	0.06	3.4272	0.316	9.230	ug/L
⌊>	Sc	45	282296.928	282296.93				ug/L
⌈	Ti	49	3801.107	0.01	7.1261	0.614	8.614	ug/L
|	V	51	3017.237	0.00	0.0846	0.013	15.176	ug/L
|	Cr	52	10250.354	0.00	0.3806	0.022	5.852	ug/L
|	Cr	53	713.430	0.00	0.2494	0.081	32.563	ug/L
|	Mn	55	410883.592	0.93	38.3971	1.470	3.828	ug/L
|	Co	59	1070.735	0.00	0.0957	0.007	7.690	ug/L
|	Ni	60	5686.355	0.01	3.1086	0.349	11.239	ug/L
|	Cu	65	2302.288	0.01	1.1762	0.064	5.446	ug/L
|	Zn	66	4007.843	0.01	3.0719	0.070	2.283	ug/L
⌊>	Ge	72	441204.423	441204.42				ug/L
|	As	75	191.423	0.00	0.3806	0.013	3.300	ug/L
|	Se	77	59.334	-0.00	-0.1432	0.207	144.233	ug/L
|	Se	82	107.663	0.00	1.2908	0.045	3.450	ug/L
⌊	Rb	85	5114.695	0.01				mg/L
	Y	89	250944.799	-39752.39				ug/L
	Rh	103	343.009	334.68				ug/L
⌈	Mo	98	70.905	0.00	0.0470	0.003	7.421	ug/L
|	Ag	107	19.000	0.00	-0.0134	0.002	13.855	ug/L
|	Cd	114	6.957	0.00	0.0269	0.005	20.373	ug/L
⌊>	In	115	329332.708	329332.71				ug/L
|	Sn	118	141.734	0.00	0.0212	0.002	10.440	ug/L
⌊	Sb	123	60.744	0.00	0.0099	0.003	34.120	ug/L
⌈	Ba	135	1033.731	0.00	0.7984	0.071	8.926	ug/L
|	Ce	140	146.682	0.00				ug/L
⌊>	Tb	159	486250.084	486250.08				ug/L
⌈	Ho	165	23.336	0.00				ug/L
|	Tl	203	148.669	0.00	0.0185	0.002	8.550	ug/L
|	Tl	205	440.054	0.00	0.0175	0.006	34.419	ug/L
|	Pb	206	410.346	0.00	-0.0201	0.005	26.411	ug/L
|	Pb	207	356.677	0.00	-0.0151	0.005	31.940	ug/L
|	Pb	208	1641.736	0.00	-0.0099	0.000	2.510	ug/L
|	U	238	96840.407	0.21	2.6370	0.023	0.871	ug/L
⌊>	Bi	209	456640.742	456640.74				ug/L

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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	174248116.592	617.13	57.6396	0.962	1.669	mg/L
|	K	39	11872768.543	40.17	1.5060	0.009	0.615	mg/L
|	Ca	43	605373.727	2.14	36.6082	0.834	2.279	mg/L
|	Fe	54	49834.414	0.04	0.0200	0.002	11.290	mg/L
|	Fe	57	35553.338	0.10	0.1340	0.008	5.900	mg/L
⌊>	Sc-1	45	282296.928	282296.93				mg/L
	Cl	35	295662.709	275877.82				mg/L
	Kr	83	39.000	3.00				mg/L
	Br	81	47599.685	40439.12				mg/L
	P	31	10946.015	822.88				mg/L
	S	34	4122099.377	3920332.87				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.887			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		91.870			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.117			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		89.089			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102060902
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Method 6020 - Summary Report

Sample ID: L1102060903

Sample Date/Time: Friday, February 25, 2011 12:37:54
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 65
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	24597.192	0.03				ug/L
|	Be	9	3.333	0.00	0.0512	0.013	24.741	ug/L
|	Al	27	22375.028	0.08	4.2143	0.224	5.322	ug/L
⌊>	Sc	45	264400.867	264400.87				ug/L
⌈	Ti	49	2620.605	0.01	5.1775	0.075	1.440	ug/L
|	V	51	2973.884	0.00	0.1000	0.011	10.680	ug/L
|	Cr	52	9955.720	0.01	0.4213	0.021	4.867	ug/L
|	Cr	53	660.088	0.00	0.2301	0.118	51.183	ug/L
|	Mn	55	793929.379	1.90	78.6323	3.675	4.674	ug/L
|	Co	59	2067.568	0.00	0.2247	0.016	7.018	ug/L
|	Ni	60	4224.604	0.01	2.4320	0.152	6.255	ug/L
|	Cu	65	1635.484	0.00	0.8696	0.054	6.200	ug/L
|	Zn	66	10310.085	0.02	9.2974	0.258	2.776	ug/L
| >	Ge	72	417014.087	417014.09				ug/L
|	As	75	162.613	0.00	0.3576	0.072	20.141	ug/L
|	Se	77	120.001	0.00	0.9763	0.099	10.147	ug/L
|	Se	82	151.644	0.00	1.9803	0.285	14.399	ug/L
⌊	Rb	85	4145.903	0.01				mg/L
	Y	89	236388.291	-54308.90				ug/L
	Rh	103	193.670	185.34				ug/L
⌈	Mo	98	223.653	0.00	0.1418	0.013	8.960	ug/L
|	Ag	107	18.334	0.00	-0.0132	0.001	7.699	ug/L
|	Cd	114	7.368	0.00	0.0280	0.011	38.723	ug/L
| >	In	115	305158.337	305158.34				ug/L
|	Sn	118	96.667	0.00	0.0088	0.002	20.544	ug/L
⌊	Sb	123	57.453	0.00	0.0103	0.002	22.904	ug/L
⌈	Ba	135	964.389	0.00	0.8221	0.030	3.613	ug/L
|	Ce	140	250.028	0.00				ug/L
⌊>	Tb	159	440848.731	440848.73				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	149.336	0.00	0.0203	0.001	5.633	ug/L
|	Tl	205	323.371	0.00	0.0108	0.006	59.016	ug/L
|	Pb	206	367.677	0.00	-0.0238	0.006	25.272	ug/L
|	Pb	207	318.675	0.00	-0.0189	0.006	32.964	ug/L
|	Pb	208	1502.060	0.00	-0.0118	0.002	20.267	ug/L
|	U	238	138101.877	0.32	4.0217	0.083	2.053	ug/L
⌊>	Bi	209	427031.862	427031.86				ug/L

Sample ID: L1102060903
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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	105671639.615	399.64	37.3249	0.879	2.356	mg/L
|	K	39	7470045.284	26.35	0.9894	0.033	3.336	mg/L
|	Ca	43	584732.901	2.21	37.7675	0.359	0.951	mg/L
|	Fe	54	44667.628	0.03	0.0160	0.002	10.305	mg/L
|	Fe	57	32091.423	0.10	0.1280	0.008	6.297	mg/L
⌊>	Sc-1	45	264400.867	264400.87				mg/L
	Cl	35	266481.562	246696.67				mg/L
	Kr	83	41.334	5.33				mg/L
	Br	81	44520.891	37360.33				mg/L
	P	31	9837.589	-285.55				mg/L
	S	34	2798617.346	2596850.84				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
| >	Ge	72		89.685			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
| >	In	115		85.126			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		88.049			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		83.313			
⌈	Na	23					

Sample ID: L1102060903
Report Date/Time: Friday, February 25, 2011 12:40:07
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102060903
Report Date/Time: Friday, February 25, 2011 12:40:07

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102060904

Sample Date/Time: Friday, February 25, 2011 12:44:42
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 66
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	25064.726	0.03				ug/L
|	Be	9	5.333	0.00	0.0586	0.016	27.861	ug/L
|	Al	27	43109.472	0.15	8.2688	0.021	0.251	ug/L
⌊>	Sc	45	269999.904	269999.90				ug/L
⌈	Ti	49	4678.228	0.01	9.3296	0.327	3.509	ug/L
|	V	51	2818.547	0.00	0.0806	0.009	11.183	ug/L
|	Cr	52	11063.895	0.01	0.5930	0.028	4.739	ug/L
|	Cr	53	1200.192	0.00	0.9283	0.110	11.861	ug/L
|	Mn	55	91493.546	0.22	8.9573	0.227	2.534	ug/L
|	Co	59	901.716	0.00	0.0823	0.006	7.863	ug/L
|	Ni	60	3405.614	0.01	1.9519	0.059	3.047	ug/L
|	Cu	65	2679.386	0.01	1.4633	0.039	2.661	ug/L
|	Zn	66	15034.112	0.04	13.8224	0.141	1.018	ug/L
|>	Ge	72	416620.466	416620.47				ug/L
|	As	75	432.254	0.00	0.6946	0.042	6.029	ug/L
|	Se	77	192.002	0.00	2.2359	0.296	13.229	ug/L
|	Se	82	310.641	0.00	4.1872	0.185	4.414	ug/L
⌊	Rb	85	3453.298	0.01				mg/L
	Y	89	238495.526	-52201.66				ug/L
	Rh	103	202.671	194.34				ug/L
⌈	Mo	98	171.537	0.00	0.1124	0.008	6.918	ug/L
|	Ag	107	20.000	0.00	-0.0127	0.002	18.426	ug/L
|	Cd	114	0.140	-0.00	0.0191	0.001	5.154	ug/L
|>	In	115	300338.861	300338.86				ug/L
|	Sn	118	110.134	0.00	0.0142	0.002	13.990	ug/L
⌊	Sb	123	50.371	0.00	0.0080	0.003	32.826	ug/L
⌈	Ba	135	1458.121	0.00	1.2475	0.047	3.801	ug/L
|	Ce	140	286.700	0.00				ug/L
⌊>	Tb	159	437978.096	437978.10				ug/L
⌈	Ho	165	70.007	0.00				ug/L
|	Tl	203	203.671	0.00	0.0321	0.005	16.685	ug/L
|	Tl	205	463.391	0.00	0.0234	0.013	57.047	ug/L
|	Pb	206	370.677	0.00	-0.0191	0.007	36.763	ug/L
|	Pb	207	325.675	0.00	-0.0137	0.005	34.325	ug/L
|	Pb	208	1514.394	0.00	-0.0073	0.002	32.605	ug/L
|	U	238	123294.148	0.30	3.7574	0.149	3.955	ug/L
⌊>	Bi	209	408697.875	408697.87				ug/L

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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	116375678.856	431.36	40.2876	1.233	3.060	mg/L
|	K	39	10630941.489	37.48	1.4055	0.009	0.673	mg/L
|	Ca	43	553221.170	2.05	34.9995	0.585	1.671	mg/L
|	Fe	54	48692.666	0.04	0.0220	0.002	10.139	mg/L
|	Fe	57	33523.102	0.10	0.1314	0.009	6.943	mg/L
⌊>	Sc-1	45	269999.904	269999.90				mg/L
	Cl	35	813966.834	794181.95				mg/L
	Kr	83	42.334	6.33				mg/L
	Br	81	113966.485	106805.92				mg/L
	P	31	9888.942	-234.20				mg/L
	S	34	5253898.470	5052131.97				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		89.600			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		83.782			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		87.476			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		79.736			
⌈	Na	23					

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
_>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102060905

Sample Date/Time: Friday, February 25, 2011 12:51:30
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 67
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	26485.139	0.03				ug/L
|	Be	9	4.000	0.00	0.0522	0.000	0.784	ug/L
|	Al	27	34693.417	0.11	6.0557	0.256	4.235	ug/L
⌊>	Sc	45	292415.791	292415.79				ug/L
⌈	Ti	49	1266.874	0.00	2.2123	0.300	13.577	ug/L
|	V	51	2966.070	0.00	0.0631	0.007	11.251	ug/L
|	Cr	52	10146.917	0.00	0.3021	0.049	16.058	ug/L
|	Cr	53	736.769	0.00	0.2389	0.224	93.818	ug/L
|	Mn	55	74578.940	0.16	6.5624	0.176	2.683	ug/L
|	Co	59	451.015	0.00	0.0218	0.002	9.089	ug/L
|	Ni	60	1738.169	0.00	0.8682	0.040	4.619	ug/L
|	Cu	65	987.059	0.00	0.4489	0.042	9.283	ug/L
|	Zn	66	3223.887	0.01	2.2395	0.227	10.129	ug/L
| >	Ge	72	461139.569	461139.57				ug/L
|	As	75	89.138	0.00	0.2555	0.065	25.611	ug/L
|	Se	77	78.667	0.00	0.1202	0.436	362.444	ug/L
|	Se	82	85.364	0.00	0.9508	0.147	15.446	ug/L
⌊	Rb	85	2342.298	0.01				mg/L
	Y	89	263519.916	-27177.27				ug/L
	Rh	103	136.336	128.00				ug/L
⌈	Mo	98	349.169	0.00	0.1874	0.008	4.158	ug/L
|	Ag	107	16.667	0.00	-0.0144	0.001	7.444	ug/L
|	Cd	114	1.416	0.00	0.0204	0.005	22.563	ug/L
| >	In	115	356179.486	356179.49				ug/L
|	Sn	118	80.000	0.00	-0.0011	0.002	223.219	ug/L
⌊	Sb	123	54.579	0.00	0.0065	0.001	19.793	ug/L
⌈	Ba	135	1651.486	0.00	1.2212	0.056	4.580	ug/L
|	Ce	140	206.690	0.00				ug/L
⌊>	Tb	159	507066.449	507066.45				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	107.002	0.00	0.0100	0.001	14.901	ug/L
|	Tl	205	240.027	0.00	0.0022	0.004	173.526	ug/L
|	Pb	206	444.348	0.00	-0.0198	0.005	26.169	ug/L
|	Pb	207	364.677	0.00	-0.0194	0.005	24.631	ug/L
|	Pb	208	1763.413	0.00	-0.0103	0.003	26.719	ug/L
|	U	238	13038.291	0.03	0.3253	0.002	0.556	ug/L
⌊>	Bi	209	492766.209	492766.21				ug/L

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⌈	Na	23	302980151.734	1036.93	60.3613	3.685	6.105	mg/L
|	Mg	24	34977896.734	119.73	11.1805	0.571	5.106	mg/L
|	K	39	5774097.901	17.87	0.6721	0.017	2.509	mg/L
|	Ca	43	285042.257	0.97	16.6398	0.038	0.231	mg/L
|	Fe	54	52993.890	0.04	0.0225	0.003	15.284	mg/L
|	Fe	57	22497.570	0.05	0.0709	0.005	7.125	mg/L
⌊>	Sc-1	45	292415.791	292415.79				mg/L
	Cl	35	324797.082	305012.19				mg/L
	Kr	83	35.000	-1.00				mg/L
	Br	81	41382.787	34222.22				mg/L
	P	31	11698.175	1575.04				mg/L
	S	34	1849064.525	1647298.02				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		99.175			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.359			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		101.275			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		96.137			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102060906 WG357433-01

Sample Date/Time: Friday, February 25, 2011 12:58:19
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 68
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	25599.566	0.03				ug/L
|	Be	9	8.000	0.00	0.0676	0.007	9.690	ug/L
|	Al	27	20955.290	0.07	3.6243	0.176	4.868	ug/L
⌊>	Sc	45	284287.513	284287.51				ug/L
⌈	Ti	49	4824.981	0.01	9.2062	0.447	4.850	ug/L
|	V	51	3186.301	0.00	0.1098	0.017	15.373	ug/L
|	Cr	52	10314.086	0.01	0.4101	0.009	2.236	ug/L
|	Cr	53	996.816	0.00	0.6101	0.074	12.095	ug/L
|	Mn	55	110623.121	0.25	10.3853	0.288	2.770	ug/L
|	Co	59	1076.402	0.00	0.0981	0.006	5.948	ug/L
|	Ni	60	4141.236	0.01	2.2800	0.180	7.896	ug/L
|	Cu	65	2863.772	0.01	1.4977	0.036	2.407	ug/L
|	Zn	66	11628.544	0.03	10.0904	0.208	2.058	ug/L
|>	Ge	72	435239.698	435239.70				ug/L
|	As	75	515.705	0.00	0.7709	0.014	1.823	ug/L
|	Se	77	105.334	0.00	0.6407	0.374	58.302	ug/L
|	Se	82	231.635	0.00	2.9538	0.106	3.578	ug/L
⌊	Rb	85	3150.862	0.01				mg/L
	Y	89	244603.279	-46093.91				ug/L
	Rh	103	244.672	236.34				ug/L
⌈	Mo	98	471.290	0.00	0.2735	0.014	5.198	ug/L
|	Ag	107	83.668	0.00	0.0046	0.002	48.757	ug/L
|	Cd	114	8.817	0.00	0.0291	0.002	6.687	ug/L
|>	In	115	325048.342	325048.34				ug/L
|	Sn	118	82.267	0.00	0.0020	0.001	62.604	ug/L
⌊	Sb	123	116.913	0.00	0.0291	0.003	9.393	ug/L
⌈	Ba	135	1543.801	0.00	1.2454	0.050	4.003	ug/L
|	Ce	140	190.021	0.00				ug/L
⌊>	Tb	159	464611.611	464611.61				ug/L
⌈	Ho	165	53.339	0.00				ug/L
|	Tl	203	193.671	0.00	0.0262	0.005	19.074	ug/L
|	Tl	205	456.723	0.00	0.0188	0.005	28.515	ug/L
|	Pb	206	415.346	0.00	-0.0189	0.005	27.015	ug/L
|	Pb	207	339.343	0.00	-0.0189	0.006	33.743	ug/L
|	Pb	208	1647.071	0.00	-0.0095	0.003	29.111	ug/L
|	U	238	189710.012	0.42	5.1770	0.169	3.261	ug/L
⌊>	Bi	209	455944.505	455944.51				ug/L

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Erin D. Long

⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	172938218.656	608.43	56.8266	1.275	2.243	mg/L
|	K	39	12790861.965	43.13	1.6165	0.039	2.386	mg/L
|	Ca	43	609838.920	2.15	36.6522	1.348	3.678	mg/L
|	Fe	54	48338.510	0.03	0.0167	0.006	35.863	mg/L
|	Fe	57	38357.498	0.11	0.1455	0.012	8.070	mg/L
⌊>	Sc-1	45	284287.513	284287.51				mg/L
	Cl	35	751842.089	732057.20				mg/L
	Kr	83	42.667	6.67				mg/L
	Br	81	127532.081	120371.52				mg/L
	P	31	11303.724	1180.59				mg/L
	S	34	4940904.950	4739138.44				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.604			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		90.675			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		92.795			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		88.953			
⌈	Na	23					

Sample ID: L1102060906 WG357433-01
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102060906S WG357433-05

Sample Date/Time: Friday, February 25, 2011 13:05:08
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 69
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23277.322	0.02				ug/L
|	Be	9	1282.082	0.00	5.1902	0.174	3.353	ug/L
|	Al	27	43645.602	0.16	8.4597	0.900	10.633	ug/L
⌊>	Sc	45	267654.612	267654.61				ug/L
⌈	Ti	49	3967.852	0.01	7.9571	0.545	6.853	ug/L
|	V	51	44697.585	0.10	5.4125	0.104	1.914	ug/L
|	Cr	52	43985.684	0.09	5.6845	0.103	1.821	ug/L
|	Cr	53	4895.022	0.01	5.7289	0.166	2.889	ug/L
|	Mn	55	152854.978	0.37	15.1575	0.428	2.821	ug/L
|	Co	59	43496.247	0.10	5.3322	0.121	2.263	ug/L
|	Ni	60	11951.270	0.03	7.0452	0.305	4.329	ug/L
|	Cu	65	11564.135	0.03	6.5502	0.133	2.031	ug/L
|	Zn	66	15992.285	0.04	14.8442	0.419	2.821	ug/L
|>	Ge	72	413589.868	413589.87				ug/L
|	As	75	4556.325	0.01	5.8803	0.065	1.103	ug/L
|	Se	77	419.342	0.00	6.2798	0.706	11.238	ug/L
|	Se	82	564.995	0.00	7.7694	0.353	4.546	ug/L
⌊	Rb	85	2834.097	0.01				mg/L
	Y	89	233859.445	-56837.74				ug/L
	Rh	103	204.671	196.34				ug/L
⌈	Mo	98	401.546	0.00	0.2525	0.010	4.053	ug/L
|	Ag	107	15590.644	0.05	4.6543	0.140	3.004	ug/L
|	Cd	114	4061.929	0.01	5.0909	0.097	1.897	ug/L
|>	In	115	300803.045	300803.04				ug/L
|	Sn	118	74.400	0.00	0.0014	0.001	68.991	ug/L
⌊	Sb	123	15103.965	0.05	5.4869	0.102	1.862	ug/L
⌈	Ba	135	7665.349	0.02	6.6649	0.025	0.379	ug/L
|	Ce	140	173.352	0.00				ug/L
⌊>	Tb	159	429301.136	429301.14				ug/L
⌈	Ho	165	43.338	0.00				ug/L
|	Tl	203	28498.228	0.07	5.3954	0.113	2.102	ug/L
|	Tl	205	70243.601	0.17	5.4570	0.213	3.906	ug/L
|	Pb	206	24475.204	0.06	5.6823	0.108	1.907	ug/L
|	Pb	207	21400.110	0.05	5.2705	0.120	2.271	ug/L
|	Pb	208	98897.923	0.24	5.4733	0.127	2.329	ug/L
|	U	238	351877.348	0.85	10.5859	0.283	2.673	ug/L
⌊>	Bi	209	413628.285	413628.28				ug/L

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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	153099603.138	572.57	53.4780	3.141	5.873	mg/L
|	K	39	11281927.596	40.29	1.5105	0.055	3.617	mg/L
|	Ca	43	533107.126	1.99	34.0388	1.661	4.880	mg/L
|	Fe	54	46463.523	0.03	0.0185	0.002	13.300	mg/L
|	Fe	57	33031.583	0.10	0.1308	0.020	15.497	mg/L
⌊>	Sc-1	45	267654.612	267654.61				mg/L
	Cl	35	629303.165	609518.28				mg/L
	Kr	83	41.667	5.67				mg/L
	Br	81	97776.352	90615.79				mg/L
	P	31	9108.178	-1014.96				mg/L
	S	34	4256004.719	4054238.21				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		88.948			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		83.911			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		85.743			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		80.698			
⌈	Na	23					

Sample ID: L1102060906S WG357433-05
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102060906S WG357433-05
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Method 6020 - Summary Report

Sample ID: L1102060906SD WG357433-06

Sample Date/Time: Friday, February 25, 2011 13:11:57
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 70
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	25866.789	0.02				ug/L
|	Be	9	1488.778	0.00	5.4252	0.186	3.425	ug/L
|	Al	27	53660.297	0.18	9.3998	0.468	4.983	ug/L
⌊>	Sc	45	297392.853	297392.85				ug/L
⌈	Ti	49	4738.264	0.01	8.8588	0.326	3.682	ug/L
|	V	51	50031.432	0.11	5.6567	0.058	1.031	ug/L
|	Cr	52	48998.594	0.09	5.9422	0.112	1.879	ug/L
|	Cr	53	5432.018	0.01	5.9451	0.129	2.174	ug/L
|	Mn	55	168967.104	0.38	15.6204	0.364	2.329	ug/L
|	Co	59	49051.198	0.11	5.6057	0.160	2.859	ug/L
|	Ni	60	14295.026	0.03	7.8608	0.298	3.789	ug/L
|	Cu	65	12916.133	0.03	6.8194	0.125	1.831	ug/L
|	Zn	66	18245.480	0.04	15.8179	0.237	1.498	ug/L
| >	Ge	72	443925.195	443925.19				ug/L
|	As	75	5146.859	0.01	6.1792	0.207	3.356	ug/L
|	Se	77	408.008	0.00	5.5824	0.718	12.864	ug/L
|	Se	82	651.013	0.00	8.3453	0.423	5.066	ug/L
⌊	Rb	85	3200.211	0.01				mg/L
	Y	89	258675.638	-32021.55				ug/L
	Rh	103	251.672	243.34				ug/L
⌈	Mo	98	470.513	0.00	0.2678	0.007	2.716	ug/L
|	Ag	107	17956.954	0.05	4.8628	0.020	0.410	ug/L
|	Cd	114	4745.132	0.01	5.3953	0.185	3.424	ug/L
| >	In	115	331630.255	331630.25				ug/L
|	Sn	118	94.134	0.00	0.0053	0.001	24.710	ug/L
⌊	Sb	123	16999.400	0.05	5.6007	0.136	2.425	ug/L
⌈	Ba	135	8496.027	0.02	6.6074	0.105	1.583	ug/L
|	Ce	140	210.023	0.00				ug/L
⌊>	Tb	159	479999.511	479999.51				ug/L
⌈	Ho	165	46.671	0.00				ug/L
|	Tl	203	32676.972	0.07	5.4934	0.174	3.176	ug/L
|	Tl	205	81626.792	0.18	5.6331	0.199	3.534	ug/L
|	Pb	206	28665.320	0.06	5.9140	0.202	3.419	ug/L
|	Pb	207	24963.037	0.05	5.4608	0.154	2.824	ug/L
|	Pb	208	115794.286	0.25	5.6926	0.110	1.937	ug/L
|	U	238	412804.532	0.89	11.0287	0.229	2.073	ug/L
⌊>	Bi	209	466138.730	466138.73				ug/L

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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	169746474.261	571.23	53.3523	2.285	4.283	mg/L
|	K	39	12893937.021	41.49	1.5554	0.046	2.941	mg/L
|	Ca	43	600337.624	2.02	34.4904	1.161	3.365	mg/L
|	Fe	54	51344.201	0.03	0.0180	0.003	15.693	mg/L
|	Fe	57	35867.857	0.10	0.1272	0.010	7.906	mg/L
⌊>	Sc-1	45	297392.853	297392.85				mg/L
	Cl	35	815184.946	795400.06				mg/L
	Kr	83	40.334	4.33				mg/L
	Br	81	124573.135	117412.57				mg/L
	P	31	10776.488	653.35				mg/L
	S	34	4947671.191	4745904.69				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		95.472			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		92.511			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		95.869			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		90.942			
⌈	Na	23					

Sample ID: L1102060906SD WG357433-06
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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102060906SD WG357433-06
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Method 6020 - Summary Report

Sample ID: L1102060908

Sample Date/Time: Friday, February 25, 2011 13:18:44
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 71
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21673.642	0.02				ug/L
|	Be	9	5.333	0.00	0.0581	0.016	27.278	ug/L
|	Al	27	250009.303	0.90	48.4049	9.696	20.031	ug/L
⌊>	Sc	45	277480.717	277480.72				ug/L
⌈	Ti	49	910.133	0.00	1.6310	0.194	11.908	ug/L
|	V	51	19508.582	0.04	2.0432	0.049	2.415	ug/L
|	Cr	52	13810.668	0.01	0.8878	0.005	0.581	ug/L
|	Cr	53	1150.182	0.00	0.7745	0.170	21.902	ug/L
|	Mn	55	84393.924	0.19	7.7552	0.199	2.570	ug/L
|	Co	59	2050.231	0.00	0.2080	0.003	1.584	ug/L
|	Ni	60	1629.483	0.00	0.8462	0.044	5.223	ug/L
|	Cu	65	1421.782	0.00	0.7016	0.016	2.245	ug/L
|	Zn	66	2349.966	0.00	1.5682	0.023	1.480	ug/L
|>	Ge	72	442893.273	442893.27				ug/L
|	As	75	4286.531	0.01	5.1848	0.066	1.271	ug/L
|	Se	77	70.667	0.00	0.0416	0.165	397.744	ug/L
|	Se	82	44.992	0.00	0.4692	0.045	9.559	ug/L
⌊	Rb	85	3067.501	0.01				mg/L
	Y	89	260816.992	-29880.20				ug/L
	Rh	103	31.000	22.67				ug/L
⌈	Mo	98	4195.562	0.01	2.2322	0.097	4.364	ug/L
|	Ag	107	15.333	0.00	-0.0147	0.001	6.940	ug/L
|	Cd	114	25.958	0.00	0.0471	0.010	21.290	ug/L
|>	In	115	346179.819	346179.82				ug/L
|	Sn	118	352.140	0.00	0.0845	0.004	4.902	ug/L
⌊	Sb	123	444.884	0.00	0.1304	0.010	7.781	ug/L
⌈	Ba	135	15491.147	0.03	11.8093	0.292	2.470	ug/L
|	Ce	140	1586.952	0.00				ug/L
⌊>	Tb	159	489525.530	489525.53				ug/L
⌈	Ho	165	50.005	0.00				ug/L
|	Tl	203	736.701	0.00	0.1127	0.012	10.927	ug/L
|	Tl	205	1696.981	0.00	0.0996	0.011	10.950	ug/L
|	Pb	206	838.377	0.00	0.0618	0.005	8.115	ug/L
|	Pb	207	699.031	0.00	0.0539	0.010	17.795	ug/L
|	Pb	208	3268.242	0.00	0.0639	0.006	8.955	ug/L
|	U	238	5394.846	0.01	0.1347	0.008	5.724	ug/L
⌊>	Bi	209	483453.726	483453.73				ug/L

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Erin D. Long

⌈	Na	23	20397752.593	73.18	4.2635	0.125	2.932	mg/L
|	Mg	24	3439236.632	12.40	1.1556	0.070	6.024	mg/L
|	K	39	3381987.868	10.30	0.3893	0.012	3.194	mg/L
|	Ca	43	87237.711	0.31	5.3614	0.158	2.951	mg/L
|	Fe	54	83650.346	0.16	0.0863	0.005	6.205	mg/L
|	Fe	57	24809.895	0.07	0.0869	0.002	1.783	mg/L
⌊>	Sc-1	45	277480.717	277480.72				mg/L
	Cl	35	129431.109	109646.22				mg/L
	Kr	83	39.334	3.33				mg/L
	Br	81	20348.018	13187.45				mg/L
	P	31	13559.867	3436.73				mg/L
	S	34	325023.688	123257.18				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		95.250			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.569			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.771			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		94.320			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102060908
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 25, 2011 13:25:31
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19302.219	0.01				ug/L
|	Be	9	12475.115	0.05	49.3849	2.464	4.990	ug/L
|	Al	27	252874.765	0.92	49.8777	0.928	1.861	ug/L
⌊>	Sc	45	272120.561	272120.56				ug/L
⌈	Ti	49	51400.285	0.12	99.6679	2.303	2.310	ug/L
|	V	51	407819.390	0.94	49.4076	0.519	1.050	ug/L
|	Cr	52	343213.443	0.78	49.5948	0.917	1.849	ug/L
|	Cr	53	40238.252	0.09	49.3344	2.110	4.277	ug/L
|	Mn	55	517750.011	1.20	49.4482	0.413	0.835	ug/L
|	Co	59	416065.601	0.96	49.0629	0.484	0.986	ug/L
|	Ni	60	86680.986	0.20	49.2698	0.579	1.176	ug/L
|	Cu	65	88809.557	0.21	48.5194	0.640	1.320	ug/L
|	Zn	66	54173.558	0.12	49.3674	0.393	0.797	ug/L
|>	Ge	72	432062.184	432062.18				ug/L
|	As	75	40516.282	0.09	48.8859	0.053	0.109	ug/L
|	Se	77	2968.441	0.01	48.9930	1.764	3.601	ug/L
|	Se	82	3697.401	0.01	49.2675	0.331	0.672	ug/L
⌊	Rb	85	1519.131	0.00				mg/L
	Y	89	252465.578	-38231.61				ug/L
	Rh	103	18.000	9.67				ug/L
⌈	Mo	98	181448.000	0.55	100.3008	1.989	1.983	ug/L
|	Ag	107	182300.201	0.55	49.4870	0.618	1.248	ug/L
|	Cd	114	42845.941	0.13	48.5171	1.251	2.579	ug/L
|>	In	115	332013.697	332013.70				ug/L
|	Sn	118	152258.081	0.46	49.4856	0.248	0.501	ug/L
⌊	Sb	123	152198.037	0.46	50.1752	0.790	1.575	ug/L
⌈	Ba	135	61874.119	0.13	49.8649	0.753	1.511	ug/L
|	Ce	140	30.003	0.00				ug/L
⌊>	Tb	159	462868.905	462868.90				ug/L
⌈	Ho	165	6.667	0.00				ug/L
|	Tl	203	287520.142	0.62	48.6829	1.176	2.415	ug/L
|	Tl	205	714259.364	1.54	49.7022	1.178	2.371	ug/L
|	Pb	206	232831.938	0.50	49.1046	1.481	3.017	ug/L
|	Pb	207	222603.342	0.48	49.7542	0.835	1.677	ug/L
|	Pb	208	994769.075	2.14	49.9248	1.287	2.578	ug/L
|	U	238	1862919.849	4.02	50.0853	1.083	2.162	ug/L
⌊>	Bi	209	463290.825	463290.82				ug/L

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Na	23	23219998.031	84.97	4.9503	0.043	0.864	mg/L
Mg	24	14924894.839	54.85	5.1211	0.155	3.024	mg/L
K	39	35414510.434	128.30	4.8010	0.103	2.140	mg/L
Ca	43	78172.232	0.29	4.8978	0.049	0.999	mg/L
Fe	54	2570661.480	9.31	4.9350	0.165	3.351	mg/L
Fe	57	1051963.599	3.84	4.9482	0.147	2.969	mg/L
Sc-1	45	272120.561	272120.56				mg/L
Cl	35	16356.700	-3428.19				mg/L
Kr	83	38.334	2.33				mg/L
Br	81	11141.537	3980.97				mg/L
P	31	8136.643	-1986.49				mg/L
S	34	179062.979	-22703.53				mg/L

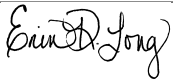
QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51	98.815				
Cr	52	99.190				
Cr	53					
Mn	55	98.896				
Co	59	98.126				
Ni	60	98.540				
Cu	65	97.039				
Zn	66	98.735				
Ge	72		92.921			
As	75	97.772				
Se	77					
Se	82	98.535				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	98.974				
Cd	114	97.034				
In	115		92.618			
Sn	118					
Sb	123	100.350				
Ba	135	99.730				
Ce	140					
Tb	159		92.447			
Ho	165					
Tl	203	97.366				
Tl	205					
Pb	206					
Pb	207					
Pb	208	99.850				
U	238	100.171				
Bi	209		90.387			
Na	23					

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 13:27:43



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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\└>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 13:27:43
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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 25, 2011 13:32:47
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20872.000	0.01				ug/L
|	Be	9	1.333	-0.00	0.0428	0.005	10.783	ug/L
|	Al	27	1283.417	-0.00	-0.1101	0.044	39.655	ug/L
⌊>	Sc	45	275087.412	275087.41				ug/L
⌈	Ti	49	66.674	0.00	0.0349	0.043	123.343	ug/L
|	V	51	2261.707	-0.00	-0.0034	0.016	484.443	ug/L
|	Cr	52	7559.265	-0.00	0.0002	0.027	14172.578	ug/L
|	Cr	53	310.036	-0.00	-0.2386	0.020	8.224	ug/L
|	Mn	55	336.342	-0.00	-0.0969	0.001	1.490	ug/L
|	Co	59	92.335	0.00	-0.0172	0.001	4.138	ug/L
|	Ni	60	43.667	-0.00	-0.0340	0.003	9.997	ug/L
|	Cu	65	213.671	0.00	0.0583	0.010	17.855	ug/L
|	Zn	66	540.687	0.00	-0.0522	0.020	37.340	ug/L
| >	Ge	72	437642.909	437642.91				ug/L
|	As	75	-114.711	-0.00	0.0192	0.047	246.568	ug/L
|	Se	77	52.000	-0.00	-0.2559	0.151	58.984	ug/L
|	Se	82	4.641	-0.00	-0.0549	0.122	222.504	ug/L
⌊	Rb	85	12.333	-0.00				mg/L
	Y	89	262812.276	-27884.91				ug/L
	Rh	103	5.333	-3.00				ug/L
⌈	Mo	98	66.087	0.00	0.0425	0.005	11.291	ug/L
|	Ag	107	20.334	0.00	-0.0134	0.001	4.543	ug/L
|	Cd	114	3.042	0.00	0.0222	0.001	5.241	ug/L
| >	In	115	346665.665	346665.66				ug/L
|	Sn	118	188.935	0.00	0.0335	0.008	23.406	ug/L
⌊	Sb	123	44.872	0.00	0.0039	0.003	70.642	ug/L
⌈	Ba	135	7.667	-0.00	0.0115	0.001	10.356	ug/L
|	Ce	140	13.335	0.00				ug/L
⌊>	Tb	159	479940.766	479940.77				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	29.667	0.00	-0.0022	0.002	78.314	ug/L
|	Tl	205	80.008	0.00	-0.0082	0.003	32.716	ug/L
|	Pb	206	369.011	0.00	-0.0332	0.003	9.028	ug/L
|	Pb	207	318.342	0.00	-0.0278	0.003	9.560	ug/L
|	Pb	208	1456.389	0.00	-0.0234	0.002	7.353	ug/L
|	U	238	97.001	0.00	-0.0018	0.000	6.961	ug/L
⌊>	Bi	209	482934.555	482934.55				ug/L

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⌈	Na	23	66305.746	-0.11	-0.0021	0.001	42.793	mg/L
|	Mg	24	806.780	0.00	-0.0023	0.000	0.628	mg/L
|	K	39	557305.230	0.14	0.0094	0.004	44.180	mg/L
|	Ca	43	183.353	0.00	0.0024	0.001	32.567	mg/L
|	Fe	54	37300.657	-0.01	-0.0016	0.001	78.993	mg/L
|	Fe	57	6526.116	0.00	0.0024	0.002	72.458	mg/L
⌊>	Sc-1	45	275087.412	275087.41				mg/L
	Cl	35	16334.666	-3450.22				mg/L
	Kr	83	41.334	5.33				mg/L
	Br	81	9941.610	2781.05				mg/L
	P	31	8956.716	-1166.42				mg/L
	S	34	199565.029	-2201.48				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.121			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.705			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		95.857			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		94.219			
⌈	Na	23					

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 13:34:58

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\└>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 13:34:58
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Method 6020 - Summary Report

Sample ID: QCMRL WG 357403-03

Sample Date/Time: Friday, February 25, 2011 13:46:03
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 53
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21022.284	0.01				ug/L
|	Be	9	2.667	-0.00	0.0471	0.011	23.247	ug/L
|	Al	27	2183.572	0.00	0.0390	0.039	99.953	ug/L
|>	Sc	45	294594.932	294594.93				ug/L
⌈	Ti	49	50.005	-0.00	-0.0001	0.032	28054.791	ug/L
|	V	51	4186.486	0.00	0.2108	0.014	6.776	ug/L
|	Cr	52	10924.743	0.01	0.4359	0.039	8.985	ug/L
|	Cr	53	696.761	0.00	0.2062	0.031	15.195	ug/L
|	Mn	55	3347.927	0.01	0.1769	0.006	3.523	ug/L
|	Co	59	2003.221	0.00	0.1973	0.008	3.885	ug/L
|	Ni	60	1733.834	0.00	0.8821	0.013	1.433	ug/L
|	Cu	65	980.058	0.00	0.4539	0.006	1.399	ug/L
|	Zn	66	5352.819	0.01	4.1574	0.042	1.000	ug/L
|>	Ge	72	453256.809	453256.81				ug/L
|	As	75	45.464	0.00	0.2072	0.019	9.389	ug/L
|	Se	77	72.667	0.00	0.0478	0.328	686.338	ug/L
|	Se	82	16.316	0.00	0.0906	0.052	57.089	ug/L
⌊	Rb	85	17.667	0.00				mg/L
	Y	89	267795.374	-22901.82				ug/L
	Rh	103	4.333	-4.00				ug/L
⌈	Mo	98	30.233	0.00	0.0232	0.002	10.473	ug/L
|	Ag	107	811.041	0.00	0.1881	0.011	5.665	ug/L
|	Cd	114	104.197	0.00	0.1298	0.014	11.028	ug/L
|>	In	115	353791.401	353791.40				ug/L
|	Sn	118	92.934	0.00	0.0031	0.002	73.687	ug/L
⌊	Sb	123	674.316	0.00	0.1985	0.016	7.986	ug/L
⌈	Ba	135	553.354	0.00	0.4332	0.033	7.663	ug/L
|	Ce	140	6.667	-0.00				ug/L
|>	Tb	159	483142.427	483142.43				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	300.674	0.00	0.0392	0.003	8.597	ug/L
|	Tl	205	670.090	0.00	0.0288	0.007	22.579	ug/L
|	Pb	206	1475.457	0.00	0.1752	0.009	5.124	ug/L
|	Pb	207	1351.772	0.00	0.1787	0.007	3.842	ug/L
|	Pb	208	6095.795	0.01	0.1847	0.003	1.473	ug/L
|	U	238	8675.182	0.02	0.2076	0.004	1.838	ug/L
|>	Bi	209	510013.322	510013.32				ug/L

Sample ID: QCMRL WG 357403-03
Report Date/Time: Friday, February 25, 2011 13:48:15
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⌈	Na	23	79321.254	-0.08	-0.0005	0.000	87.305	mg/L
|	Mg	24	1093.503	0.00	-0.0022	0.000	1.909	mg/L
|	K	39	554722.440	-0.00	0.0039	0.002	63.648	mg/L
|	Ca	43	256.696	0.00	0.0059	0.003	45.026	mg/L
|	Fe	54	39441.333	-0.01	-0.0026	0.003	116.340	mg/L
|	Fe	57	6813.003	0.00	0.0016	0.001	41.488	mg/L
⌊>	Sc-1	45	294594.932	294594.93				mg/L
	Cl	35	16393.430	-3391.46				mg/L
	Kr	83	40.334	4.33				mg/L
	Br	81	8707.791	1547.23				mg/L
	P	31	9445.807	-677.33				mg/L
	S	34	196515.574	-5250.93				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		97.479			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		98.693			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.497			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.502			
⌈	Na	23					

Sample ID: QCMRL WG 357403-03
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QCMRL WG 357403-03
Report Date/Time: Friday, February 25, 2011 13:48:15
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Method 6020 - Summary Report

Sample ID: ~~L1102057401~~ L1102057101

Sample Date/Time: Friday, February 25, 2011 13:52:49
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 12
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20938.707	0.01				ug/L
|	Be	9	3.333	0.00	0.0496	0.011	22.314	ug/L
|	Al	27	389422.557	1.32	71.0760	1.424	2.003	ug/L
⌊>	Sc	45	294696.541	294696.54				ug/L
⌈	Ti	49	1203.527	0.00	2.1913	0.300	13.669	ug/L
|	V	51	3740.623	0.00	0.1705	0.018	10.558	ug/L
|	Cr	52	10897.045	0.01	0.4728	0.043	9.030	ug/L
|	Cr	53	660.088	0.00	0.1827	0.112	61.392	ug/L
|	Mn	55	8556.746	0.02	0.6730	0.008	1.173	ug/L
|	Co	59	289.007	0.00	0.0054	0.001	27.841	ug/L
|	Ni	60	6545.874	0.01	3.5867	0.031	0.874	ug/L
|	Cu	65	460.349	0.00	0.1892	0.016	8.372	ug/L
|	Zn	66	2367.971	0.00	1.5910	0.028	1.768	ug/L
|>	Ge	72	441557.418	441557.42				ug/L
|	As	75	-90.473	0.00	0.0488	0.019	38.019	ug/L
|	Se	77	68.667	0.00	0.0106	0.171	1614.506	ug/L
|	Se	82	11.687	-0.00	0.0361	0.137	379.234	ug/L
⌊	Rb	85	510.685	0.00				mg/L
	Y	89	267247.436	-23449.75				ug/L
	Rh	103	6.667	-1.67				ug/L
⌈	Mo	98	227.050	0.00	0.1238	0.005	3.956	ug/L
|	Ag	107	23.667	0.00	-0.0127	0.003	19.955	ug/L
|	Cd	114	0.496	-0.00	0.0194	0.007	33.446	ug/L
|>	In	115	358132.317	358132.32				ug/L
|	Sn	118	155.601	0.00	0.0216	0.004	20.715	ug/L
⌊	Sb	123	69.246	0.00	0.0109	0.003	29.785	ug/L
⌈	Ba	135	387.011	0.00	0.2967	0.017	5.703	ug/L
|	Ce	140	703.429	0.00				ug/L
⌊>	Tb	159	495801.887	495801.89				ug/L
⌈	Ho	165	20.002	0.00				ug/L
|	Tl	203	22.667	0.00	-0.0036	0.000	13.910	ug/L
|	Tl	205	76.675	0.00	-0.0087	0.002	22.685	ug/L
|	Pb	206	619.025	0.00	0.0109	0.006	54.503	ug/L
|	Pb	207	536.353	0.00	0.0130	0.008	59.957	ug/L
|	Pb	208	2499.482	0.00	0.0206	0.003	15.992	ug/L
|	U	238	148.003	0.00	-0.0007	0.000	5.665	ug/L
⌊>	Bi	209	509370.112	509370.11				ug/L

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Na	23	262027.844	0.54	0.0356	0.001	2.554	mg/L
Mg	24	157679.985	0.53	0.0474	0.001	2.104	mg/L
K	39	815157.010	0.88	0.0369	0.003	7.376	mg/L
Ca	43	2070.422	0.01	0.1111	0.005	4.092	mg/L
Fe	54	129232.642	0.30	0.1589	0.008	4.796	mg/L
Fe	57	25745.723	0.07	0.0842	0.005	5.708	mg/L
> Sc-1	45	294696.541	294696.54				mg/L
Cl	35	62257.220	42472.33				mg/L
Kr	83	36.000	0.00				mg/L
Br	81	9609.953	2449.39				mg/L
P	31	21441.698	11318.56				mg/L
S	34	218347.161	16580.66				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		94.963			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		99.904			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		99.025			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		99.377			
Na	23					

Sample ID: ~~L1102057401~~ L1102057101
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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: ~~L1102057401~~ L1102057101
Report Date/Time: Friday, February 25, 2011 13:55:00

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: ~~L1102057101~~ L1102057102

Sample Date/Time: Friday, February 25, 2011 13:59:33
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 13
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21489.746	0.01				ug/L
|	Be	9	4.667	0.00	0.0554	0.009	15.944	ug/L
|	Al	27	6885.722	0.02	0.9685	0.133	13.684	ug/L
⌊>	Sc	45	279519.923	279519.92				ug/L
⌈	Ti	49	90.009	0.00	0.0803	0.038	47.902	ug/L
|	V	51	2251.479	-0.00	-0.0041	0.007	174.504	ug/L
|	Cr	52	8918.065	0.00	0.2007	0.022	10.984	ug/L
|	Cr	53	393.380	-0.00	-0.1354	0.015	10.905	ug/L
|	Mn	55	1461.121	0.00	0.0097	0.004	36.574	ug/L
|	Co	59	118.669	0.00	-0.0142	0.002	11.806	ug/L
|	Ni	60	125.335	0.00	0.0120	0.002	18.197	ug/L
|	Cu	65	284.340	0.00	0.0967	0.006	6.158	ug/L
|	Zn	66	1921.538	0.00	1.2073	0.137	11.366	ug/L
|>	Ge	72	436798.366	436798.37				ug/L
|	As	75	-91.760	0.00	0.0460	0.020	42.495	ug/L
|	Se	77	56.000	-0.00	-0.1873	0.220	117.339	ug/L
|	Se	82	12.006	-0.00	0.0417	0.096	230.090	ug/L
⌊	Rb	85	28.000	0.00				mg/L
	Y	89	262770.302	-27926.89				ug/L
	Rh	103	3.667	-4.67				ug/L
⌈	Mo	98	24.566	0.00	0.0207	0.006	28.494	ug/L
|	Ag	107	12.667	0.00	-0.0153	0.001	5.021	ug/L
|	Cd	114	2.441	0.00	0.0216	0.001	3.639	ug/L
|>	In	115	341320.050	341320.05				ug/L
|	Sn	118	165.335	0.00	0.0270	0.002	8.271	ug/L
⌊	Sb	123	38.662	-0.00	0.0021	0.002	111.521	ug/L
⌈	Ba	135	51.667	0.00	0.0452	0.003	7.435	ug/L
|	Ce	140	36.670	0.00				ug/L
⌊>	Tb	159	485159.295	485159.30				ug/L
⌈	Ho	165	3.334	0.00				ug/L
|	Tl	203	15.334	-0.00	-0.0046	0.001	28.722	ug/L
|	Tl	205	40.004	0.00	-0.0109	0.001	5.963	ug/L
|	Pb	206	422.680	0.00	-0.0230	0.005	21.994	ug/L
|	Pb	207	372.344	0.00	-0.0168	0.001	5.226	ug/L
|	Pb	208	1682.072	0.00	-0.0131	0.002	11.922	ug/L
|	U	238	20.667	0.00	-0.0038	0.000	0.681	ug/L
⌊>	Bi	209	486328.069	486328.07				ug/L

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Na	23	85983.335	-0.04	0.0018	0.000	16.977	mg/L
Mg	24	6876.387	0.02	-0.0003	0.000	45.891	mg/L
K	39	550711.428	0.08	0.0072	0.001	16.476	mg/L
Ca	43	523.399	0.00	0.0231	0.004	15.374	mg/L
Fe	54	81056.173	0.15	0.0802	0.008	10.520	mg/L
Fe	57	6632.864	0.00	0.0024	0.002	69.680	mg/L
> Sc-1	45	279519.923	279519.92				mg/L
Cl	35	24677.750	4892.86				mg/L
Kr	83	37.667	1.67				mg/L
Br	81	8135.311	974.75				mg/L
P	31	18846.510	8723.37				mg/L
S	34	203091.238	1324.73				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		93.940			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		95.214			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		96.899			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		94.881			
Na	23					

Sample ID: ~~L1102057101~~ L1102057102
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 28, 2011



Method 6020 - Summary Report

Sample ID: ~~L1102057102~~ L1102057401

Sample Date/Time: Friday, February 25, 2011 14:06:18
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 14
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	25315.381	0.01				ug/L
|	Be	9	32.000	0.00	0.1413	0.048	34.145	ug/L
|	Al	27	33676331.068	101.29	5475.2025	206.371	3.769	ug/L
⌊>	Sc	45	332680.207	332680.21				ug/L
⌈	Ti	49	89847.621	0.21	172.8982	4.197	2.428	ug/L
|	V	51	115537.291	0.26	13.6882	0.245	1.788	ug/L
|	Cr	52	61247.704	0.12	7.8727	0.261	3.318	ug/L
|	Cr	53	7440.292	0.02	8.5585	2.380	27.814	ug/L
|	Mn	55	1120340.422	2.57	106.2985	1.590	1.496	ug/L
|	Co	59	13751.921	0.03	1.5817	0.023	1.430	ug/L
|	Ni	60	11528.759	0.03	6.4499	0.135	2.090	ug/L
|	Cu	65	10600.056	0.02	5.6952	0.166	2.908	ug/L
|	Zn	66	108258.932	0.25	98.3997	0.413	0.419	ug/L
| >	Ge	72	435558.471	435558.47				ug/L
|	As	75	452.883	0.00	0.6952	0.042	6.090	ug/L
|	Se	77	76.667	0.00	0.1615	0.357	220.969	ug/L
|	Se	82	34.931	0.00	0.3455	0.069	20.104	ug/L
⌊	Rb	85	35309.253	0.08				mg/L
	Y	89	264245.386	-26451.80				ug/L
	Rh	103	20.000	11.67				ug/L
⌈	Mo	98	969.623	0.00	0.5247	0.017	3.318	ug/L
|	Ag	107	88.668	0.00	0.0046	0.002	47.233	ug/L
|	Cd	114	708.980	0.00	0.7931	0.023	2.852	ug/L
| >	In	115	344020.827	344020.83				ug/L
|	Sn	118	1018.319	0.00	0.2942	0.002	0.613	ug/L
⌊	Sb	123	11543.062	0.03	3.6628	0.062	1.686	ug/L
⌈	Ba	135	30437.892	0.06	23.0893	0.436	1.887	ug/L
|	Ce	140	181888.133	0.37				ug/L
⌊>	Tb	159	491886.001	491886.00				ug/L
⌈	Ho	165	1313.551	0.00				ug/L
|	Tl	203	305.008	0.00	0.0428	0.005	11.148	ug/L
|	Tl	205	750.103	0.00	0.0369	0.002	5.784	ug/L
|	Pb	206	31981.713	0.07	6.4194	0.087	1.360	ug/L
|	Pb	207	27422.823	0.06	5.8351	0.101	1.730	ug/L
|	Pb	208	127578.199	0.26	6.1004	0.040	0.651	ug/L
|	U	238	7298.402	0.02	0.1853	0.006	2.985	ug/L
⌊>	Bi	209	479681.987	479681.99				ug/L

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Na	23	83927595.033	252.03	14.6742	0.402	2.738	mg/L	
Mg	24	13673663.127	41.11	3.8374	0.059	1.536	mg/L	
K	39	37914297.088	112.13	4.1964	0.121	2.876	mg/L	
Ca	43	118290.927	0.36	6.0666	0.182	2.998	mg/L	
Fe	54	2764807.363	8.17	4.3325	0.084	1.935	mg/L	
Fe	57	1123731.334	3.36	4.3194	0.118	2.732	mg/L	
> Sc-1	45	332680.207	332680.21				mg/L	
Cl	35	295012.087	275227.20				mg/L	
Kr	83	46.334	10.33				mg/L	
Br	81	19788.242	12627.68				mg/L	
P	31	960664.432	950541.29				mg/L	
S	34	492390.337	290623.83				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		93.673			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		95.967			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		98.243			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		93.584			
Na	23					

Sample ID: ~~L1102057102~~ L1102057401
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102057901

Sample Date/Time: Friday, February 25, 2011 14:13:03
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 15
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23895.236	0.02				ug/L
|	Be	9	4.667	0.00	0.0549	0.009	16.094	ug/L
|	Al	27	27003.124	0.09	4.6634	0.213	4.566	ug/L
⌊>	Sc	45	290476.664	290476.66				ug/L
⌈	Ti	49	193.355	0.00	0.2655	0.060	22.763	ug/L
|	V	51	2023.285	-0.00	-0.0404	0.009	21.064	ug/L
|	Cr	52	9101.899	0.00	0.1796	0.019	10.780	ug/L
|	Cr	53	1523.602	0.00	1.1854	0.064	5.414	ug/L
|	Mn	55	11341.544	0.02	0.9069	0.028	3.039	ug/L
|	Co	59	240.672	0.00	-0.0009	0.001	62.632	ug/L
|	Ni	60	517.685	0.00	0.2223	0.014	6.262	ug/L
|	Cu	65	367.344	0.00	0.1345	0.006	4.095	ug/L
|	Zn	66	2337.297	0.00	1.5096	0.071	4.720	ug/L
| >	Ge	72	453122.484	453122.48				ug/L
|	As	75	298.668	0.00	0.4977	0.024	4.722	ug/L
|	Se	77	118.001	0.00	0.7762	0.281	36.182	ug/L
|	Se	82	139.710	0.00	1.6626	0.169	10.167	ug/L
⌊	Rb	85	1335.103	0.00				mg/L
	Y	89	267081.065	-23616.12				ug/L
	Rh	103	25.667	17.33				ug/L
⌈	Mo	98	110.865	0.00	0.0661	0.003	3.988	ug/L
|	Ag	107	14.333	0.00	-0.0149	0.001	8.177	ug/L
|	Cd	114	1.674	0.00	0.0207	0.006	28.994	ug/L
| >	In	115	347234.442	347234.44				ug/L
|	Sn	118	100.667	0.00	0.0060	0.000	7.490	ug/L
⌊	Sb	123	73.996	0.00	0.0130	0.002	14.078	ug/L
⌈	Ba	135	11580.491	0.02	8.8290	0.090	1.018	ug/L
|	Ce	140	223.358	0.00				ug/L
⌊>	Tb	159	489402.198	489402.20				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	120.002	0.00	0.0127	0.004	30.232	ug/L
|	Tl	205	303.368	0.00	0.0069	0.003	37.847	ug/L
|	Pb	206	381.344	0.00	-0.0297	0.006	19.144	ug/L
|	Pb	207	353.010	0.00	-0.0194	0.005	26.655	ug/L
|	Pb	208	1623.069	0.00	-0.0144	0.003	20.444	ug/L
|	U	238	159.670	0.00	-0.0001	0.000	225.602	ug/L
⌊>	Bi	209	476867.678	476867.68				ug/L

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⌈	Na	23	208534918.534	718.08	41.8019	1.993	4.769	mg/L
|	Mg	24	8973314.900	30.91	2.8848	0.121	4.210	mg/L
|	K	39	1960983.376	4.87	0.1860	0.005	2.590	mg/L
|	Ca	43	31873.921	0.11	1.8666	0.090	4.816	mg/L
|	Fe	54	62317.833	0.07	0.0402	0.003	8.010	mg/L
|	Fe	57	13363.602	0.02	0.0311	0.003	11.091	mg/L
⌊>	Sc-1	45	290476.664	290476.66				mg/L
	Cl	35	1101379.023	1081594.14				mg/L
	Kr	83	33.667	-2.33				mg/L
	Br	81	79119.893	71959.33				mg/L
	P	31	41563.805	31440.67				mg/L
	S	34	222358.402	20591.90				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		97.450			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.864			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.747			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		93.035			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 28, 2011

Data not used - sequencing error.

Method 6020 - Summary Report

Sample ID: L1102057102

Sample Date/Time: Friday, February 25, 2011 14:21:28
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 72
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22325.104	0.02				ug/L
|	Be	9	1.333	-0.00	0.0427	0.005	10.642	ug/L
|	Al	27	6368.704	0.02	0.8669	0.060	6.879	ug/L
⌊>	Sc	45	279763.957	279763.96				ug/L
⌈	Ti	49	50.005	-0.00	0.0017	0.019	1111.408	ug/L
|	V	51	2103.678	-0.00	-0.0266	0.015	56.189	ug/L
|	Cr	52	7428.166	-0.00	-0.0372	0.023	62.736	ug/L
|	Cr	53	353.375	-0.00	-0.1929	0.101	52.369	ug/L
|	Mn	55	633.360	0.00	-0.0698	0.002	2.730	ug/L
|	Co	59	80.668	-0.00	-0.0188	0.001	6.188	ug/L
|	Ni	60	64.668	0.00	-0.0228	0.002	9.496	ug/L
|	Cu	65	178.337	0.00	0.0376	0.006	14.641	ug/L
|	Zn	66	1241.089	0.00	0.5661	0.019	3.405	ug/L
|>	Ge	72	445099.819	445099.82				ug/L
|	As	75	-128.019	-0.00	0.0057	0.014	250.167	ug/L
|	Se	77	49.333	-0.00	-0.3141	0.114	36.443	ug/L
|	Se	82	1.299	-0.00	-0.1002	0.084	83.455	ug/L
⌊	Rb	85	33.667	0.00				mg/L
	Y	89	260608.421	-30088.77				ug/L
	Rh	103	3.333	-5.00				ug/L
⌈	Mo	98	16.525	0.00	0.0163	0.002	12.406	ug/L
|	Ag	107	14.667	0.00	-0.0148	0.001	6.620	ug/L
|	Cd	114	3.556	0.00	0.0228	0.001	5.240	ug/L
|>	In	115	343230.517	343230.52				ug/L
|	Sn	118	75.467	0.00	-0.0016	0.002	122.551	ug/L
⌊	Sb	123	24.371	-0.00	-0.0025	0.001	34.375	ug/L
⌈	Ba	135	23.334	0.00	0.0237	0.004	15.954	ug/L
|	Ce	140	20.002	0.00				ug/L
⌊>	Tb	159	479390.314	479390.31				ug/L
⌈	Ho	165	16.668	0.00				ug/L
|	Tl	203	16.334	-0.00	-0.0043	0.000	7.763	ug/L
|	Tl	205	40.004	0.00	-0.0108	0.001	12.065	ug/L
|	Pb	206	384.011	0.00	-0.0276	0.003	11.867	ug/L
|	Pb	207	325.675	0.00	-0.0239	0.004	15.806	ug/L
|	Pb	208	1558.731	0.00	-0.0160	0.003	20.525	ug/L
|	U	238	9.000	-0.00	-0.0041	0.000	1.244	ug/L
⌊>	Bi	209	467555.588	467555.59				ug/L

Sample ID: L1102057102
Report Date/Time: Friday, February 25, 2011 14:23:40
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Erin D. Long

Data not used - sequencing error.

	Na	23	61716.033	-0.13	-0.0033	0.001	15.677	mg/L
	Mg	24	2370.520	0.01	-0.0018	0.000	5.674	mg/L
	K	39	542464.969	0.05	0.0061	0.002	40.976	mg/L
	Ca	43	293.367	0.00	0.0090	0.003	28.612	mg/L
	Fe	54	46158.891	0.02	0.0140	0.004	28.015	mg/L
	Fe	57	5608.800	-0.00	-0.0023	0.001	61.877	mg/L
>	Sc-1	45	279763.957	279763.96				mg/L
	Cl	35	17195.439	-2589.45				mg/L
	Kr	83	42.334	6.33				mg/L
	Br	81	9858.192	2697.63				mg/L
	P	31	10125.158	2.02				mg/L
	S	34	169051.303	-32715.20				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	6					
	Be	9					
	Al	27					
>	Sc	45					
	Ti	49					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Co	59					
	Ni	60					
	Cu	65					
	Zn	66					
>	Ge	72		95.725			
	As	75					
	Se	77					
	Se	82					
	Rb	85					
	Y	89					
	Rh	103					
	Mo	98					
	Ag	107					
	Cd	114					
>	In	115		95.747			
	Sn	118					
	Sb	123					
	Ba	135					
	Ce	140					
>	Tb	159		95.747			
	Ho	165					
	Tl	203					
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
	U	238					
>	Bi	209		91.219			
	Na	23					

Sample ID: L1102057102
Report Date/Time: Friday, February 25, 2011 14:23:40
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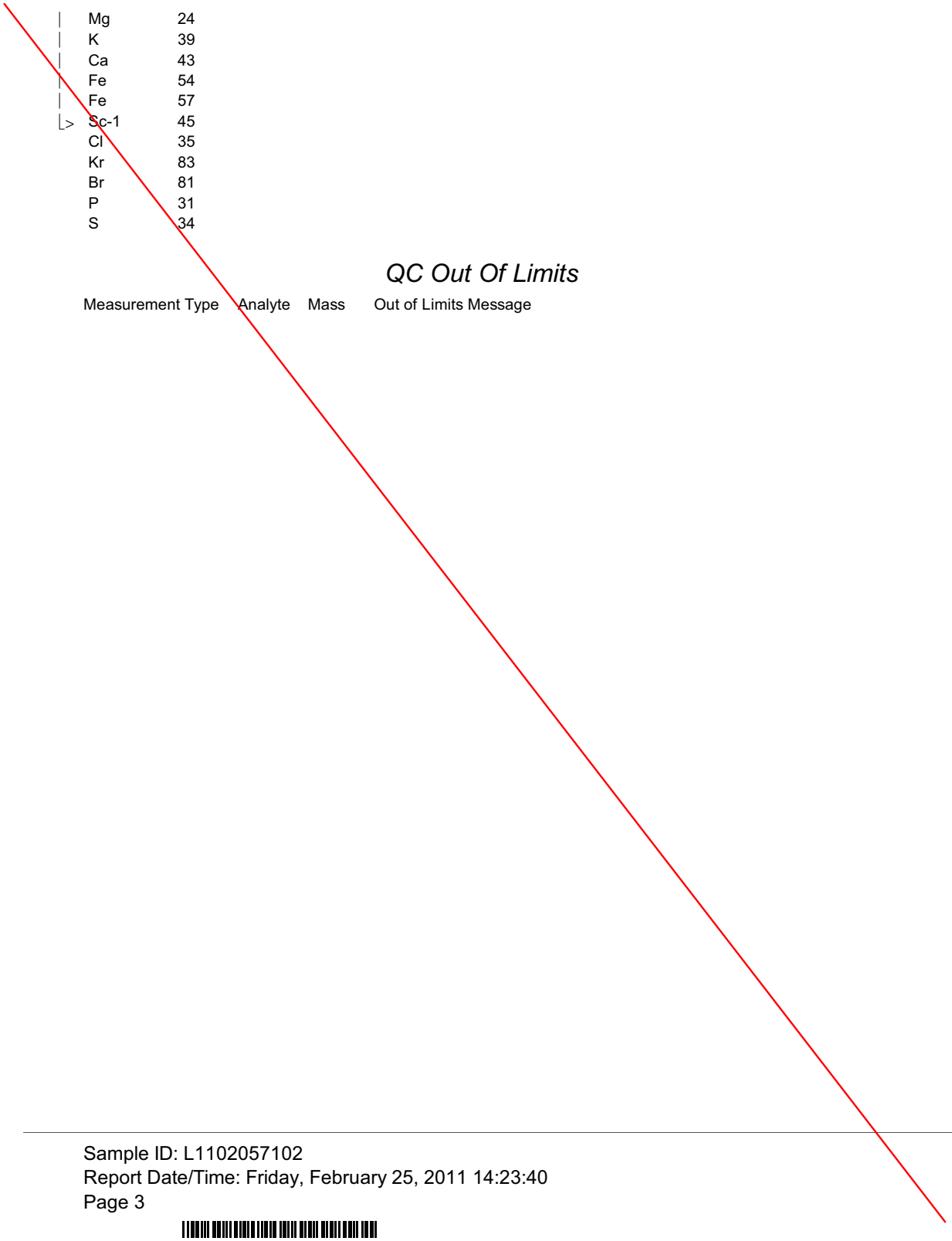
Approved: February 28, 2011

Data not used - sequencing error.

|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message



Sample ID: L1102057102
Report Date/Time: Friday, February 25, 2011 14:23:40
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Method 6020 - Summary Report

Sample ID: L1102060901PS WG357485-03

Sample Date/Time: Friday, February 25, 2011 14:28:14
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 73
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22842.768	0.03				ug/L
|	Be	9	12312.267	0.05	52.1623	3.655	7.007	ug/L
|	Al	27	254620.787	1.00	53.8068	1.996	3.710	ug/L
|>	Sc	45	254070.481	254070.48				ug/L
⌈	Ti	49	6682.901	0.02	13.9949	0.251	1.791	ug/L
|	V	51	397153.983	0.99	52.2706	2.726	5.215	ug/L
|	Cr	52	337714.677	0.83	53.0750	2.833	5.337	ug/L
|	Cr	53	39468.777	0.10	52.5966	4.788	9.103	ug/L
|	Mn	55	498865.733	1.25	51.7501	3.285	6.348	ug/L
|	Co	59	393510.887	0.99	50.3947	2.931	5.816	ug/L
|	Ni	60	84576.368	0.21	52.2132	3.361	6.437	ug/L
|	Cu	65	86454.586	0.22	51.2960	4.011	7.820	ug/L
|	Zn	66	58031.984	0.14	57.5196	3.768	6.550	ug/L
|>	Ge	72	397812.740	397812.74				ug/L
|	As	75	39295.844	0.10	51.4835	3.073	5.969	ug/L
|	Se	77	4539.700	0.01	82.1110	5.834	7.106	ug/L
|	Se	82	5672.625	0.01	82.1665	3.826	4.657	ug/L
⌊	Rb	85	3202.545	0.01				mg/L
	Y	89	226942.080	-63755.11				ug/L
	Rh	103	209.004	200.67				ug/L
⌈	Mo	98	388.025	0.00	0.2541	0.016	6.244	ug/L
|	Ag	107	139470.437	0.48	43.5198	2.836	6.516	ug/L
|	Cd	114	37131.492	0.13	48.3122	3.518	7.281	ug/L
|>	In	115	288960.231	288960.23				ug/L
|	Sn	118	249.603	0.00	0.0679	0.006	9.068	ug/L
⌊	Sb	123	138186.891	0.48	52.3585	3.364	6.424	ug/L
⌈	Ba	135	57789.911	0.14	52.2813	2.405	4.600	ug/L
|	Ce	140	173.352	0.00				ug/L
|>	Tb	159	412077.409	412077.41				ug/L
⌈	Ho	165	130.014	0.00				ug/L
|	Tl	203	256881.975	0.65	50.6291	2.694	5.322	ug/L
|	Tl	205	639053.997	1.61	51.7372	4.413	8.530	ug/L
|	Pb	206	219921.970	0.55	53.9891	3.028	5.608	ug/L
|	Pb	207	194633.395	0.49	50.6352	3.579	7.069	ug/L
|	Pb	208	903385.480	2.27	52.7732	3.130	5.931	ug/L
|	U	238	1982550.792	4.98	62.0470	3.239	5.220	ug/L
|>	Bi	209	397737.878	397737.88				ug/L

Sample ID: L1102060901PS WG357485-03
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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	215469155.909	848.06	79.2089	2.504	3.162	mg/L
|	K	39	10168024.049	38.13	1.4298	0.064	4.499	mg/L
|	Ca	43	480677.490	1.89	32.3037	1.314	4.066	mg/L
|	Fe	54	46211.748	0.04	0.0228	0.005	19.819	mg/L
|	Fe	57	28637.257	0.09	0.1169	0.010	8.721	mg/L
⌊>	Sc-1	45	254070.481	254070.48				mg/L
	Cl	35	654849.396	635064.51				mg/L
	Kr	83	46.334	10.33				mg/L
	Br	81	87392.896	80232.33				mg/L
	P	31	9802.804	-320.33				mg/L
	S	34	7753196.728	7551430.22				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		85.555			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		80.608			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		82.303			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		77.597			
⌈	Na	23					

Sample ID: L1102060901PS WG357485-03
Report Date/Time: Friday, February 25, 2011 14:30:27
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

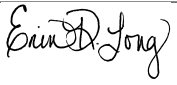
QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102060901PS WG357485-03
Report Date/Time: Friday, February 25, 2011 14:30:27
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Data not used - sequencing error.

Method 6020 - Summary Report

Sample ID: ~~L1102060901SDL WG357485-04~~ L1102057102

Sample Date/Time: Friday, February 25, 2011 14:35:01
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 74
Method File: C:\elandata\Method\6020a.mth
Sample Description: ~~25~~ 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21038.823	0.01				ug/L
|	Be	9	3.333	0.00	0.0507	0.005	9.054	ug/L
|	Al	27	18550.564	0.06	3.3151	0.208	6.267	ug/L
⌊>	Sc	45	272650.441	272650.44				ug/L
⌈	Ti	49	146.682	0.00	0.1924	0.097	50.581	ug/L
|	V	51	2880.562	0.00	0.0759	0.007	9.813	ug/L
|	Cr	52	9591.027	0.00	0.3159	0.008	2.657	ug/L
|	Cr	53	406.716	-0.00	-0.1130	0.039	34.247	ug/L
|	Mn	55	1159.079	0.00	-0.0176	0.001	3.177	ug/L
|	Co	59	105.335	0.00	-0.0156	0.001	4.762	ug/L
|	Ni	60	96.335	0.00	-0.0037	0.003	76.811	ug/L
|	Cu	65	284.674	0.00	0.0988	0.007	7.583	ug/L
|	Zn	66	11371.578	0.03	9.9447	0.271	2.729	ug/L
|>	Ge	72	431594.527	431594.53				ug/L
|	As	75	-124.180	-0.00	0.0056	0.056	1004.047	ug/L
|	Se	77	54.000	-0.00	-0.2100	0.121	57.480	ug/L
|	Se	82	8.281	-0.00	-0.0064	0.125	1964.445	ug/L
⌊	Rb	85	60.667	0.00				mg/L
	Y	89	259586.492	-31110.70				ug/L
	Rh	103	6.000	-2.33				ug/L
⌈	Mo	98	22.790	0.00	0.0201	0.000	0.198	ug/L
|	Ag	107	83.001	0.00	0.0038	0.000	11.269	ug/L
|	Cd	114	-4.733	-0.00	0.0136	0.002	16.057	ug/L
|>	In	115	332454.906	332454.91				ug/L
|	Sn	118	86.000	0.00	0.0026	0.001	30.192	ug/L
⌊	Sb	123	333.088	0.00	0.0993	0.012	12.442	ug/L
⌈	Ba	135	33.667	0.00	0.0331	0.004	12.201	ug/L
|	Ce	140	56.673	0.00				ug/L
⌊>	Tb	159	455950.239	455950.24				ug/L
⌈	Ho	165	6.667	0.00				ug/L
|	Tl	203	27.334	0.00	-0.0026	0.001	46.120	ug/L
|	Tl	205	40.004	0.00	-0.0108	0.001	6.330	ug/L
|	Pb	206	396.345	0.00	-0.0263	0.005	20.222	ug/L
|	Pb	207	352.010	0.00	-0.0192	0.001	2.657	ug/L
|	Pb	208	1599.066	0.00	-0.0151	0.002	14.804	ug/L
|	U	238	186.337	0.00	0.0006	0.001	109.260	ug/L
⌊>	Bi	209	474375.587	474375.59				ug/L

Sample ID: ~~L1102060901SDL WG357485-04~~ L1102057102
Report Date/Time: Friday, February 25, 2011 14:37:14
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Na	23	417265.956	1.18	0.0729	0.005	6.302	mg/L
Mg	24	100860.539	0.37	0.0320	0.002	6.674	mg/L
K	39	585503.007	0.26	0.0138	0.002	14.969	mg/L
Ca	43	1346.895	0.00	0.0755	0.018	23.445	mg/L
Fe	54	45920.335	0.03	0.0157	0.002	10.946	mg/L
Fe	57	9231.857	0.01	0.0154	0.003	17.744	mg/L
Sc-1	45	272650.441	272650.44				mg/L
Cl	35	17977.483	-1807.41				mg/L
Kr	83	44.334	8.33				mg/L
Br	81	9649.989	2489.43				mg/L
P	31	9495.221	-627.92				mg/L
S	34	217038.587	15272.08				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72		92.820			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
In	115		92.741			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
Tb	159		91.066			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
Bi	209		92.549			
Na	23					

Sample ID: ~~L1102060901SDL WG357485-04~~ L1102057102
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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: ~~L1102060901SDL WG357485-04~~ L1102057102
Report Date/Time: Friday, February 25, 2011 14:37:14
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Approved: February 28, 2011

Data not used - sequencing error.

Method 6020 - Summary Report

Sample ID: L1102057102

Sample Date/Time: Friday, February 25, 2011 14:41:48
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 75
Method File: C:\elandata\Method\6020a.mth
Sample Description: 2

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19101.672	0.01				ug/L
|	Be	9	4.000	0.00	0.0531	0.001	1.017	ug/L
|	Al	27	18667.473	0.06	3.2898	0.232	7.059	ug/L
⌊>	Sc	45	276249.972	276249.97				ug/L
⌈	Ti	49	156.684	0.00	0.2169	0.070	32.388	ug/L
|	V	51	2577.847	0.00	0.0440	0.009	20.463	ug/L
|	Cr	52	9188.312	0.00	0.2781	0.021	7.432	ug/L
|	Cr	53	370.044	-0.00	-0.1515	0.064	42.352	ug/L
|	Mn	55	1620.147	0.00	0.0291	0.004	13.331	ug/L
|	Co	59	95.335	0.00	-0.0166	0.001	3.615	ug/L
|	Ni	60	121.669	0.00	0.0119	0.003	27.202	ug/L
|	Cu	65	275.673	0.00	0.0963	0.008	8.603	ug/L
|	Zn	66	2682.387	0.01	1.9699	0.036	1.838	ug/L
|>	Ge	72	424777.241	424777.24				ug/L
|	As	75	-99.277	0.00	0.0337	0.023	68.662	ug/L
|	Se	77	42.667	-0.00	-0.3903	0.151	38.736	ug/L
|	Se	82	3.681	-0.00	-0.0671	0.068	101.900	ug/L
⌊	Rb	85	34.667	0.00				mg/L
	Y	89	251867.921	-38829.27				ug/L
	Rh	103	6.000	-2.33				ug/L
⌈	Mo	98	36.608	0.00	0.0279	0.003	9.968	ug/L
|	Ag	107	18.667	0.00	-0.0135	0.001	8.083	ug/L
|	Cd	114	0.972	-0.00	0.0201	0.003	16.808	ug/L
|>	In	115	329690.347	329690.35				ug/L
|	Sn	118	100.667	0.00	0.0076	0.002	22.641	ug/L
⌊	Sb	123	159.914	0.00	0.0428	0.004	8.951	ug/L
⌈	Ba	135	33.667	0.00	0.0331	0.004	10.759	ug/L
|	Ce	140	40.004	0.00				ug/L
⌊>	Tb	159	453991.743	453991.74				ug/L
⌈	Ho	165	6.667	0.00				ug/L
|	Tl	203	18.000	-0.00	-0.0040	0.001	15.236	ug/L
|	Tl	205	43.338	0.00	-0.0106	0.001	13.312	ug/L
|	Pb	206	393.012	0.00	-0.0255	0.005	20.890	ug/L
|	Pb	207	339.009	0.00	-0.0207	0.010	47.783	ug/L
|	Pb	208	1603.734	0.00	-0.0135	0.005	36.419	ug/L
|	U	238	37.334	0.00	-0.0033	0.000	2.340	ug/L
⌊>	Bi	209	466118.523	466118.52				ug/L

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Erin D. Long

Data not used - sequencing error.

	Na	23	98044.853	0.01	0.0045	0.000	6.700	mg/L
	Mg	24	5045.110	0.02	-0.0009	0.000	6.879	mg/L
	K	39	545761.132	0.09	0.0074	0.003	43.785	mg/L
	Ca	43	413.383	0.00	0.0166	0.003	19.931	mg/L
	Fe	54	56741.743	0.06	0.0353	0.001	2.551	mg/L
	Fe	57	7903.913	0.01	0.0087	0.001	11.220	mg/L
>	Sc-1	45	276249.972	276249.97				mg/L
	Cl	35	19038.106	-746.78				mg/L
	Kr	83	36.667	0.67				mg/L
	Br	81	7562.860	402.30				mg/L
	P	31	10944.667	821.53				mg/L
	S	34	192818.965	-8947.54				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	6					
	Be	9					
	Al	27					
>	Sc	45					
	Ti	49					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Co	59					
	Ni	60					
	Cu	65					
	Zn	66					
>	Ge	72		91.354			
	As	75					
	Se	77					
	Se	82					
	Rb	85					
	Y	89					
	Rh	103					
	Mo	98					
	Ag	107					
	Cd	114					
>	In	115		91.970			
	Sn	118					
	Sb	123					
	Ba	135					
	Ce	140					
>	Tb	159		90.674			
	Ho	165					
	Tl	203					
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
	U	238					
>	Bi	209		90.938			
	Na	23					

Sample ID: L1102057102
Report Date/Time: Friday, February 25, 2011 14:44:01

Approved: February 28, 2011

Data not used - sequencing error.

|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102057102
Report Date/Time: Friday, February 25, 2011 14:44:01
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 25, 2011 14:48:35
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18366.943	0.01				ug/L
|	Be	9	12494.471	0.05	50.7892	2.762	5.439	ug/L
|	Al	27	245307.843	0.92	49.6750	1.741	3.505	ug/L
⌊>	Sc	45	265085.960	265085.96				ug/L
⌈	Ti	49	52033.660	0.12	104.4143	3.778	3.618	ug/L
|	V	51	403099.881	0.96	50.5309	0.485	0.959	ug/L
|	Cr	52	339732.726	0.80	50.8157	0.507	0.998	ug/L
|	Cr	53	39023.242	0.09	49.5067	0.317	0.641	ug/L
|	Mn	55	510835.828	1.22	50.4933	1.072	2.123	ug/L
|	Co	59	412825.635	0.99	50.3784	0.793	1.573	ug/L
|	Ni	60	86103.558	0.21	50.6389	1.332	2.631	ug/L
|	Cu	65	88552.271	0.21	50.0596	0.190	0.379	ug/L
|	Zn	66	53557.591	0.13	50.5128	0.491	0.973	ug/L
|>	Ge	72	417593.140	417593.14				ug/L
|	As	75	40310.573	0.10	50.3194	0.207	0.411	ug/L
|	Se	77	2945.767	0.01	50.3514	2.164	4.298	ug/L
|	Se	82	3592.023	0.01	49.5245	0.325	0.657	ug/L
⌊	Rb	85	1449.120	0.00				mg/L
	Y	89	244546.051	-46151.14				ug/L
	Rh	103	14.000	5.67				ug/L
⌈	Mo	98	178165.394	0.56	101.9172	1.105	1.085	ug/L
|	Ag	107	175599.539	0.55	49.3361	1.071	2.171	ug/L
|	Cd	114	43834.935	0.14	51.3698	1.375	2.678	ug/L
|>	In	115	320801.965	320801.96				ug/L
|	Sn	118	150690.277	0.47	50.6882	0.414	0.817	ug/L
⌊	Sb	123	152252.666	0.47	51.9425	0.474	0.913	ug/L
⌈	Ba	135	61072.613	0.14	51.5528	0.949	1.842	ug/L
|	Ce	140	33.337	0.00				ug/L
⌊>	Tb	159	441875.317	441875.32				ug/L
⌈	Ho	165	20.002	0.00				ug/L
|	Tl	203	282236.723	0.63	49.5670	0.185	0.374	ug/L
|	Tl	205	704415.447	1.58	50.8337	0.654	1.286	ug/L
|	Pb	206	231417.922	0.52	50.6254	0.790	1.561	ug/L
|	Pb	207	214911.051	0.48	49.8387	1.675	3.360	ug/L
|	Pb	208	966004.444	2.16	50.2859	0.773	1.536	ug/L
|	U	238	1829230.792	4.10	51.0261	1.078	2.113	ug/L
⌊>	Bi	209	446563.301	446563.30				ug/L

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 14:50:48
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Na	23	23180904.594	87.10	5.0742	0.025	0.492	mg/L
Mg	24	14814211.859	55.90	5.2189	0.128	2.446	mg/L
K	39	36349981.531	135.27	5.0616	0.112	2.221	mg/L
Ca	43	78864.731	0.30	5.0716	0.153	3.013	mg/L
Fe	54	2538407.049	9.44	5.0021	0.052	1.048	mg/L
Fe	57	1040230.827	3.90	5.0250	0.186	3.706	mg/L
> Sc-1	45	265085.960	265085.96				mg/L
Cl	35	15625.534	-4159.35				mg/L
Kr	83	39.000	3.00				mg/L
Br	81	6754.948	-405.62				mg/L
P	31	7427.433	-2695.70				mg/L
S	34	183482.765	-18283.74				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	101.062				
Cr	52	101.631				
Cr	53					
Mn	55	100.987				
Co	59	100.757				
Ni	60	101.278				
Cu	65	100.119				
Zn	66	101.026				
> Ge	72		89.809			
As	75	100.639				
Se	77					
Se	82	99.049				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	98.672				
Cd	114	102.740				
> In	115		89.490			
Sn	118					
Sb	123	103.885				
Ba	135	103.106				
Ce	140					
> Tb	159		88.254			
Ho	165					
Tl	203	99.134				
Tl	205					
Pb	206					
Pb	207					
Pb	208	100.572				
U	238	102.052				
> Bi	209		87.123			
Na	23					

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 14:50:48

Approved: February 28, 2011

	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 14:50:48

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 25, 2011 14:55:51
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19953.306	0.01				ug/L
|	Be	9	4.000	0.00	0.0535	0.014	25.874	ug/L
|	Al	27	1450.106	-0.00	-0.0717	0.037	51.556	ug/L
⌊>	Sc	45	269756.701	269756.70				ug/L
⌈	Ti	49	66.674	0.00	0.0370	0.044	120.146	ug/L
|	V	51	2226.969	-0.00	-0.0037	0.007	198.450	ug/L
|	Cr	52	7357.446	-0.00	-0.0139	0.011	78.150	ug/L
|	Cr	53	306.702	-0.00	-0.2367	0.075	31.608	ug/L
|	Mn	55	360.677	-0.00	-0.0941	0.002	1.951	ug/L
|	Co	59	87.001	0.00	-0.0177	0.000	2.370	ug/L
|	Ni	60	43.334	-0.00	-0.0338	0.002	4.446	ug/L
|	Cu	65	161.670	0.00	0.0315	0.002	7.291	ug/L
|	Zn	66	516.685	0.00	-0.0672	0.007	10.768	ug/L
|>	Ge	72	431429.998	431430.00				ug/L
|	As	75	-99.266	0.00	0.0357	0.012	32.888	ug/L
|	Se	77	48.667	-0.00	-0.2991	0.093	31.100	ug/L
|	Se	82	5.012	-0.00	-0.0494	0.069	139.360	ug/L
⌊	Rb	85	17.334	0.00				mg/L
	Y	89	258336.602	-32360.59				ug/L
	Rh	103	3.333	-5.00				ug/L
⌈	Mo	98	63.791	0.00	0.0427	0.009	20.838	ug/L
|	Ag	107	17.000	0.00	-0.0140	0.001	6.119	ug/L
|	Cd	114	0.470	-0.00	0.0195	0.002	10.610	ug/L
|>	In	115	331574.948	331574.95				ug/L
|	Sn	118	177.068	0.00	0.0323	0.005	14.474	ug/L
⌊	Sb	123	72.495	0.00	0.0136	0.002	16.997	ug/L
⌈	Ba	135	8.667	-0.00	0.0125	0.001	11.931	ug/L
|	Ce	140	26.669	0.00				ug/L
⌊>	Tb	159	464483.602	464483.60				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	25.334	0.00	-0.0028	0.001	18.875	ug/L
|	Tl	205	40.004	0.00	-0.0108	0.001	6.166	ug/L
|	Pb	206	357.677	0.00	-0.0337	0.002	7.165	ug/L
|	Pb	207	344.676	0.00	-0.0203	0.006	28.829	ug/L
|	Pb	208	1491.058	0.00	-0.0199	0.003	14.728	ug/L
|	U	238	91.335	0.00	-0.0019	0.000	19.837	ug/L
⌊>	Bi	209	471073.225	471073.23				ug/L

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 14:58:02
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⌈	Na	23	44570.244	-0.18	-0.0065	0.000	2.677	mg/L
|	Mg	24	590.077	0.00	-0.0024	0.000	1.382	mg/L
|	K	39	553246.348	0.16	0.0102	0.001	6.017	mg/L
|	Ca	43	183.353	0.00	0.0027	0.001	37.126	mg/L
|	Fe	54	36523.365	-0.01	-0.0018	0.002	123.105	mg/L
|	Fe	57	6345.991	0.00	0.0021	0.003	130.532	mg/L
⌊>	Sc-1	45	269756.701	269756.70				mg/L
	Cl	35	15795.138	-3989.75				mg/L
	Kr	83	37.000	1.00				mg/L
	Br	81	6676.896	-483.67				mg/L
	P	31	8924.652	-1198.48				mg/L
	S	34	193795.878	-7970.63				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		92.785			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		92.495			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		92.770			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		91.905			
⌈	Na	23					

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 14:58:02

Approved: February 28, 2011

	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 14:58:02

Approved: February 28, 2011

Data not used - sequencing error.

Method 6020 - Summary Report

Sample ID: L1102057102

Sample Date/Time: Friday, February 25, 2011 15:02:36
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 76
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20654.652	0.01				ug/L
|	Be	9	4.000	0.00	0.0524	0.013	24.690	ug/L
|	Al	27	9271.113	0.03	1.3712	0.382	27.876	ug/L
⌊>	Sc	45	288777.200	288777.20				ug/L
⌈	Ti	49	90.009	0.00	0.0812	0.021	25.325	ug/L
|	V	51	2311.328	-0.00	0.0044	0.005	125.854	ug/L
|	Cr	52	13232.884	0.01	0.8406	0.052	6.129	ug/L
|	Cr	53	926.803	0.00	0.5242	0.117	22.415	ug/L
|	Mn	55	1709.830	0.00	0.0340	0.003	8.582	ug/L
|	Co	59	128.669	0.00	-0.0129	0.003	19.681	ug/L
|	Ni	60	262.339	0.00	0.0899	0.004	4.814	ug/L
|	Cu	65	329.009	0.00	0.1218	0.010	7.976	ug/L
|	Zn	66	2760.742	0.01	1.9838	0.074	3.752	ug/L
|>	Ge	72	434734.389	434734.39				ug/L
|	As	75	-131.003	-0.00	-0.0016	0.050	3062.808	ug/L
|	Se	77	56.667	-0.00	-0.1705	0.193	112.945	ug/L
|	Se	82	2.646	-0.00	-0.0821	0.119	144.627	ug/L
⌊	Rb	85	28.000	0.00				mg/L
	Y	89	262941.739	-27755.45				ug/L
	Rh	103	3.333	-5.00				ug/L
⌈	Mo	98	202.570	0.00	0.1137	0.007	6.261	ug/L
|	Ag	107	19.334	0.00	-0.0137	0.001	9.968	ug/L
|	Cd	114	-0.340	-0.00	0.0186	0.003	18.349	ug/L
|>	In	115	349945.115	349945.11				ug/L
|	Sn	118	226.536	0.00	0.0446	0.003	6.558	ug/L
⌊	Sb	123	86.038	0.00	0.0166	0.002	9.912	ug/L
⌈	Ba	135	45.667	0.00	0.0409	0.001	2.536	ug/L
|	Ce	140	30.003	0.00				ug/L
⌊>	Tb	159	481406.571	481406.57				ug/L
⌈	Ho	165	20.002	0.00				ug/L
|	Tl	203	21.334	0.00	-0.0037	0.000	13.225	ug/L
|	Tl	205	66.674	0.00	-0.0092	0.001	10.902	ug/L
|	Pb	206	461.015	0.00	-0.0165	0.002	13.362	ug/L
|	Pb	207	385.345	0.00	-0.0151	0.004	26.085	ug/L
|	Pb	208	1765.411	0.00	-0.0102	0.001	7.149	ug/L
|	U	238	67.001	0.00	-0.0026	0.000	7.754	ug/L
⌊>	Bi	209	493012.168	493012.17				ug/L

Sample ID: L1102057102
Report Date/Time: Friday, February 25, 2011 15:04:49
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Approved: February 28, 2011

Erin D. Long

Data not used - sequencing error.

Na	23	81489.005	-0.07	0.0003	0.001	184.835	mg/L
Mg	24	7099.897	0.02	-0.0003	0.000	16.376	mg/L
K	39	552869.909	0.03	0.0051	0.001	23.298	mg/L
Ca	43	386.713	0.00	0.0140	0.006	40.728	mg/L
Fe	54	86706.250	0.16	0.0856	0.007	7.798	mg/L
Fe	57	7099.905	0.00	0.0035	0.002	67.335	mg/L
Sc-1	45	288777.200	288777.20				mg/L
Cl	35	23553.708	3768.82				mg/L
Kr	83	40.667	4.67				mg/L
Br	81	7039.811	-120.75				mg/L
P	31	16613.791	6490.65				mg/L
S	34	196720.399	-5046.11				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72		93.496			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
In	115		97.620			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
Tb	159		96.150			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
Bi	209		96.185			
Na	23					

Sample ID: L1102057102
Report Date/Time: Friday, February 25, 2011 15:04:49
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Data not used - sequencing error.

|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102057102
Report Date/Time: Friday, February 25, 2011 15:04:49
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Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 25, 2011 15:09:23
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19251.950	0.00				ug/L
|	Be	9	13404.994	0.05	49.7685	2.631	5.287	ug/L
|	Al	27	261239.881	0.90	48.3336	2.200	4.551	ug/L
⌊>	Sc	45	289995.390	289995.39				ug/L
⌈	Ti	49	56689.282	0.13	108.0439	1.919	1.776	ug/L
|	V	51	435757.445	0.99	51.9069	0.932	1.796	ug/L
|	Cr	52	368346.313	0.82	52.3799	0.717	1.370	ug/L
|	Cr	53	42758.826	0.10	51.5575	0.232	0.450	ug/L
|	Mn	55	561488.986	1.28	52.7133	1.241	2.354	ug/L
|	Co	59	452336.384	1.03	52.4249	0.945	1.803	ug/L
|	Ni	60	94004.443	0.21	52.5245	0.943	1.796	ug/L
|	Cu	65	95229.917	0.22	51.1395	0.363	0.710	ug/L
|	Zn	66	57342.533	0.13	51.3820	0.724	1.410	ug/L
|>	Ge	72	439615.858	439615.86				ug/L
|	As	75	42529.886	0.10	50.4349	0.949	1.882	ug/L
|	Se	77	3233.856	0.01	52.5303	0.750	1.429	ug/L
|	Se	82	3833.821	0.01	50.2145	0.771	1.536	ug/L
⌊	Rb	85	1590.809	0.00				mg/L
	Y	89	263827.848	-26869.34				ug/L
	Rh	103	19.334	11.00				ug/L
⌈	Mo	98	193160.289	0.56	102.5490	0.917	0.894	ug/L
|	Ag	107	193162.742	0.56	50.3655	0.728	1.445	ug/L
|	Cd	114	47101.478	0.14	51.2237	1.627	3.176	ug/L
|>	In	115	345639.366	345639.37				ug/L
|	Sn	118	160433.421	0.46	50.0849	0.315	0.629	ug/L
⌊	Sb	123	160935.812	0.47	50.9589	1.015	1.992	ug/L
⌈	Ba	135	66119.874	0.14	51.3850	0.233	0.453	ug/L
|	Ce	140	36.670	0.00				ug/L
⌊>	Tb	159	479960.271	479960.27				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	309651.540	0.64	49.9817	2.331	4.663	ug/L
|	Tl	205	768748.299	1.58	50.9790	1.628	3.194	ug/L
|	Pb	206	251395.193	0.52	50.5255	1.626	3.218	ug/L
|	Pb	207	243081.377	0.50	51.7703	0.728	1.406	ug/L
|	Pb	208	1072355.730	2.20	51.2813	1.181	2.303	ug/L
|	U	238	1981567.610	4.08	50.7837	1.835	3.614	ug/L
⌊>	Bi	209	486281.817	486281.82				ug/L

Sample ID: QC Std 6
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Na	23	24828843.326	85.27	4.9673	0.055	1.116	mg/L
Mg	24	15709720.640	54.17	5.0573	0.017	0.343	mg/L
K	39	38714644.582	131.63	4.9255	0.055	1.109	mg/L
Ca	43	86329.643	0.30	5.0761	0.048	0.944	mg/L
Fe	54	2846733.067	9.68	5.1301	0.110	2.136	mg/L
Fe	57	1138611.509	3.90	5.0239	0.070	1.398	mg/L
> Sc-1	45	289995.390	289995.39				mg/L
Cl	35	16062.224	-3722.66				mg/L
Kr	83	34.334	-1.67				mg/L
Br	81	6444.744	-715.82				mg/L
P	31	8326.802	-1796.34				mg/L
S	34	196138.326	-5628.18				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	103.814				
Cr	52	104.760				
Cr	53					
Mn	55	105.427				
Co	59	104.850				
Ni	60	105.049				
Cu	65	102.279				
Zn	66	102.764				
> Ge	72		94.546			
As	75	100.870				
Se	77					
Se	82	100.429				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	100.731				
Cd	114	102.447				
> In	115		96.419			
Sn	118					
Sb	123	101.918				
Ba	135	102.770				
Ce	140					
> Tb	159		95.861			
Ho	165					
Tl	203	99.963				
Tl	205					
Pb	206					
Pb	207					
Pb	208	102.563				
U	238	101.567				
> Bi	209		94.872			
Na	23					

Sample ID: QC Std 6
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 15:11:36

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 25, 2011 15:16:39
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19185.136	0.01				ug/L
|	Be	9	6.000	0.00	0.0607	0.008	13.146	ug/L
|	Al	27	1633.475	0.00	-0.0455	0.095	209.510	ug/L
⌊>	Sc	45	278166.035	278166.03				ug/L
⌈	Ti	49	60.006	0.00	0.0245	0.052	211.186	ug/L
|	V	51	2204.561	-0.00	-0.0056	0.011	199.339	ug/L
|	Cr	52	7269.714	-0.00	-0.0236	0.010	40.724	ug/L
|	Cr	53	236.693	-0.00	-0.3233	0.040	12.463	ug/L
|	Mn	55	361.343	-0.00	-0.0939	0.001	0.750	ug/L
|	Co	59	92.668	0.00	-0.0170	0.001	3.198	ug/L
|	Ni	60	36.000	-0.00	-0.0380	0.002	6.242	ug/L
|	Cu	65	138.669	0.00	0.0192	0.015	78.574	ug/L
|	Zn	66	504.351	0.00	-0.0770	0.018	23.966	ug/L
|>	Ge	72	430110.800	430110.80				ug/L
|	As	75	-107.913	-0.00	0.0247	0.036	144.306	ug/L
|	Se	77	54.667	-0.00	-0.1953	0.227	116.360	ug/L
|	Se	82	0.693	-0.00	-0.1073	0.101	94.486	ug/L
⌊	Rb	85	10.000	-0.00				mg/L
	Y	89	257201.552	-33495.64				ug/L
	Rh	103	5.000	-3.33				ug/L
⌈	Mo	98	74.713	0.00	0.0479	0.004	9.059	ug/L
|	Ag	107	21.334	0.00	-0.0130	0.001	6.089	ug/L
|	Cd	114	2.016	0.00	0.0212	0.002	7.222	ug/L
|>	In	115	338668.653	338668.65				ug/L
|	Sn	118	182.135	0.00	0.0328	0.004	12.360	ug/L
⌊	Sb	123	58.453	0.00	0.0086	0.004	51.216	ug/L
⌈	Ba	135	8.667	-0.00	0.0125	0.003	21.676	ug/L
|	Ce	140	6.667	-0.00				ug/L
⌊>	Tb	159	463879.113	463879.11				ug/L
⌈	Ho	165	13.335	0.00				ug/L
|	Tl	203	26.667	0.00	-0.0026	0.001	38.236	ug/L
|	Tl	205	63.340	0.00	-0.0093	0.002	24.682	ug/L
|	Pb	206	362.010	0.00	-0.0325	0.004	10.947	ug/L
|	Pb	207	302.008	0.00	-0.0294	0.007	22.615	ug/L
|	Pb	208	1455.724	0.00	-0.0214	0.001	6.553	ug/L
|	U	238	92.668	0.00	-0.0018	0.000	14.258	ug/L
⌊>	Bi	209	469069.234	469069.23				ug/L

Sample ID: QC Std 7
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⌈	Na	23	39377.984	-0.21	-0.0079	0.000	1.437	mg/L
|	Mg	24	523.400	0.00	-0.0024	0.000	0.920	mg/L
|	K	39	552946.942	0.10	0.0078	0.001	9.059	mg/L
|	Ca	43	163.351	0.00	0.0011	0.003	273.897	mg/L
|	Fe	54	36542.557	-0.01	-0.0039	0.002	53.145	mg/L
|	Fe	57	6025.753	-0.00	-0.0003	0.001	450.769	mg/L
⌊>	Sc-1	45	278166.035	278166.03				mg/L
	Cl	35	15384.493	-4400.39				mg/L
	Kr	83	35.334	-0.67				mg/L
	Br	81	6254.622	-905.94				mg/L
	P	31	8438.921	-1684.22				mg/L
	S	34	190719.866	-11046.64				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		92.501			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		94.474			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		92.649			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		91.514			
⌈	Na	23					

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 15:18:50
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\└>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 15:18:50

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: PBW 57 WG357434-02

Sample Date/Time: Friday, February 25, 2011 15:23:24
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 18
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21723.617	0.01				ug/L
|	Be	9	8.000	0.00	0.0672	0.007	11.004	ug/L
|	Al	27	55000.992	0.18	9.9151	0.383	3.861	ug/L
⌊>	Sc	45	289274.340	289274.34				ug/L
⌈	Ti	49	73.341	0.00	0.0492	0.032	64.076	ug/L
|	V	51	2451.920	0.00	0.0213	0.002	7.216	ug/L
|	Cr	52	8797.290	0.00	0.1885	0.010	5.046	ug/L
|	Cr	53	483.394	-0.00	-0.0216	0.109	502.412	ug/L
|	Mn	55	6005.196	0.01	0.4426	0.007	1.648	ug/L
|	Co	59	265.006	0.00	0.0031	0.000	15.957	ug/L
|	Ni	60	166.003	0.00	0.0353	0.001	2.513	ug/L
|	Cu	65	317.008	0.00	0.1151	0.013	10.947	ug/L
|	Zn	66	2857.437	0.01	2.0714	0.023	1.103	ug/L
|>	Ge	72	434917.791	434917.79				ug/L
|	As	75	-48.325	0.00	0.0975	0.009	9.446	ug/L
|	Se	77	59.334	0.00	-0.1284	0.361	281.201	ug/L
|	Se	82	12.748	-0.00	0.0529	0.077	145.820	ug/L
⌊	Rb	85	109.002	0.00				mg/L
	Y	89	264618.740	-26078.45				ug/L
	Rh	103	6.000	-2.33				ug/L
⌈	Mo	98	41.493	0.00	0.0298	0.004	12.522	ug/L
|	Ag	107	60.334	0.00	-0.0027	0.001	21.837	ug/L
|	Cd	114	235.378	0.00	0.2782	0.010	3.593	ug/L
|>	In	115	341121.709	341121.71				ug/L
|	Sn	118	214.669	0.00	0.0426	0.004	9.329	ug/L
⌊	Sb	123	115.118	0.00	0.0267	0.002	7.003	ug/L
⌈	Ba	135	288.340	0.00	0.2288	0.016	6.947	ug/L
|	Ce	140	673.423	0.00				ug/L
⌊>	Tb	159	481509.643	481509.64				ug/L
⌈	Ho	165	23.336	0.00				ug/L
|	Tl	203	84.335	0.00	0.0065	0.001	11.124	ug/L
|	Tl	205	203.356	0.00	-0.0002	0.003	1871.661	ug/L
|	Pb	206	5410.185	0.01	0.9760	0.040	4.097	ug/L
|	Pb	207	4613.777	0.01	0.8836	0.033	3.698	ug/L
|	Pb	208	21551.720	0.04	0.9337	0.014	1.465	ug/L
|	U	238	513.685	0.00	0.0088	0.000	2.802	ug/L
⌊>	Bi	209	488539.092	488539.09				ug/L

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⌈	Na	23	127378.973	0.09	0.0095	0.001	5.384	mg/L
|	Mg	24	50877.571	0.18	0.0138	0.000	3.508	mg/L
|	K	39	593637.053	0.17	0.0102	0.001	6.124	mg/L
|	Ca	43	903.465	0.00	0.0444	0.005	10.372	mg/L
|	Fe	54	92408.339	0.18	0.0958	0.004	4.173	mg/L
|	Fe	57	10549.952	0.01	0.0188	0.001	5.241	mg/L
⌊>	Sc-1	45	289274.340	289274.34				mg/L
	Cl	35	167860.809	148075.92				mg/L
	Kr	83	29.000	-7.00				mg/L
	Br	81	7299.331	138.77				mg/L
	P	31	16073.585	5950.45				mg/L
	S	34	187046.258	-14720.25				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.535			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		95.158			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.170			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		95.312			
⌈	Na	23					

Sample ID: PBW 57 WG357434-02
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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 57 WG357434-02
Report Date/Time: Friday, February 25, 2011 15:25:36
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Approved: February 28, 2011



Method 6020 - Summary Report

Sample ID: LCSW 57 WG357434-03

Sample Date/Time: Friday, February 25, 2011 15:30:11
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 19
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23561.124	0.02				ug/L
|	Be	9	6705.582	0.02	24.2748	1.164	4.794	ug/L
|	Al	27	167051.682	0.56	29.9493	0.321	1.071	ug/L
⌊>	Sc	45	297873.994	297873.99				ug/L
⌈	Ti	49	163.351	0.00	0.2216	0.065	29.122	ug/L
|	V	51	225119.103	0.51	26.8645	0.619	2.303	ug/L
|	Cr	52	197778.658	0.43	27.8056	0.286	1.028	ug/L
|	Cr	53	22761.484	0.05	27.3425	0.325	1.187	ug/L
|	Mn	55	298098.537	0.68	28.1174	0.564	2.005	ug/L
|	Co	59	230506.668	0.53	26.8820	0.268	0.999	ug/L
|	Ni	60	48835.135	0.11	27.4449	0.809	2.949	ug/L
|	Cu	65	49572.407	0.11	26.7708	0.130	0.485	ug/L
|	Zn	66	29303.836	0.07	26.1727	0.589	2.249	ug/L
| >	Ge	72	436693.544	436693.54				ug/L
|	As	75	19952.539	0.05	23.9046	0.735	3.077	ug/L
|	Se	77	1411.433	0.00	22.4559	0.315	1.403	ug/L
|	Se	82	1705.112	0.00	22.4165	0.436	1.945	ug/L
⌊	Rb	85	105.002	0.00				mg/L
	Y	89	270695.714	-20001.47				ug/L
	Rh	103	11.333	3.00				ug/L
⌈	Mo	98	53.603	0.00	0.0357	0.009	25.430	ug/L
|	Ag	107	92457.733	0.26	23.8355	0.124	0.519	ug/L
|	Cd	114	23090.754	0.07	24.8516	0.965	3.881	ug/L
| >	In	115	349431.993	349431.99				ug/L
|	Sn	118	151.601	0.00	0.0215	0.003	15.737	ug/L
⌊	Sb	123	80843.145	0.23	25.3179	0.588	2.322	ug/L
⌈	Ba	135	34422.869	0.07	25.7376	1.171	4.549	ug/L
|	Ce	140	293.367	0.00				ug/L
⌊>	Tb	159	499109.732	499109.73				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	160943.350	0.32	25.2908	0.191	0.756	ug/L
|	Tl	205	402190.345	0.81	25.9703	0.397	1.529	ug/L
|	Pb	206	137405.108	0.27	26.8465	0.123	0.456	ug/L
|	Pb	207	123208.303	0.25	25.5181	0.182	0.713	ug/L
|	Pb	208	566924.493	1.13	26.3679	0.377	1.429	ug/L
|	U	238	1055912.942	2.12	26.3545	0.228	0.865	ug/L
⌊>	Bi	209	498986.161	498986.16				ug/L

Sample ID: LCSW 57 WG357434-03
Report Date/Time: Friday, February 25, 2011 15:32:23
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⌈	Na	23	122083.218	0.06	0.0077	0.000	0.759	mg/L
|	Mg	24	95708.719	0.32	0.0274	0.001	2.300	mg/L
|	K	39	649655.450	0.30	0.0151	0.003	17.424	mg/L
|	Ca	43	1363.563	0.00	0.0694	0.009	13.203	mg/L
|	Fe	54	89594.673	0.16	0.0860	0.009	10.387	mg/L
|	Fe	57	9088.381	0.01	0.0111	0.002	14.628	mg/L
⌊>	Sc-1	45	297873.994	297873.99				mg/L
	Cl	35	650039.873	630254.99				mg/L
	Kr	83	45.001	9.00				mg/L
	Br	81	7032.475	-128.09				mg/L
	P	31	18123.767	8000.63				mg/L
	S	34	194577.488	-7189.02				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.917			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.477			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.686			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.351			
⌈	Na	23					

Sample ID: LCSW 57 WG357434-03
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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 57 WG357434-03
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Method 6020 - Summary Report

Sample ID: FBLK WG357088-01

Sample Date/Time: Friday, February 25, 2011 15:36:58
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 20
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	16965.230	0.00				ug/L
|	Be	9	6.667	0.00	0.0650	0.009	14.261	ug/L
|	Al	27	15094.792	0.05	2.7733	0.277	9.993	ug/L
⌊>	Sc	45	260055.071	260055.07				ug/L
⌈	Ti	49	150.016	0.00	0.2335	0.100	42.716	ug/L
|	V	51	7871.849	0.01	0.7984	0.018	2.294	ug/L
|	Cr	52	27516.757	0.05	3.4491	0.056	1.638	ug/L
|	Cr	53	743.435	0.00	0.4150	0.015	3.526	ug/L
|	Mn	55	1633.150	0.00	0.0464	0.005	10.639	ug/L
|	Co	59	173.670	0.00	-0.0051	0.001	21.738	ug/L
|	Ni	60	1262.759	0.00	0.7462	0.015	2.070	ug/L
|	Cu	65	594.690	0.00	0.3071	0.023	7.445	ug/L
|	Zn	66	2986.476	0.01	2.5371	0.077	3.048	ug/L
| >	Ge	72	385832.433	385832.43				ug/L
|	As	75	-103.305	-0.00	0.0160	0.010	60.121	ug/L
|	Se	77	54.000	0.00	-0.1014	0.103	101.452	ug/L
|	Se	82	10.287	-0.00	0.0367	0.052	140.887	ug/L
⌊	Rb	85	116.669	0.00				mg/L
	Y	89	235613.470	-55083.72				ug/L
	Rh	103	5.333	-3.00				ug/L
⌈	Mo	98	62.160	0.00	0.0475	0.005	10.823	ug/L
|	Ag	107	32.667	0.00	-0.0084	0.002	20.583	ug/L
|	Cd	114	3.200	0.00	0.0231	0.007	29.025	ug/L
| >	In	115	286080.793	286080.79				ug/L
|	Sn	118	155.201	0.00	0.0333	0.003	7.983	ug/L
⌊	Sb	123	64.411	0.00	0.0143	0.004	24.653	ug/L
⌈	Ba	135	805.040	0.00	0.7483	0.018	2.470	ug/L
|	Ce	140	73.341	0.00				ug/L
⌊>	Tb	159	404389.086	404389.09				ug/L
⌈	Ho	165	0.000	-0.00				ug/L
|	Tl	203	25.667	0.00	-0.0018	0.001	53.168	ug/L
|	Tl	205	60.006	0.00	-0.0085	0.001	11.522	ug/L
|	Pb	206	539.687	0.00	0.0296	0.009	29.477	ug/L
|	Pb	207	452.348	0.00	0.0259	0.003	13.040	ug/L
|	Pb	208	2128.444	0.00	0.0354	0.002	5.126	ug/L
|	U	238	73.334	0.00	-0.0019	0.001	31.455	ug/L
⌊>	Bi	209	384371.039	384371.04				ug/L

Sample ID: FBLK WG357088-01
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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	24843.340	0.09	0.0063	0.000	6.084	mg/L
|	K	39	1041288.799	2.12	0.0832	0.002	2.108	mg/L
|	Ca	43	1260.207	0.00	0.0739	0.015	20.473	mg/L
|	Fe	54	72454.641	0.14	0.0741	0.006	7.743	mg/L
|	Fe	57	6265.922	0.00	0.0028	0.001	23.229	mg/L
⌊>	Sc-1	45	260055.071	260055.07				mg/L
	Cl	35	29545.584	9760.70				mg/L
	Kr	83	43.667	7.67				mg/L
	Br	81	8241.396	1080.83				mg/L
	P	31	13901.081	3777.94				mg/L
	S	34	175076.652	-26689.85				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		82.979			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		79.804			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		80.767			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		74.990			
⌈	Na	23					

Sample ID: FBLK WG357088-01
Report Date/Time: Friday, February 25, 2011 15:39:10

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: FBLK WG357088-01
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Method 6020 - Summary Report

Sample ID: L1102050217

Sample Date/Time: Friday, February 25, 2011 15:43:45
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 21
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18183.246	0.00				ug/L
|	Be	9	7.333	0.00	0.0667	0.005	8.190	ug/L
|	Al	27	518032.056	1.90	102.8469	4.347	4.227	ug/L
⌊>	Sc	45	271557.414	271557.41				ug/L
⌈	Ti	49	1616.959	0.00	3.1096	0.184	5.914	ug/L
|	V	51	14148.863	0.03	1.4837	0.013	0.873	ug/L
|	Cr	52	12930.153	0.01	0.8471	0.049	5.800	ug/L
|	Cr	53	896.797	0.00	0.5176	0.124	24.044	ug/L
|	Mn	55	787866.124	1.86	76.8681	0.573	0.745	ug/L
|	Co	59	5523.581	0.01	0.6371	0.019	2.978	ug/L
|	Ni	60	937.053	0.00	0.4857	0.010	2.160	ug/L
|	Cu	65	1217.420	0.00	0.6225	0.016	2.491	ug/L
|	Zn	66	2895.782	0.01	2.1794	0.097	4.474	ug/L
| >	Ge	72	423337.257	423337.26				ug/L
|	As	75	2476.654	0.01	3.1951	0.045	1.415	ug/L
|	Se	77	77.334	0.00	0.2106	0.117	55.521	ug/L
|	Se	82	1.594	-0.00	-0.0951	0.042	43.835	ug/L
⌊	Rb	85	1233.755	0.00				mg/L
	Y	89	258251.039	-32446.15				ug/L
	Rh	103	6.333	-2.00				ug/L
⌈	Mo	98	398.651	0.00	0.2331	0.004	1.878	ug/L
|	Ag	107	19977.286	0.06	5.5283	0.469	8.483	ug/L
|	Cd	114	14.382	0.00	0.0356	0.007	19.850	ug/L
| >	In	115	324267.068	324267.07				ug/L
|	Sn	118	124.934	0.00	0.0163	0.003	21.474	ug/L
⌊	Sb	123	83.952	0.00	0.0181	0.002	9.660	ug/L
⌈	Ba	135	13097.711	0.03	10.8298	0.452	4.175	ug/L
|	Ce	140	31539.477	0.07				ug/L
⌊>	Tb	159	451381.548	451381.55				ug/L
⌈	Ho	165	236.693	0.00				ug/L
|	Tl	203	64.668	0.00	0.0045	0.001	25.593	ug/L
|	Tl	205	170.018	0.00	-0.0011	0.001	84.844	ug/L
|	Pb	206	1962.879	0.00	0.3296	0.013	3.962	ug/L
|	Pb	207	1636.484	0.00	0.2905	0.007	2.460	ug/L
|	Pb	208	7774.943	0.01	0.3188	0.006	1.862	ug/L
|	U	238	17116.825	0.04	0.4812	0.012	2.590	ug/L
⌊>	Bi	209	438968.947	438968.95				ug/L

Sample ID: L1102050217
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⌈	Na	23	293878898.864	1082.50	63.0139	1.872	2.970	mg/L
|	Mg	24	235958.549	0.87	0.0786	0.003	3.333	mg/L
|	K	39	1073291.693	2.07	0.0814	0.004	5.084	mg/L
|	Ca	43	6082.457	0.02	0.3740	0.017	4.567	mg/L
|	Fe	54	198582.142	0.59	0.3141	0.005	1.680	mg/L
|	Fe	57	67970.451	0.23	0.2941	0.010	3.386	mg/L
⌊>	Sc-1	45	271557.414	271557.41				mg/L
	Cl	35	449417.955	429633.07				mg/L
	Kr	83	46.667	10.67				mg/L
	Br	81	6642.205	-518.36				mg/L
	P	31	13982.464	3859.33				mg/L
	S	34	171390.164	-30376.34				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		91.045			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		90.457			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		90.153			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		85.641			
⌈	Na	23					

Sample ID: L1102050217
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102050217
Report Date/Time: Friday, February 25, 2011 15:45:58
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Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102050611 WG357434-01

Sample Date/Time: Friday, February 25, 2011 15:50:33
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 22
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18584.037	0.00				ug/L
|	Be	9	11.333	0.00	0.0806	0.024	29.357	ug/L
|	Al	27	452996.279	1.59	85.7963	7.373	8.594	ug/L
|>	Sc	45	284871.687	284871.69				ug/L
⌈	Ti	49	2977.412	0.01	5.7614	0.697	12.098	ug/L
|	V	51	21016.909	0.04	2.3183	0.042	1.809	ug/L
|	Cr	52	13951.533	0.01	0.9853	0.033	3.351	ug/L
|	Cr	53	663.422	0.00	0.2159	0.165	76.541	ug/L
|	Mn	55	634540.882	1.49	61.4248	1.384	2.254	ug/L
|	Co	59	6914.794	0.02	0.7986	0.028	3.535	ug/L
|	Ni	60	1602.478	0.00	0.8654	0.033	3.831	ug/L
|	Cu	65	1427.450	0.00	0.7339	0.026	3.484	ug/L
|	Zn	66	11708.968	0.03	10.3847	0.140	1.350	ug/L
|>	Ge	72	426517.348	426517.35				ug/L
|	As	75	811.151	0.00	1.1436	0.064	5.633	ug/L
|	Se	77	58.000	-0.00	-0.1303	0.216	165.956	ug/L
|	Se	82	14.397	-0.00	0.0784	0.126	160.727	ug/L
⌊	Rb	85	484.350	0.00				mg/L
	Y	89	280925.713	-9771.48				ug/L
	Rh	103	6.000	-2.33				ug/L
⌈	Mo	98	271.942	0.00	0.1608	0.010	6.363	ug/L
|	Ag	107	28.667	0.00	-0.0107	0.001	6.276	ug/L
|	Cd	114	46.199	0.00	0.0723	0.003	4.685	ug/L
|>	In	115	325327.475	325327.47				ug/L
|	Sn	118	991.249	0.00	0.3036	0.005	1.599	ug/L
⌊	Sb	123	254.665	0.00	0.0754	0.004	4.903	ug/L
⌈	Ba	135	25838.943	0.06	20.9595	0.480	2.289	ug/L
|	Ce	140	104483.411	0.23				ug/L
|>	Tb	159	459898.522	459898.52				ug/L
⌈	Ho	165	1046.826	0.00				ug/L
|	Tl	203	19.334	0.00	-0.0037	0.001	24.106	ug/L
|	Tl	205	40.004	0.00	-0.0107	0.001	13.393	ug/L
|	Pb	206	6262.690	0.01	1.2652	0.036	2.854	ug/L
|	Pb	207	5212.744	0.01	1.1150	0.028	2.515	ug/L
|	Pb	208	24633.555	0.05	1.1913	0.028	2.384	ug/L
|	U	238	73816.609	0.17	2.0552	0.055	2.664	ug/L
|>	Bi	209	446450.595	446450.59				ug/L

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⌈	Na	23	307889385.275	1081.57	62.9600	3.309	5.256	mg/L
|	Mg	24	455246.023	1.60	0.1468	0.006	4.216	mg/L
|	K	39	1310021.908	2.71	0.1055	0.003	2.712	mg/L
|	Ca	43	22156.736	0.08	1.3205	0.039	2.972	mg/L
|	Fe	54	161739.983	0.43	0.2275	0.007	2.873	mg/L
|	Fe	57	54178.470	0.17	0.2167	0.006	2.715	mg/L
⌊>	Sc-1	45	284871.687	284871.69				mg/L
	Cl	35	81429.548	61644.66				mg/L
	Kr	83	31.000	-5.00				mg/L
	Br	81	7181.914	21.35				mg/L
	P	31	23148.767	13025.63				mg/L
	S	34	187716.301	-14050.20				mg/L

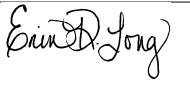
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		91.729			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		90.752			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		91.854			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		87.101			
⌈	Na	23					

Sample ID: L1102050611 WG357434-01
Report Date/Time: Friday, February 25, 2011 15:52:45
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102050611 WG357434-01
Report Date/Time: Friday, February 25, 2011 15:52:45
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Method 6020 - Summary Report

Sample ID: L1102050611S WG357434-04

Sample Date/Time: Friday, February 25, 2011 15:57:19
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 23
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18283.507	0.00				ug/L
|	Be	9	1314.753	0.00	5.1610	0.437	8.476	ug/L
|	Al	27	467163.348	1.68	90.9985	4.299	4.724	ug/L
⌊>	Sc	45	276870.881	276870.88				ug/L
⌈	Ti	49	2827.349	0.01	5.4781	0.109	1.989	ug/L
|	V	51	67307.164	0.15	8.0489	0.231	2.868	ug/L
|	Cr	52	52120.678	0.10	6.7138	0.232	3.458	ug/L
|	Cr	53	5208.545	0.01	5.9454	0.273	4.591	ug/L
|	Mn	55	695070.898	1.63	67.4301	1.120	1.661	ug/L
|	Co	59	53270.833	0.12	6.3509	0.201	3.170	ug/L
|	Ni	60	11283.811	0.03	6.4610	0.250	3.868	ug/L
|	Cu	65	11426.639	0.03	6.2880	0.177	2.814	ug/L
|	Zn	66	17430.353	0.04	15.7572	0.330	2.091	ug/L
|>	Ge	72	425743.791	425743.79				ug/L
|	As	75	5421.303	0.01	6.7760	0.315	4.655	ug/L
|	Se	77	398.675	0.00	5.7042	0.447	7.841	ug/L
|	Se	82	429.018	0.00	5.6977	0.313	5.488	ug/L
⌊	Rb	85	497.017	0.00				mg/L
	Y	89	279174.769	-11522.42				ug/L
	Rh	103	10.667	2.33				ug/L
⌈	Mo	98	294.350	0.00	0.1738	0.014	7.946	ug/L
|	Ag	107	18404.105	0.06	5.0911	0.090	1.769	ug/L
|	Cd	114	4926.971	0.02	5.7195	0.088	1.539	ug/L
|>	In	115	324744.771	324744.77				ug/L
|	Sn	118	233.869	0.00	0.0524	0.002	4.359	ug/L
⌊	Sb	123	17266.857	0.05	5.8106	0.107	1.840	ug/L
⌈	Ba	135	32770.606	0.07	26.9107	0.156	0.581	ug/L
|	Ce	140	102661.298	0.23				ug/L
⌊>	Tb	159	454251.762	454251.76				ug/L
⌈	Ho	165	906.799	0.00				ug/L
|	Tl	203	30922.381	0.07	5.5186	0.152	2.757	ug/L
|	Tl	205	76364.831	0.17	5.5951	0.187	3.335	ug/L
|	Pb	206	32470.630	0.07	7.1340	0.250	3.507	ug/L
|	Pb	207	28854.195	0.07	6.7230	0.216	3.207	ug/L
|	Pb	208	133227.786	0.30	6.9744	0.173	2.482	ug/L
|	U	238	270167.466	0.62	7.6620	0.218	2.839	ug/L
⌊>	Bi	209	439102.343	439102.34				ug/L

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⌈	Na	23	309260662.760	1119.10	65.1442	4.029	6.185	mg/L
|	Mg	24	468896.456	1.70	0.1558	0.007	4.580	mg/L
|	K	39	1311734.356	2.86	0.1108	0.006	5.641	mg/L
|	Ca	43	21481.866	0.08	1.3186	0.071	5.370	mg/L
|	Fe	54	165281.126	0.46	0.2433	0.015	6.033	mg/L
|	Fe	57	53032.268	0.17	0.2186	0.007	3.127	mg/L
⌊>	Sc-1	45	276870.881	276870.88				mg/L
	Cl	35	270271.092	250486.20				mg/L
	Kr	83	38.000	2.00				mg/L
	Br	81	6721.592	-438.97				mg/L
	P	31	23837.057	13713.92				mg/L
	S	34	185893.144	-15873.36				mg/L

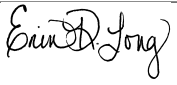
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		91.562			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		90.590			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		90.726			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		85.667			
⌈	Na	23					

Sample ID: L1102050611S WG357434-04
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102050611S WG357434-04
Report Date/Time: Friday, February 25, 2011 15:59:30
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Method 6020 - Summary Report

Sample ID: L1102050611SD WG357434-05

Sample Date/Time: Friday, February 25, 2011 16:04:03
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 24
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18968.031	0.00				ug/L
|	Be	9	1452.772	0.01	5.4844	0.312	5.697	ug/L
|	Al	27	537305.744	1.87	100.8955	4.843	4.800	ug/L
⌊>	Sc	45	286907.983	286907.98				ug/L
⌈	Ti	49	3184.161	0.01	6.0383	0.538	8.913	ug/L
|	V	51	72304.219	0.16	8.4638	0.341	4.025	ug/L
|	Cr	52	54941.417	0.11	6.9493	0.142	2.037	ug/L
|	Cr	53	5502.064	0.01	6.1587	0.164	2.661	ug/L
|	Mn	55	782657.057	1.80	74.2236	1.615	2.176	ug/L
|	Co	59	57212.464	0.13	6.6691	0.127	1.910	ug/L
|	Ni	60	12028.019	0.03	6.7323	0.176	2.615	ug/L
|	Cu	65	12097.775	0.03	6.5081	0.281	4.318	ug/L
|	Zn	66	19140.839	0.04	16.9521	0.624	3.679	ug/L
|>	Ge	72	435525.800	435525.80				ug/L
|	As	75	5736.585	0.01	7.0008	0.478	6.827	ug/L
|	Se	77	375.340	0.00	5.1636	0.250	4.834	ug/L
|	Se	82	424.314	0.00	5.5067	0.742	13.475	ug/L
⌊	Rb	85	533.686	0.00				mg/L
	Y	89	283277.727	-7419.46				ug/L
	Rh	103	10.333	2.00				ug/L
⌈	Mo	98	298.313	0.00	0.1741	0.006	3.344	ug/L
|	Ag	107	18979.862	0.06	5.1891	0.177	3.415	ug/L
|	Cd	114	5153.929	0.02	5.9125	0.333	5.629	ug/L
|>	In	115	328586.102	328586.10				ug/L
|	Sn	118	300.005	0.00	0.0733	0.009	11.759	ug/L
⌊	Sb	123	17779.393	0.05	5.9126	0.196	3.309	ug/L
⌈	Ba	135	35562.508	0.08	28.6682	0.427	1.491	ug/L
|	Ce	140	115175.613	0.25				ug/L
⌊>	Tb	159	462680.202	462680.20				ug/L
⌈	Ho	165	1110.173	0.00				ug/L
|	Tl	203	33058.243	0.07	5.8542	0.058	0.996	ug/L
|	Tl	205	80753.098	0.18	5.8705	0.123	2.092	ug/L
|	Pb	206	35520.072	0.08	7.7501	0.205	2.644	ug/L
|	Pb	207	30257.697	0.07	6.9988	0.069	0.984	ug/L
|	Pb	208	141994.847	0.32	7.3802	0.153	2.070	ug/L
|	U	238	292584.676	0.66	8.2306	0.341	4.141	ug/L
⌊>	Bi	209	442336.912	442336.91				ug/L

Sample ID: L1102050611SD WG357434-05
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⌈	Na	23	350496720.910	1221.57	71.1087	3.043	4.279	mg/L
|	Mg	24	517205.562	1.80	0.1658	0.006	3.873	mg/L
|	K	39	1349495.514	2.82	0.1094	0.006	5.199	mg/L
|	Ca	43	23977.863	0.08	1.4192	0.111	7.843	mg/L
|	Fe	54	174399.329	0.47	0.2486	0.013	5.376	mg/L
|	Fe	57	60508.585	0.19	0.2432	0.003	1.028	mg/L
⌊>	Sc-1	45	286907.983	286907.98				mg/L
	Cl	35	25172.999	5388.11				mg/L
	Kr	83	42.334	6.33				mg/L
	Br	81	6670.224	-490.34				mg/L
	P	31	24388.413	14265.28				mg/L
	S	34	174291.593	-27474.91				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.666			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		91.662			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		92.410			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		86.299			
⌈	Na	23					

Sample ID: L1102050611SD WG357434-05
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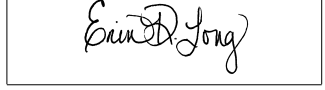
Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102050611SD WG357434-05
Report Date/Time: Friday, February 25, 2011 16:06:15
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Method 6020 - Summary Report

Sample ID: L1102050610

Sample Date/Time: Friday, February 25, 2011 16:10:48
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 25
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17815.874	-0.00				ug/L
|	Be	9	10.667	0.00	0.0771	0.011	14.479	ug/L
|	Al	27	1332088.667	4.61	249.3894	17.032	6.829	ug/L
⌊>	Sc	45	289219.267	289219.27				ug/L
⌈	Ti	49	7350.102	0.02	14.0880	0.448	3.180	ug/L
|	V	51	25610.809	0.05	2.8250	0.050	1.761	ug/L
|	Cr	52	16043.699	0.02	1.2517	0.040	3.159	ug/L
|	Cr	53	1263.540	0.00	0.9403	0.029	3.102	ug/L
|	Mn	55	696684.569	1.60	66.1455	0.764	1.155	ug/L
|	Co	59	7863.174	0.02	0.8934	0.027	3.055	ug/L
|	Ni	60	1888.197	0.00	1.0088	0.041	4.045	ug/L
|	Cu	65	1806.848	0.00	0.9250	0.010	1.048	ug/L
|	Zn	66	10747.213	0.02	9.2958	0.140	1.502	ug/L
|>	Ge	72	434869.198	434869.20				ug/L
|	As	75	936.791	0.00	1.2749	0.027	2.152	ug/L
|	Se	77	84.667	0.00	0.2987	0.078	26.245	ug/L
|	Se	82	-0.020	-0.00	-0.1146	0.199	174.019	ug/L
⌊	Rb	85	2340.298	0.01				mg/L
	Y	89	285652.835	-5044.35				ug/L
	Rh	103	9.667	1.33				ug/L
⌈	Mo	98	309.647	0.00	0.1804	0.003	1.852	ug/L
|	Ag	107	44.334	0.00	-0.0066	0.003	45.008	ug/L
|	Cd	114	43.021	0.00	0.0680	0.015	22.448	ug/L
|>	In	115	328744.773	328744.77				ug/L
|	Sn	118	224.536	0.00	0.0484	0.001	2.802	ug/L
⌊	Sb	123	302.502	0.00	0.0906	0.004	4.913	ug/L
⌈	Ba	135	28310.997	0.06	22.7639	0.232	1.020	ug/L
|	Ce	140	112628.780	0.24				ug/L
⌊>	Tb	159	464067.285	464067.28				ug/L
⌈	Ho	165	950.140	0.00				ug/L
|	Tl	203	100.335	0.00	0.0106	0.003	29.354	ug/L
|	Tl	205	250.028	0.00	0.0044	0.002	34.659	ug/L
|	Pb	206	7100.930	0.02	1.4383	0.017	1.202	ug/L
|	Pb	207	6027.880	0.01	1.2952	0.022	1.688	ug/L
|	Pb	208	28319.174	0.06	1.3740	0.027	1.974	ug/L
|	U	238	77954.699	0.17	2.1562	0.038	1.760	ug/L
⌊>	Bi	209	449723.217	449723.22				ug/L

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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	641094.456	2.22	0.2053	0.018	8.715	mg/L
|	K	39	1726127.712	4.09	0.1570	0.009	5.936	mg/L
|	Ca	43	22828.328	0.08	1.3418	0.063	4.666	mg/L
|	Fe	54	260786.039	0.76	0.4054	0.023	5.558	mg/L
|	Fe	57	93986.228	0.30	0.3906	0.017	4.277	mg/L
⌊>	Sc-1	45	289219.267	289219.27				mg/L
	Cl	35	675787.788	656002.90				mg/L
	Kr	83	40.667	4.67				mg/L
	Br	81	7441.441	280.88				mg/L
	P	31	24397.778	14274.64				mg/L
	S	34	184630.184	-17136.32				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.525			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		91.706			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		92.687			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		87.740			
⌈	Na	23					

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Report Date/Time: Friday, February 25, 2011 16:13:00
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\└>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102050610PS WG357487-01

Sample Date/Time: Friday, February 25, 2011 16:17:40
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 26
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20220.760	0.01				ug/L
|	Be	9	11677.500	0.04	43.2677	3.237	7.481	ug/L
|	Al	27	1532250.268	5.26	284.3901	13.288	4.672	ug/L
⌊>	Sc	45	290768.762	290768.76				ug/L
⌈	Ti	49	7113.249	0.02	13.4398	0.993	7.390	ug/L
|	V	51	409259.016	0.92	48.5906	0.598	1.230	ug/L
|	Cr	52	336345.725	0.74	47.5950	1.041	2.188	ug/L
|	Cr	53	39719.356	0.09	47.7121	0.359	0.752	ug/L
|	Mn	55	1179432.936	2.67	110.5684	3.540	3.201	ug/L
|	Co	59	405588.768	0.92	46.8772	1.392	2.969	ug/L
|	Ni	60	84679.626	0.19	47.1754	1.187	2.516	ug/L
|	Cu	65	85887.158	0.19	45.9896	1.037	2.256	ug/L
|	Zn	66	58755.745	0.13	52.5154	1.460	2.780	ug/L
| >	Ge	72	440861.427	440861.43				ug/L
|	As	75	40372.836	0.09	47.7470	0.515	1.079	ug/L
|	Se	77	2834.402	0.01	45.7776	0.601	1.312	ug/L
|	Se	82	3381.910	0.01	44.1528	0.304	0.689	ug/L
⌊	Rb	85	2299.954	0.01				mg/L
	Y	89	281601.451	-9095.74				ug/L
	Rh	103	20.000	11.67				ug/L
⌈	Mo	98	299.094	0.00	0.1706	0.009	5.563	ug/L
|	Ag	107	161671.554	0.48	43.3179	0.977	2.254	ug/L
|	Cd	114	41266.470	0.12	46.1201	1.561	3.385	ug/L
| >	In	115	336314.038	336314.04				ug/L
|	Sn	118	407.475	0.00	0.1055	0.005	4.971	ug/L
⌊	Sb	123	143969.537	0.43	46.8504	0.670	1.431	ug/L
⌈	Ba	135	86364.736	0.18	68.2732	2.426	3.554	ug/L
|	Ce	140	112763.686	0.24				ug/L
⌊>	Tb	159	472047.215	472047.22				ug/L
⌈	Ho	165	983.480	0.00				ug/L
|	Tl	203	261394.445	0.57	44.8831	1.862	4.148	ug/L
|	Tl	205	652639.492	1.43	46.0619	2.621	5.690	ug/L
|	Pb	206	232569.187	0.51	49.7420	1.665	3.346	ug/L
|	Pb	207	203951.735	0.45	46.2318	1.087	2.352	ug/L
|	Pb	208	945277.556	2.07	48.1101	1.198	2.490	ug/L
|	U	238	1820584.909	3.99	49.6488	1.850	3.726	ug/L
⌊>	Bi	209	456758.558	456758.56				ug/L

Sample ID: L1102050610PS WG357487-01
Report Date/Time: Friday, February 25, 2011 16:19:52
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⌈	Na	23	330765060.341	1137.98	66.2433	3.720	5.615	mg/L
|	Mg	24	602950.388	2.07	0.1912	0.008	4.174	mg/L
|	K	39	1710120.037	4.00	0.1535	0.008	4.890	mg/L
|	Ca	43	22387.274	0.08	1.3072	0.060	4.573	mg/L
|	Fe	54	260966.066	0.76	0.4024	0.020	4.884	mg/L
|	Fe	57	93982.694	0.30	0.3883	0.027	6.975	mg/L
⌊>	Sc-1	45	290768.762	290768.76				mg/L
	Cl	35	674403.403	654618.52				mg/L
	Kr	83	43.334	7.33				mg/L
	Br	81	7492.807	332.24				mg/L
	P	31	25750.468	15627.33				mg/L
	S	34	186856.055	-14910.45				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		94.813			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		93.817			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		94.281			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		89.112			
⌈	Na	23					

Sample ID: L1102050610PS WG357487-01
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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1102050610PS WG357487-01
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Method 6020 - Summary Report

Sample ID: L1102050610SDL WG357487-02

Sample Date/Time: Friday, February 25, 2011 16:24:26
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 27
Method File: C:\elandata\Method\6020a.mth
Sample Description: 25

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19753.066	0.01				ug/L
|	Be	9	5.333	0.00	0.0570	0.010	18.257	ug/L
|	Al	27	246605.096	0.85	45.9306	3.684	8.022	ug/L
⌊>	Sc	45	288943.894	288943.89				ug/L
⌈	Ti	49	1643.635	0.00	2.9098	0.502	17.255	ug/L
|	V	51	6811.964	0.01	0.5052	0.018	3.650	ug/L
|	Cr	52	9085.885	0.00	0.1602	0.038	23.431	ug/L
|	Cr	53	533.401	-0.00	0.0043	0.088	2018.374	ug/L
|	Mn	55	136586.938	0.30	12.1748	0.214	1.760	ug/L
|	Co	59	1654.820	0.00	0.1557	0.003	1.887	ug/L
|	Ni	60	403.679	0.00	0.1576	0.009	5.747	ug/L
|	Cu	65	500.018	0.00	0.2002	0.005	2.577	ug/L
|	Zn	66	3413.617	0.01	2.4145	0.022	0.927	ug/L
|>	Ge	72	459320.897	459320.90				ug/L
|	As	75	90.609	0.00	0.2576	0.044	17.093	ug/L
|	Se	77	54.667	-0.00	-0.2543	0.093	36.633	ug/L
|	Se	82	-4.026	-0.00	-0.1674	0.063	37.764	ug/L
⌊	Rb	85	481.350	0.00				mg/L
	Y	89	281633.241	-9063.95				ug/L
	Rh	103	7.000	-1.33				ug/L
⌈	Mo	98	74.270	0.00	0.0460	0.005	10.155	ug/L
|	Ag	107	25.667	0.00	-0.0121	0.001	10.862	ug/L
|	Cd	114	3.878	0.00	0.0231	0.001	5.355	ug/L
|>	In	115	354545.440	354545.44				ug/L
|	Sn	118	162.001	0.00	0.0240	0.004	14.982	ug/L
⌊	Sb	123	320.628	0.00	0.0888	0.010	11.405	ug/L
⌈	Ba	135	5570.608	0.01	4.2648	0.176	4.127	ug/L
|	Ce	140	22965.307	0.05				ug/L
⌊>	Tb	159	487947.420	487947.42				ug/L
⌈	Ho	165	226.692	0.00				ug/L
|	Tl	203	37.667	0.00	-0.0010	0.001	129.741	ug/L
|	Tl	205	76.675	0.00	-0.0085	0.000	4.211	ug/L
|	Pb	206	1779.176	0.00	0.2489	0.001	0.460	ug/L
|	Pb	207	1549.469	0.00	0.2332	0.008	3.315	ug/L
|	Pb	208	7185.094	0.01	0.2493	0.003	1.353	ug/L
|	U	238	15179.665	0.03	0.3832	0.007	1.917	ug/L
⌊>	Bi	209	487930.338	487930.34				ug/L

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⌈	Na	23	67171546.464	232.75	13.5522	0.812	5.994	mg/L
|	Mg	24	127872.888	0.44	0.0389	0.004	9.149	mg/L
|	K	39	770308.220	0.79	0.0335	0.007	22.386	mg/L
|	Ca	43	4514.806	0.02	0.2583	0.014	5.603	mg/L
|	Fe	54	82378.488	0.14	0.0779	0.008	10.604	mg/L
|	Fe	57	23503.269	0.06	0.0768	0.007	9.559	mg/L
⌊>	Sc-1	45	288943.894	288943.89				mg/L
	Cl	35	146941.199	127156.31				mg/L
	Kr	83	41.334	5.33				mg/L
	Br	81	6600.846	-559.72				mg/L
	P	31	12373.653	2250.52				mg/L
	S	34	181109.524	-20656.98				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		98.783			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		98.903			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.456			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		95.194			
⌈	Na	23					

Sample ID: L1102050610SDL WG357487-02
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102050610SDL WG357487-02
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 25, 2011 16:31:12
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

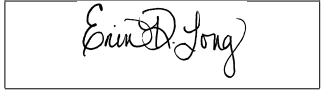
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21456.393	0.01				ug/L
|	Be	9	14105.282	0.05	49.3635	1.206	2.443	ug/L
|	Al	27	284920.454	0.92	49.7210	1.597	3.212	ug/L
⌊>	Sc	45	307558.203	307558.20				ug/L
⌈	Ti	49	58553.518	0.12	104.3902	4.431	4.244	ug/L
|	V	51	451422.584	0.95	50.2680	0.465	0.925	ug/L
|	Cr	52	382271.994	0.79	50.7929	0.327	0.643	ug/L
|	Cr	53	43769.988	0.09	49.3317	1.693	3.431	ug/L
|	Mn	55	582896.548	1.24	51.1637	0.795	1.554	ug/L
|	Co	59	465926.570	0.99	50.4854	1.119	2.217	ug/L
|	Ni	60	98253.392	0.21	51.3248	0.134	0.262	ug/L
|	Cu	65	100535.520	0.21	50.4824	0.562	1.112	ug/L
|	Zn	66	59845.807	0.13	50.1342	0.927	1.849	ug/L
| >	Ge	72	470165.653	470165.65				ug/L
|	As	75	44839.155	0.10	49.7171	0.323	0.650	ug/L
|	Se	77	3251.196	0.01	49.3039	1.719	3.487	ug/L
|	Se	82	4017.141	0.01	49.1919	1.260	2.562	ug/L
⌊	Rb	85	1623.481	0.00				mg/L
	Y	89	281165.947	-9531.24				ug/L
	Rh	103	23.667	15.33				ug/L
⌈	Mo	98	201521.997	0.55	101.4699	0.946	0.932	ug/L
|	Ag	107	200541.311	0.55	49.5912	0.708	1.428	ug/L
|	Cd	114	48382.344	0.13	49.9045	1.817	3.641	ug/L
| >	In	115	364445.320	364445.32				ug/L
|	Sn	118	168788.169	0.46	49.9763	0.478	0.957	ug/L
⌊	Sb	123	167469.273	0.46	50.2922	0.737	1.466	ug/L
⌈	Ba	135	69303.745	0.14	51.2432	0.717	1.398	ug/L
|	Ce	140	40.004	0.00				ug/L
⌊>	Tb	159	504427.443	504427.44				ug/L
⌈	Ho	165	6.667	0.00				ug/L
|	Tl	203	325804.277	0.64	50.3454	1.104	2.192	ug/L
|	Tl	205	812663.357	1.60	51.6072	1.009	1.954	ug/L
|	Pb	206	267135.593	0.53	51.4099	0.646	1.258	ug/L
|	Pb	207	250767.749	0.49	51.1505	0.885	1.730	ug/L
|	Pb	208	1114403.867	2.19	51.0337	0.672	1.317	ug/L
|	U	238	2053642.858	4.05	50.3902	0.594	1.180	ug/L
⌊>	Bi	209	507572.357	507572.36				ug/L

Sample ID: QC Std 6
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Na	23	25767085.816	83.44	4.8611	0.109	2.244	mg/L	
Mg	24	16320905.737	53.07	4.9542	0.037	0.754	mg/L	
K	39	41437904.886	132.84	4.9707	0.069	1.384	mg/L	
Ca	43	87940.524	0.29	4.8750	0.120	2.455	mg/L	
Fe	54	2915089.443	9.34	4.9496	0.133	2.680	mg/L	
Fe	57	1173635.840	3.79	4.8829	0.147	3.020	mg/L	
> Sc-1	45	307558.203	307558.20				mg/L	
Cl	35	23539.675	3754.79				mg/L	
Kr	83	45.001	9.00				mg/L	
Br	81	6249.286	-911.28				mg/L	
P	31	10771.810	648.67				mg/L	
S	34	201835.301	68.80				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	100.536				
Cr	52	101.586				
Cr	53					
Mn	55	102.327				
Co	59	100.971				
Ni	60	102.650				
Cu	65	100.965				
Zn	66	100.268				
> Ge	72		101.116			
As	75	99.434				
Se	77					
Se	82	98.384				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	99.182				
Cd	114	99.809				
> In	115		101.665			
Sn	118					
Sb	123	100.584				
Ba	135	102.486				
Ce	140					
> Tb	159		100.748			
Ho	165					
Tl	203	100.691				
Tl	205					
Pb	206					
Pb	207					
Pb	208	102.067				
U	238	100.780				
> Bi	209		99.026			
Na	23					

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 16:33:25

Approved: February 28, 2011

	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 16:33:25

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 25, 2011 16:38:28
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20738.223	0.01				ug/L
|	Be	9	2.000	-0.00	0.0449	0.008	16.722	ug/L
|	Al	27	1616.816	0.00	-0.0576	0.140	243.708	ug/L
⌊>	Sc	45	286343.479	286343.48				ug/L
⌈	Ti	49	83.342	0.00	0.0605	0.046	75.907	ug/L
|	V	51	2093.681	-0.00	-0.0341	0.014	42.388	ug/L
|	Cr	52	7187.988	-0.00	-0.0975	0.029	29.448	ug/L
|	Cr	53	306.702	-0.00	-0.2582	0.014	5.457	ug/L
|	Mn	55	332.676	-0.00	-0.0986	0.000	0.296	ug/L
|	Co	59	81.334	-0.00	-0.0189	0.001	5.485	ug/L
|	Ni	60	44.667	-0.00	-0.0344	0.007	19.205	ug/L
|	Cu	65	109.668	0.00	-0.0003	0.007	2262.508	ug/L
|	Zn	66	432.347	-0.00	-0.1670	0.049	29.332	ug/L
|>	Ge	72	456605.823	456605.82				ug/L
|	As	75	-115.335	-0.00	0.0236	0.044	187.230	ug/L
|	Se	77	43.333	-0.00	-0.4298	0.079	18.458	ug/L
|	Se	82	1.974	-0.00	-0.0934	0.222	237.791	ug/L
⌊	Rb	85	13.667	-0.00				mg/L
	Y	89	281567.717	-9129.47				ug/L
	Rh	103	2.667	-5.67				ug/L
⌈	Mo	98	70.088	0.00	0.0438	0.008	17.926	ug/L
|	Ag	107	22.334	0.00	-0.0130	0.001	10.527	ug/L
|	Cd	114	3.611	0.00	0.0228	0.003	13.750	ug/L
|>	In	115	353803.905	353803.90				ug/L
|	Sn	118	172.668	0.00	0.0273	0.005	18.021	ug/L
⌊	Sb	123	81.164	0.00	0.0148	0.002	11.799	ug/L
⌈	Ba	135	11.667	0.00	0.0143	0.002	11.038	ug/L
|	Ce	140	23.336	0.00				ug/L
⌊>	Tb	159	492650.527	492650.53				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	25.334	0.00	-0.0031	0.001	18.254	ug/L
|	Tl	205	66.674	0.00	-0.0092	0.003	29.521	ug/L
|	Pb	206	380.678	0.00	-0.0335	0.004	12.649	ug/L
|	Pb	207	317.008	-0.00	-0.0304	0.001	4.405	ug/L
|	Pb	208	1546.730	0.00	-0.0216	0.001	3.761	ug/L
|	U	238	114.335	0.00	-0.0015	0.000	33.675	ug/L
⌊>	Bi	209	499695.496	499695.50				ug/L

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 16:40:39
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Erin D. Long

⌈	Na	23	69098.165	-0.11	-0.0021	0.001	27.970	mg/L
|	Mg	24	480.060	0.00	-0.0024	0.000	0.339	mg/L
|	K	39	555563.252	0.05	0.0060	0.001	22.727	mg/L
|	Ca	43	190.021	0.00	0.0024	0.002	81.736	mg/L
|	Fe	54	38281.610	-0.01	-0.0027	0.003	115.572	mg/L
|	Fe	57	6169.190	-0.00	-0.0005	0.001	193.187	mg/L
⌊>	Sc-1	45	286343.479	286343.48				mg/L
	Cl	35	20220.427	435.54				mg/L
	Kr	83	41.334	5.33				mg/L
	Br	81	6260.627	-899.94				mg/L
	P	31	9345.068	-778.07				mg/L
	S	34	194576.983	-7189.52				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		98.199			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		98.696			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.396			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.489			
⌈	Na	23					

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 16:40:39

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 16:40:39

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: PBS 88 WG357299-03

Sample Date/Time: Friday, February 25, 2011 16:45:13
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 28
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22358.396	0.01				ug/L
|	Be	9	4.000	0.00	0.0514	0.007	13.598	ug/L
|	Al	27	18401.117	0.05	2.8711	0.934	32.533	ug/L
⌊>	Sc	45	308263.072	308263.07				ug/L
⌈	Ti	49	113.345	0.00	0.1141	0.104	91.377	ug/L
|	V	51	2328.227	-0.00	-0.0086	0.019	216.520	ug/L
|	Cr	52	8781.610	0.00	0.1177	0.040	34.188	ug/L
|	Cr	53	323.371	-0.00	-0.2408	0.040	16.813	ug/L
|	Mn	55	1818.184	0.00	0.0350	0.005	12.897	ug/L
|	Co	59	127.002	0.00	-0.0139	0.002	15.918	ug/L
|	Ni	60	114.668	0.00	0.0028	0.004	128.909	ug/L
|	Cu	65	492.017	0.00	0.1960	0.003	1.704	ug/L
|	Zn	66	2614.368	0.00	1.7213	0.013	0.783	ug/L
| >	Ge	72	459432.428	459432.43				ug/L
|	As	75	-122.368	-0.00	0.0165	0.076	461.427	ug/L
|	Se	77	52.667	-0.00	-0.2858	0.259	90.578	ug/L
|	Se	82	5.971	-0.00	-0.0432	0.320	740.268	ug/L
⌊	Rb	85	39.667	0.00				mg/L
	Y	89	280793.388	-9903.80				ug/L
	Rh	103	6.000	-2.33				ug/L
⌈	Mo	98	110.011	0.00	0.0639	0.007	11.470	ug/L
|	Ag	107	42.667	0.00	-0.0079	0.002	19.945	ug/L
|	Cd	114	4.165	0.00	0.0233	0.001	4.319	ug/L
| >	In	115	357461.934	357461.93				ug/L
|	Sn	118	170.668	0.00	0.0262	0.001	3.986	ug/L
⌊	Sb	123	100.456	0.00	0.0205	0.004	18.158	ug/L
⌈	Ba	135	50.667	0.00	0.0428	0.001	3.029	ug/L
|	Ce	140	123.347	0.00				ug/L
⌊>	Tb	159	506626.269	506626.27				ug/L
⌈	Ho	165	13.335	0.00				ug/L
|	Tl	203	18.667	-0.00	-0.0042	0.001	21.903	ug/L
|	Tl	205	46.671	0.00	-0.0106	0.001	12.714	ug/L
|	Pb	206	468.016	0.00	-0.0178	0.009	48.301	ug/L
|	Pb	207	372.011	0.00	-0.0202	0.010	51.369	ug/L
|	Pb	208	1807.083	0.00	-0.0107	0.003	26.320	ug/L
|	U	238	100.668	0.00	-0.0018	0.000	14.736	ug/L
⌊>	Bi	209	507798.133	507798.13				ug/L

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⌈	Na	23	109608.478	0.01	0.0046	0.001	13.215	mg/L
|	Mg	24	7496.895	0.02	-0.0003	0.000	25.303	mg/L
|	K	39	566394.191	-0.05	0.0022	0.001	65.451	mg/L
|	Ca	43	253.362	0.00	0.0051	0.002	40.844	mg/L
|	Fe	54	74471.021	0.10	0.0545	0.002	3.001	mg/L
|	Fe	57	7116.578	0.00	0.0015	0.001	91.421	mg/L
⌊>	Sc-1	45	308263.072	308263.07				mg/L
	Cl	35	22135.815	2350.93				mg/L
	Kr	83	41.667	5.67				mg/L
	Br	81	6889.041	-271.52				mg/L
	P	31	16104.334	5981.20				mg/L
	S	34	190858.916	-10907.59				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		98.807			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.717			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		101.187			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.070			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: LCSS 88 WG357299-04

Sample Date/Time: Friday, February 25, 2011 16:52:00
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 29
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22024.381	0.01				ug/L
|	Be	9	6977.102	0.02	24.4050	0.770	3.156	ug/L
|	Al	27	145213.648	0.47	25.1370	0.993	3.949	ug/L
⌊>	Sc	45	308006.212	308006.21				ug/L
⌈	Ti	49	86.676	0.00	0.0670	0.076	113.209	ug/L
|	V	51	236965.661	0.51	26.9959	0.338	1.253	ug/L
|	Cr	52	205208.790	0.43	27.5376	0.778	2.826	ug/L
|	Cr	53	23636.933	0.05	27.1067	0.672	2.477	ug/L
|	Mn	55	304151.937	0.66	27.3880	0.709	2.590	ug/L
|	Co	59	243413.444	0.53	27.1078	0.779	2.875	ug/L
|	Ni	60	50171.048	0.11	26.9131	0.250	0.929	ug/L
|	Cu	65	51740.031	0.11	26.6763	0.145	0.542	ug/L
|	Zn	66	31269.124	0.07	26.6712	0.294	1.103	ug/L
|>	Ge	72	457412.028	457412.03				ug/L
|	As	75	21711.835	0.05	24.8233	0.186	0.750	ug/L
|	Se	77	1527.450	0.00	23.2429	0.864	3.716	ug/L
|	Se	82	1861.162	0.00	23.3625	0.149	0.638	ug/L
⌊	Rb	85	24.667	0.00				mg/L
	Y	89	279647.692	-11049.50				ug/L
	Rh	103	11.000	2.67				ug/L
⌈	Mo	98	43.603	0.00	0.0293	0.002	5.494	ug/L
|	Ag	107	97138.823	0.27	23.9135	0.238	0.997	ug/L
|	Cd	114	24398.621	0.07	25.0671	1.145	4.566	ug/L
|>	In	115	365927.910	365927.91				ug/L
|	Sn	118	126.401	0.00	0.0120	0.002	16.802	ug/L
⌊	Sb	123	83516.692	0.23	24.9708	0.254	1.019	ug/L
⌈	Ba	135	35660.175	0.07	26.1948	0.451	1.721	ug/L
|	Ce	140	50.005	0.00				ug/L
⌊>	Tb	159	507815.359	507815.36				ug/L
⌈	Ho	165	13.335	0.00				ug/L
|	Tl	203	165663.896	0.33	25.6177	0.294	1.149	ug/L
|	Tl	205	405266.687	0.80	25.7546	0.528	2.049	ug/L
|	Pb	206	142521.726	0.28	27.4033	0.073	0.267	ug/L
|	Pb	207	125815.468	0.25	25.6441	0.371	1.448	ug/L
|	Pb	208	583865.511	1.15	26.7186	0.182	0.682	ug/L
|	U	238	1060716.587	2.09	26.0488	0.076	0.293	ug/L
⌊>	Bi	209	507112.460	507112.46				ug/L

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⌈	Na	23	79973.275	-0.09	-0.0010	0.000	5.158	mg/L
|	Mg	24	2767.327	0.01	-0.0017	0.000	1.748	mg/L
|	K	39	555609.458	-0.08	0.0009	0.001	97.701	mg/L
|	Ca	43	226.692	0.00	0.0036	0.003	85.876	mg/L
|	Fe	54	73207.094	0.10	0.0524	0.005	10.274	mg/L
|	Fe	57	6699.587	-0.00	-0.0002	0.002	767.547	mg/L
⌊>	Sc-1	45	308006.212	308006.21				mg/L
	Cl	35	27452.305	7667.42				mg/L
	Kr	83	42.667	6.67				mg/L
	Br	81	6550.813	-609.75				mg/L
	P	31	15885.287	5762.15				mg/L
	S	34	193022.819	-8743.69				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		98.373			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		102.078			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		101.424			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.936			
⌈	Na	23					

Sample ID: LCSS 88 WG357299-04
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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSS 88 WG357299-04
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Method 6020 - Summary Report

Sample ID: L1102031801

Sample Date/Time: Friday, February 25, 2011 16:58:46
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 30
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21372.972	0.01				ug/L
|	Be	9	53.333	0.00	0.2267	0.025	11.134	ug/L
|	Al	27	11950370.076	39.48	2133.9767	47.291	2.216	ug/L
⌊>	Sc	45	302697.765	302697.77				ug/L
⌈	Ti	49	82235.081	0.18	151.6209	4.366	2.880	ug/L
|	V	51	118282.443	0.25	13.4215	0.342	2.550	ug/L
|	Cr	52	163967.872	0.34	21.9188	0.438	1.998	ug/L
|	Cr	53	18412.135	0.04	21.1123	1.199	5.680	ug/L
|	Mn	55	2706065.433	5.95	246.1511	4.060	1.649	ug/L
|	Co	59	65046.582	0.14	7.2659	0.113	1.554	ug/L
|	Ni	60	69378.953	0.15	37.4660	0.753	2.011	ug/L
|	Cu	65	23513.200	0.05	12.1667	0.406	3.336	ug/L
|	Zn	66	224431.193	0.49	195.9698	4.431	2.261	ug/L
|>	Ge	72	454606.280	454606.28				ug/L
|	As	75	1241.902	0.00	1.5748	0.088	5.582	ug/L
|	Se	77	63.334	0.00	-0.1082	0.348	321.886	ug/L
|	Se	82	28.563	0.00	0.2456	0.171	69.611	ug/L
⌊	Rb	85	4996.632	0.01				mg/L
	Y	89	308036.090	17338.90				ug/L
	Rh	103	262.673	254.34				ug/L
⌈	Mo	98	142.354	0.00	0.0834	0.003	4.187	ug/L
|	Ag	107	170.336	0.00	0.0260	0.002	8.472	ug/L
|	Cd	114	193.594	0.00	0.2303	0.007	2.962	ug/L
|>	In	115	344178.680	344178.68				ug/L
|	Sn	118	275.604	0.00	0.0611	0.004	7.100	ug/L
⌊	Sb	123	149.331	0.00	0.0372	0.004	11.646	ug/L
⌈	Ba	135	30317.190	0.06	23.9028	0.138	0.578	ug/L
|	Ce	140	108880.493	0.23				ug/L
⌊>	Tb	159	473149.897	473149.90				ug/L
⌈	Ho	165	2587.261	0.01				ug/L
|	Tl	203	94.668	0.00	0.0084	0.004	42.375	ug/L
|	Tl	205	253.362	0.00	0.0035	0.003	78.820	ug/L
|	Pb	206	67938.200	0.14	13.7764	0.581	4.217	ug/L
|	Pb	207	59556.789	0.12	12.8009	0.304	2.374	ug/L
|	Pb	208	276121.351	0.57	13.3304	0.377	2.829	ug/L
|	U	238	16952.878	0.04	0.4366	0.022	5.008	ug/L
⌊>	Bi	209	479075.151	479075.15				ug/L

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⌈	Na	23	3234606.020	10.34	0.6059	0.018	2.900	mg/L
|	Mg	24	20320018.100	67.13	6.2681	0.075	1.200	mg/L
|	K	39	3921670.239	11.07	0.4180	0.006	1.534	mg/L
|	Ca	43	1681544.649	5.56	94.8901	1.404	1.479	mg/L
|	Fe	54	4334579.335	14.18	7.5168	0.080	1.062	mg/L
|	Fe	57	1854688.255	6.11	7.8580	0.111	1.419	mg/L
⌊>	Sc-1	45	302697.765	302697.77				mg/L
	Cl	35	26604.682	6819.79				mg/L
	Kr	83	50.334	14.33				mg/L
	Br	81	10998.713	3838.15				mg/L
	P	31	246955.507	236832.37				mg/L
	S	34	218972.433	17205.93				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		97.769			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.011			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		94.501			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		93.466			
⌈	Na	23					

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Zn 66 Upper, S, EEE	Zn	66	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102031802

Sample Date/Time: Friday, February 25, 2011 17:05:33
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 31
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19719.514	0.00				ug/L
|	Be	9	48.667	0.00	0.2096	0.017	8.272	ug/L
|	Al	27	13816384.292	45.53	2460.8624	126.308	5.133	ug/L
⌊>	Sc	45	303661.420	303661.42				ug/L
⌈	Ti	49	83697.232	0.19	155.3840	3.353	2.158	ug/L
|	V	51	143941.571	0.31	16.5085	0.338	2.048	ug/L
|	Cr	52	190830.000	0.40	25.8789	0.767	2.964	ug/L
|	Cr	53	21742.476	0.05	25.2216	1.265	5.016	ug/L
|	Mn	55	3338346.000	7.39	305.8310	7.057	2.307	ug/L
|	Co	59	80111.472	0.18	9.0187	0.186	2.063	ug/L
|	Ni	60	69384.270	0.15	37.7349	0.845	2.240	ug/L
|	Cu	65	25157.191	0.06	13.1124	0.150	1.143	ug/L
|	Zn	66	74446.862	0.16	65.1042	1.336	2.052	ug/L
|>	Ge	72	451469.408	451469.41				ug/L
|	As	75	1166.062	0.00	1.4968	0.119	7.974	ug/L
|	Se	77	78.667	0.00	0.1483	0.063	42.689	ug/L
|	Se	82	32.282	0.00	0.2939	0.353	120.138	ug/L
⌊	Rb	85	6156.957	0.01				mg/L
	Y	89	320063.449	29366.26				ug/L
	Rh	103	228.005	219.67				ug/L
⌈	Mo	98	113.161	0.00	0.0689	0.008	11.199	ug/L
|	Ag	107	207.671	0.00	0.0368	0.006	16.628	ug/L
|	Cd	114	158.364	0.00	0.1949	0.015	7.512	ug/L
|>	In	115	338034.132	338034.13				ug/L
|	Sn	118	157.468	0.00	0.0250	0.004	17.326	ug/L
⌊	Sb	123	167.707	0.00	0.0440	0.002	3.473	ug/L
⌈	Ba	135	37152.940	0.08	29.7388	0.381	1.281	ug/L
|	Ce	140	141532.840	0.30				ug/L
⌊>	Tb	159	466011.041	466011.04				ug/L
⌈	Ho	165	3607.678	0.01				ug/L
|	Tl	203	85.001	0.00	0.0069	0.001	11.433	ug/L
|	Tl	205	240.027	0.00	0.0027	0.006	205.070	ug/L
|	Pb	206	80938.161	0.17	16.5387	0.367	2.217	ug/L
|	Pb	207	69772.656	0.15	15.1111	0.292	1.932	ug/L
|	Pb	208	325263.893	0.68	15.8214	0.267	1.687	ug/L
|	U	238	16931.160	0.04	0.4388	0.007	1.594	ug/L
⌊>	Bi	209	475929.581	475929.58				ug/L

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⌈	Na	23	3095312.157	9.85	0.5776	0.019	3.365	mg/L
|	Mg	24	19791833.448	65.21	6.0880	0.125	2.061	mg/L
|	K	39	4992914.572	14.57	0.5486	0.019	3.498	mg/L
|	Ca	43	1611416.208	5.31	90.6960	3.365	3.710	mg/L
|	Fe	54	4448583.972	14.52	7.6972	0.307	3.992	mg/L
|	Fe	57	1850158.206	6.07	7.8166	0.242	3.090	mg/L
⌊>	Sc-1	45	303661.420	303661.42				mg/L
	Cl	35	30916.398	11131.51				mg/L
	Kr	83	44.334	8.33				mg/L
	Br	81	12595.265	5434.70				mg/L
	P	31	264916.985	254793.85				mg/L
	S	34	205766.699	4000.19				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		97.095			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		94.297			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		93.075			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		92.852			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102031803

Sample Date/Time: Friday, February 25, 2011 17:12:21
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 32
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20704.847	0.00				ug/L
|	Be	9	66.000	0.00	0.2649	0.026	9.828	ug/L
|	Al	27	19616422.699	62.73	3390.5956	127.882	3.772	ug/L
⌊>	Sc	45	312993.730	312993.73				ug/L
⌈	Ti	49	114445.888	0.25	210.8704	3.929	1.863	ug/L
|	V	51	220699.211	0.48	25.2619	0.726	2.874	ug/L
|	Cr	52	278592.483	0.59	37.9856	1.215	3.198	ug/L
|	Cr	53	32355.527	0.07	37.5417	1.795	4.781	ug/L
|	Mn	55	4947578.583	10.87	449.7588	4.070	0.905	ug/L
|	Co	59	120068.868	0.26	13.4253	0.257	1.913	ug/L
|	Ni	60	86857.458	0.19	46.8872	1.032	2.200	ug/L
|	Cu	65	31695.470	0.07	16.4085	0.391	2.381	ug/L
|	Zn	66	122726.550	0.27	106.8324	2.275	2.130	ug/L
| >	Ge	72	455027.353	455027.35				ug/L
|	As	75	1236.689	0.00	1.5675	0.016	1.037	ug/L
|	Se	77	77.334	0.00	0.1159	0.192	165.413	ug/L
|	Se	82	29.893	0.00	0.2631	0.126	47.794	ug/L
⌊	Rb	85	8266.832	0.02				mg/L
	Y	89	343149.279	52452.09				ug/L
	Rh	103	278.673	270.34				ug/L
⌈	Mo	98	127.426	0.00	0.0766	0.001	1.347	ug/L
|	Ag	107	301.674	0.00	0.0618	0.006	9.707	ug/L
|	Cd	114	201.962	0.00	0.2434	0.019	7.934	ug/L
| >	In	115	338208.309	338208.31				ug/L
|	Sn	118	275.470	0.00	0.0626	0.004	6.467	ug/L
⌊	Sb	123	150.872	0.00	0.0385	0.001	3.855	ug/L
⌈	Ba	135	51880.773	0.11	40.7108	0.428	1.051	ug/L
|	Ce	140	215989.091	0.45				ug/L
⌊>	Tb	159	475385.653	475385.65				ug/L
⌈	Ho	165	5622.143	0.01				ug/L
|	Tl	203	111.668	0.00	0.0112	0.002	19.132	ug/L
|	Tl	205	270.031	0.00	0.0046	0.001	17.045	ug/L
|	Pb	206	87686.314	0.18	17.8009	0.174	0.977	ug/L
|	Pb	207	77385.804	0.16	16.6559	0.568	3.407	ug/L
|	Pb	208	360398.972	0.75	17.4189	0.311	1.784	ug/L
|	U	238	20730.342	0.04	0.5345	0.015	2.751	ug/L
⌊>	Bi	209	479317.181	479317.18				ug/L

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⌈	Na	23	3677179.438	11.41	0.6684	0.027	3.989	mg/L
|	Mg	24	23057523.695	73.72	6.8831	0.198	2.876	mg/L
|	K	39	7046241.148	20.65	0.7760	0.030	3.859	mg/L
|	Ca	43	1820605.298	5.82	99.3839	3.434	3.455	mg/L
|	Fe	54	6536643.899	20.76	11.0049	0.422	3.836	mg/L
|	Fe	57	2742215.649	8.75	11.2576	0.478	4.245	mg/L
⌊>	Sc-1	45	312993.730	312993.73				mg/L
	Cl	35	93293.921	73509.03				mg/L
	Kr	83	50.667	14.67				mg/L
	Br	81	11375.133	4214.57				mg/L
	P	31	305509.273	295386.14				mg/L
	S	34	210163.779	8397.27				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		97.860			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		94.346			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		94.947			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		93.513			
⌈	Na	23					

Sample ID: L1102031803
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Zn 66 Upper, S, EEE	Zn	66	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102031804

Sample Date/Time: Friday, February 25, 2011 17:19:09
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 33
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19686.084	0.01				ug/L
|	Be	9	14.667	0.00	0.0943	0.012	12.617	ug/L
|	Al	27	4167009.358	14.92	806.4248	58.145	7.210	ug/L
⌊>	Sc	45	279992.643	279992.64				ug/L
⌈	Ti	49	26317.236	0.06	50.6370	1.423	2.809	ug/L
|	V	51	46786.651	0.10	5.3856	0.058	1.076	ug/L
|	Cr	52	122261.239	0.26	16.8343	0.274	1.628	ug/L
|	Cr	53	13517.150	0.03	16.0476	0.243	1.514	ug/L
|	Mn	55	1300277.081	2.99	123.5339	0.420	0.340	ug/L
|	Co	59	44718.210	0.10	5.2125	0.032	0.620	ug/L
|	Ni	60	114484.447	0.26	64.6496	0.112	0.174	ug/L
|	Cu	65	7237.359	0.02	3.8741	0.102	2.638	ug/L
|	Zn	66	13438.828	0.03	11.7530	0.238	2.024	ug/L
|>	Ge	72	435030.465	435030.46				ug/L
|	As	75	1790.155	0.00	2.2935	0.058	2.522	ug/L
|	Se	77	50.000	-0.00	-0.2847	0.171	59.940	ug/L
|	Se	82	18.954	0.00	0.1341	0.106	79.429	ug/L
⌊	Rb	85	2179.926	0.00				mg/L
	Y	89	290618.193	-79.00				ug/L
	Rh	103	487.017	478.68				ug/L
⌈	Mo	98	261.207	0.00	0.1549	0.009	5.901	ug/L
|	Ag	107	86.668	0.00	0.0054	0.006	118.219	ug/L
|	Cd	114	34.420	0.00	0.0587	0.010	17.353	ug/L
|>	In	115	324944.059	324944.06				ug/L
|	Sn	118	78.267	0.00	0.0007	0.002	338.468	ug/L
⌊	Sb	123	81.994	0.00	0.0173	0.001	3.698	ug/L
⌈	Ba	135	7668.683	0.02	6.3174	0.206	3.255	ug/L
|	Ce	140	48190.730	0.11				ug/L
⌊>	Tb	159	453348.867	453348.87				ug/L
⌈	Ho	165	1360.229	0.00				ug/L
|	Tl	203	75.668	0.00	0.0059	0.002	25.867	ug/L
|	Tl	205	200.022	0.00	0.0006	0.002	360.910	ug/L
|	Pb	206	9945.044	0.02	2.0225	0.060	2.964	ug/L
|	Pb	207	8669.847	0.02	1.8718	0.073	3.894	ug/L
|	Pb	208	40096.489	0.08	1.9498	0.038	1.928	ug/L
|	U	238	27673.187	0.06	0.7500	0.017	2.229	ug/L
⌊>	Bi	209	456977.979	456977.98				ug/L

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⌈	Na	23	6343309.558	22.34	1.3048	0.052	3.949	mg/L
|	Mg	24	40566090.349	145.07	13.5478	0.451	3.332	mg/L
|	K	39	1964272.759	5.15	0.1965	0.017	8.578	mg/L
|	Ca	43	2766502.884	9.91	169.2468	11.699	6.913	mg/L
|	Fe	54	2187137.461	7.69	4.0777	0.268	6.569	mg/L
|	Fe	57	1003886.645	3.57	4.5987	0.299	6.505	mg/L
⌊>	Sc-1	45	279992.643	279992.64				mg/L
	Cl	35	31022.714	11237.83				mg/L
	Kr	83	43.667	7.67				mg/L
	Br	81	7292.661	132.10				mg/L
	P	31	85462.364	75339.23				mg/L
	S	34	225691.160	23924.65				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.559			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		90.646			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		90.546			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		89.155			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102031805

Sample Date/Time: Friday, February 25, 2011 17:25:57
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 34
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20437.586	-0.00				ug/L
|	Be	9	105.334	0.00	0.3802	0.048	12.704	ug/L
|	Al	27	51036423.526	154.67	8360.5597	503.777	6.026	ug/L
⌊>	Sc	45	330284.515	330284.51				ug/L
⌈	Ti	49	117380.052	0.26	219.3317	6.393	2.915	ug/L
|	V	51	200969.503	0.44	23.3026	1.206	5.174	ug/L
|	Cr	52	376159.758	0.82	52.4076	2.332	4.449	ug/L
|	Cr	53	43164.001	0.09	50.9807	1.564	3.067	ug/L
|	Mn	55	5613188.170	12.51	517.4691	16.250	3.140	ug/L
|	Co	59	77546.412	0.17	8.7824	0.204	2.318	ug/L
|	Ni	60	60854.705	0.14	33.2871	1.074	3.225	ug/L
|	Cu	65	20934.110	0.05	10.9684	0.277	2.524	ug/L
|	Zn	66	72198.208	0.16	63.5062	1.599	2.518	ug/L
|>	Ge	72	448705.666	448705.67				ug/L
|	As	75	4665.541	0.01	5.5594	0.158	2.838	ug/L
|	Se	77	65.334	0.00	-0.0586	0.389	664.099	ug/L
|	Se	82	37.879	0.00	0.3703	0.080	21.492	ug/L
⌊	Rb	85	22978.602	0.05				mg/L
	Y	89	347664.546	56967.36				ug/L
	Rh	103	211.004	202.67				ug/L
⌈	Mo	98	176.903	0.00	0.1034	0.010	9.410	ug/L
|	Ag	107	804.374	0.00	0.1957	0.010	5.218	ug/L
|	Cd	114	303.795	0.00	0.3563	0.012	3.355	ug/L
|>	In	115	338264.021	338264.02				ug/L
|	Sn	118	471.478	0.00	0.1251	0.005	3.990	ug/L
⌊	Sb	123	69.532	0.00	0.0122	0.002	16.676	ug/L
⌈	Ba	135	61564.960	0.13	48.9505	1.468	2.999	ug/L
|	Ce	140	240682.949	0.51				ug/L
⌊>	Tb	159	469157.945	469157.94				ug/L
⌈	Ho	165	5095.148	0.01				ug/L
|	Tl	203	314.341	0.00	0.0442	0.003	6.248	ug/L
|	Tl	205	746.770	0.00	0.0364	0.009	24.781	ug/L
|	Pb	206	203734.487	0.42	41.3247	0.989	2.392	ug/L
|	Pb	207	177170.479	0.37	38.0760	0.956	2.511	ug/L
|	Pb	208	827690.220	1.72	39.9463	0.945	2.367	ug/L
|	U	238	28613.844	0.06	0.7360	0.012	1.583	ug/L
⌊>	Bi	209	481429.776	481429.78				ug/L

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⌈	Na	23	2979323.996	8.68	0.5094	0.029	5.760	mg/L
|	Mg	24	15727829.828	47.64	4.4475	0.200	4.503	mg/L
|	K	39	5188129.200	13.83	0.5210	0.014	2.685	mg/L
|	Ca	43	1505950.870	4.56	77.8834	1.347	1.730	mg/L
|	Fe	54	8110478.028	24.43	12.9478	0.626	4.837	mg/L
|	Fe	57	3296848.166	9.97	12.8256	0.670	5.225	mg/L
⌊>	Sc-1	45	330284.515	330284.51				mg/L
	Cl	35	57633.610	37848.72				mg/L
	Kr	83	52.334	16.33				mg/L
	Br	81	16866.214	9705.65				mg/L
	P	31	474452.755	464329.62				mg/L
	S	34	203901.832	2135.33				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		96.500			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		94.361			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		93.704			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		93.925			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102031806

Sample Date/Time: Friday, February 25, 2011 17:32:43
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 35
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19920.074	-0.01				ug/L
|	Be	9	112.667	0.00	0.3659	0.046	12.472	ug/L
|	Al	27	25004314.484	67.66	3657.5753	105.113	2.874	ug/L
⌊>	Sc	45	369732.917	369732.92				ug/L
⌈	Ti	49	23673.713	0.05	41.6509	1.460	3.506	ug/L
|	V	51	381142.000	0.80	41.9106	0.285	0.679	ug/L
|	Cr	52	273606.450	0.56	35.6190	0.885	2.484	ug/L
|	Cr	53	32034.458	0.07	35.5182	1.269	3.574	ug/L
|	Mn	55	9176237.379	19.30	798.2196	19.984	2.504	ug/L
|	Co	59	278787.203	0.59	29.8597	0.999	3.345	ug/L
|	Ni	60	37892.037	0.08	19.5335	0.268	1.371	ug/L
|	Cu	65	20815.525	0.04	10.2876	0.295	2.870	ug/L
|	Zn	66	31891.102	0.07	26.1516	0.629	2.407	ug/L
| >	Ge	72	475576.454	475576.45				ug/L
|	As	75	100.358	0.00	0.2647	0.043	16.305	ug/L
|	Se	77	87.334	0.00	0.2178	0.262	120.308	ug/L
|	Se	82	38.548	0.00	0.3510	0.051	14.533	ug/L
⌊	Rb	85	11793.406	0.02				mg/L
	Y	89	382054.292	91357.10				ug/L
	Rh	103	16.000	7.67				ug/L
⌈	Mo	98	95.494	0.00	0.0562	0.011	18.838	ug/L
|	Ag	107	268.340	0.00	0.0487	0.006	13.174	ug/L
|	Cd	114	41.492	0.00	0.0623	0.006	9.980	ug/L
| >	In	115	359241.752	359241.75				ug/L
|	Sn	118	84.134	0.00	-0.0000	0.004	15318.515	ug/L
⌊	Sb	123	34.662	-0.00	0.0003	0.001	516.806	ug/L
⌈	Ba	135	53720.454	0.11	40.4687	0.890	2.199	ug/L
|	Ce	140	418854.232	0.85				ug/L
⌊>	Tb	159	495275.791	495275.79				ug/L
⌈	Ho	165	7960.638	0.02				ug/L
|	Tl	203	99.335	0.00	0.0082	0.001	6.375	ug/L
|	Tl	205	193.355	0.00	-0.0014	0.002	129.565	ug/L
|	Pb	206	12105.120	0.02	2.2132	0.070	3.178	ug/L
|	Pb	207	10338.112	0.02	2.0051	0.024	1.212	ug/L
|	Pb	208	48263.797	0.09	2.1085	0.021	1.019	ug/L
|	U	238	5412.520	0.01	0.1278	0.003	2.167	ug/L
⌊>	Bi	209	510363.019	510363.02				ug/L

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⌈	Na	23	816323.284	1.86	0.1125	0.008	6.765	mg/L
|	Mg	24	5575083.317	15.09	1.4073	0.072	5.152	mg/L
|	K	39	3445976.690	7.44	0.2823	0.014	4.928	mg/L
|	Ca	43	38685.249	0.10	1.7794	0.075	4.242	mg/L
|	Fe	54	8467564.474	22.79	12.0783	0.672	5.565	mg/L
|	Fe	57	3376421.458	9.12	11.7413	0.769	6.547	mg/L
⌊>	Sc-1	45	369732.917	369732.92				mg/L
	Cl	35	43799.085	24014.20				mg/L
	Kr	83	52.001	16.00				mg/L
	Br	81	14940.501	7779.94				mg/L
	P	31	95683.665	85560.53				mg/L
	S	34	186501.572	-15264.93				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		102.279			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.213			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.920			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.570			
⌈	Na	23					

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102031806PS WG357404-01

Sample Date/Time: Friday, February 25, 2011 17:39:28
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 36
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20771.741	-0.01				ug/L
|	Be	9	14457.112	0.04	40.8499	1.114	2.727	ug/L
|	Al	27	25566389.633	67.13	3628.7130	224.440	6.185	ug/L
⌊>	Sc	45	381146.511	381146.51				ug/L
⌈	Ti	49	23847.482	0.05	41.7372	1.837	4.401	ug/L
|	V	51	840989.782	1.75	92.3098	0.976	1.057	ug/L
|	Cr	52	663898.235	1.37	87.5207	1.816	2.075	ug/L
|	Cr	53	76526.052	0.16	85.2415	2.042	2.396	ug/L
|	Mn	55	9845705.229	20.59	851.8753	20.875	2.451	ug/L
|	Co	59	765116.003	1.60	81.5526	1.082	1.327	ug/L
|	Ni	60	140008.782	0.29	71.9444	1.106	1.538	ug/L
|	Cu	65	125375.077	0.26	61.9138	1.103	1.782	ug/L
|	Zn	66	96027.535	0.20	79.4050	1.267	1.595	ug/L
| >	Ge	72	478144.787	478144.79				ug/L
|	As	75	49108.005	0.10	53.5286	0.816	1.525	ug/L
|	Se	77	3814.061	0.01	57.0606	1.089	1.909	ug/L
|	Se	82	4424.570	0.01	53.2861	1.768	3.318	ug/L
⌊	Rb	85	11604.513	0.02				mg/L
	Y	89	381276.134	90578.94				ug/L
	Rh	103	28.334	20.00				ug/L
⌈	Mo	98	82.270	0.00	0.0493	0.004	7.110	ug/L
|	Ag	107	202109.459	0.56	50.4473	0.515	1.020	ug/L
|	Cd	114	50775.921	0.14	52.8544	0.822	1.555	ug/L
| >	In	115	361048.105	361048.10				ug/L
|	Sn	118	266.537	0.00	0.0544	0.001	2.712	ug/L
⌊	Sb	123	174989.112	0.48	53.0433	0.446	0.842	ug/L
⌈	Ba	135	124135.340	0.25	94.3424	0.767	0.813	ug/L
|	Ce	140	413358.654	0.84				ug/L
⌊>	Tb	159	490785.928	490785.93				ug/L
⌈	Ho	165	7877.222	0.02				ug/L
|	Tl	203	326329.021	0.65	50.9020	0.875	1.720	ug/L
|	Tl	205	821265.029	1.63	52.6458	1.097	2.085	ug/L
|	Pb	206	291916.950	0.58	56.7314	0.269	0.475	ug/L
|	Pb	207	252144.846	0.50	51.9270	0.590	1.137	ug/L
|	Pb	208	1176363.800	2.34	54.3946	0.587	1.079	ug/L
|	U	238	2035656.107	4.05	50.4328	0.807	1.599	ug/L
⌊>	Bi	209	502734.625	502734.63				ug/L

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⌈	Na	23	800227.513	1.75	0.1061	0.005	5.063	mg/L
|	Mg	24	5477015.462	14.38	1.3406	0.068	5.088	mg/L
|	K	39	3465655.147	7.21	0.2736	0.009	3.334	mg/L
|	Ca	43	38012.575	0.10	1.6951	0.048	2.856	mg/L
|	Fe	54	8346338.826	21.76	11.5348	0.205	1.777	mg/L
|	Fe	57	3478276.543	9.11	11.7211	0.372	3.174	mg/L
⌊>	Sc-1	45	381146.511	381146.51				mg/L
	Cl	35	41900.265	22115.38				mg/L
	Kr	83	55.001	19.00				mg/L
	Br	81	14086.582	6926.02				mg/L
	P	31	94491.274	84368.14				mg/L
	S	34	186990.277	-14776.23				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		102.832			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.717			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.023			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.082			
⌈	Na	23					

Sample ID: L1102031806PS WG357404-01
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102031806SDL WG357404-02

Sample Date/Time: Friday, February 25, 2011 17:46:14
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 37
Method File: C:\elandata\Method\6020a.mth
Sample Description: 25

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19602.551	0.00				ug/L
|	Be	9	22.000	0.00	0.1163	0.045	38.853	ug/L
|	Al	27	5173349.708	17.13	925.8276	49.680	5.366	ug/L
|>	Sc	45	302234.889	302234.89				ug/L
⌈	Ti	49	4851.668	0.01	8.4155	0.812	9.654	ug/L
|	V	51	76751.140	0.16	8.1708	0.081	0.989	ug/L
|	Cr	52	59445.424	0.11	6.8303	0.082	1.195	ug/L
|	Cr	53	6419.372	0.01	6.5831	0.449	6.822	ug/L
|	Mn	55	1872805.249	3.91	161.8732	3.306	2.043	ug/L
|	Co	59	56155.466	0.12	5.9577	0.094	1.575	ug/L
|	Ni	60	7800.788	0.02	3.9525	0.168	4.245	ug/L
|	Cu	65	4228.270	0.01	2.0323	0.051	2.500	ug/L
|	Zn	66	8193.771	0.02	6.2754	0.105	1.670	ug/L
|>	Ge	72	478305.064	478305.06				ug/L
|	As	75	-93.554	0.00	0.0536	0.039	72.416	ug/L
|	Se	77	45.333	-0.00	-0.4311	0.023	5.328	ug/L
|	Se	82	3.594	-0.00	-0.0734	0.147	200.815	ug/L
⌊	Rb	85	2403.980	0.00				mg/L
	Y	89	308882.446	18185.26				ug/L
	Rh	103	4.667	-3.67				ug/L
⌈	Mo	98	16.160	0.00	0.0157	0.001	9.331	ug/L
|	Ag	107	76.334	0.00	0.0005	0.004	721.897	ug/L
|	Cd	114	7.380	0.00	0.0266	0.015	55.150	ug/L
|>	In	115	358552.908	358552.91				ug/L
|	Sn	118	51.067	-0.00	-0.0100	0.003	28.699	ug/L
⌊	Sb	123	287.793	0.00	0.0776	0.009	11.155	ug/L
⌈	Ba	135	10791.931	0.02	8.2924	0.301	3.629	ug/L
|	Ce	140	84124.637	0.17				ug/L
|>	Tb	159	485820.355	485820.36				ug/L
⌈	Ho	165	1526.937	0.00				ug/L
|	Tl	203	79.334	0.00	0.0053	0.003	52.298	ug/L
|	Tl	205	186.687	0.00	-0.0016	0.002	130.078	ug/L
|	Pb	206	2618.369	0.00	0.4007	0.016	4.051	ug/L
|	Pb	207	2222.270	0.00	0.3614	0.030	8.216	ug/L
|	Pb	208	10611.361	0.02	0.3969	0.016	3.934	ug/L
|	U	238	1097.071	0.00	0.0228	0.000	1.339	ug/L
|>	Bi	209	503863.555	503863.55				ug/L

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⌈	Na	23	197807.359	0.31	0.0220	0.001	5.739	mg/L
|	Mg	24	1178909.648	3.90	0.3619	0.010	2.745	mg/L
|	K	39	1143819.166	1.90	0.0751	0.006	7.446	mg/L
|	Ca	43	7196.645	0.02	0.3981	0.026	6.528	mg/L
|	Fe	54	1714527.380	5.53	2.9344	0.081	2.748	mg/L
|	Fe	57	690669.090	2.26	2.9138	0.063	2.146	mg/L
⌊>	Sc-1	45	302234.889	302234.89				mg/L
	Cl	35	21326.054	1541.17				mg/L
	Kr	83	46.667	10.67				mg/L
	Br	81	8026.553	865.99				mg/L
	P	31	22257.412	12134.27				mg/L
	S	34	164138.156	-37628.35				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		102.866			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.021			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.031			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.302			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 25, 2011 17:53:00
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19101.689	0.00				ug/L
|	Be	9	13238.777	0.05	48.5262	2.952	6.083	ug/L
|	Al	27	275168.693	0.93	50.3324	3.152	6.263	ug/L
⌊>	Sc	45	293928.829	293928.83				ug/L
⌈	Ti	49	59086.628	0.13	107.8560	2.701	2.504	ug/L
|	V	51	450252.438	0.98	51.3506	0.782	1.522	ug/L
|	Cr	52	380460.190	0.81	51.7888	0.585	1.130	ug/L
|	Cr	53	44653.980	0.10	51.5504	1.005	1.950	ug/L
|	Mn	55	583690.379	1.27	52.4773	0.926	1.765	ug/L
|	Co	59	469161.832	1.02	52.0732	1.076	2.067	ug/L
|	Ni	60	98123.728	0.21	52.4950	0.330	0.628	ug/L
|	Cu	65	99104.676	0.22	50.9587	0.290	0.569	ug/L
|	Zn	66	59204.673	0.13	50.7960	0.949	1.869	ug/L
| >	Ge	72	459122.177	459122.18				ug/L
|	As	75	45062.378	0.10	51.1653	0.675	1.320	ug/L
|	Se	77	3329.888	0.01	51.7862	0.851	1.644	ug/L
|	Se	82	3990.438	0.01	50.0531	1.573	3.143	ug/L
⌊	Rb	85	1622.148	0.00				mg/L
	Y	89	279113.987	-11583.20				ug/L
	Rh	103	19.334	11.00				ug/L
⌈	Mo	98	201230.589	0.59	107.4339	1.425	1.326	ug/L
|	Ag	107	198909.534	0.58	52.1515	0.348	0.666	ug/L
|	Cd	114	46204.100	0.13	50.5274	0.681	1.348	ug/L
| >	In	115	343715.816	343715.82				ug/L
|	Sn	118	165165.613	0.48	51.8504	0.374	0.722	ug/L
⌊	Sb	123	165587.357	0.48	52.7231	0.261	0.495	ug/L
⌈	Ba	135	68190.743	0.14	52.8304	0.385	0.729	ug/L
|	Ce	140	63.340	0.00				ug/L
⌊>	Tb	159	481472.029	481472.03				ug/L
⌈	Ho	165	6.667	0.00				ug/L
|	Tl	203	307093.712	0.62	48.9577	0.381	0.778	ug/L
|	Tl	205	757239.560	1.54	49.6065	0.765	1.543	ug/L
|	Pb	206	255510.879	0.52	50.7328	0.179	0.352	ug/L
|	Pb	207	239112.343	0.49	50.3234	0.670	1.331	ug/L
|	Pb	208	1071864.406	2.18	50.6460	0.208	0.410	ug/L
|	U	238	1971821.147	4.01	49.9200	0.286	0.572	ug/L
⌊>	Bi	209	491949.431	491949.43				ug/L

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⌈	Na	23	24989727.856	84.77	4.9384	0.229	4.642	mg/L
|	Mg	24	15865157.838	54.04	5.0454	0.229	4.539	mg/L
|	K	39	40181948.321	134.95	5.0498	0.174	3.436	mg/L
|	Ca	43	89440.452	0.30	5.1956	0.258	4.968	mg/L
|	Fe	54	2909472.495	9.77	5.1778	0.186	3.601	mg/L
|	Fe	57	1189584.034	4.03	5.1859	0.204	3.943	mg/L
⌊>	Sc-1	45	293928.829	293928.83				mg/L
	Cl	35	17763.768	-2021.12				mg/L
	Kr	83	48.001	12.00				mg/L
	Br	81	6315.994	-844.57				mg/L
	P	31	8756.517	-1366.62				mg/L
	S	34	187881.320	-13885.18				mg/L

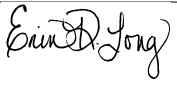
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	102.701				
|	Cr	52	103.578				
|	Cr	53					
|	Mn	55	104.955				
|	Co	59	104.146				
|	Ni	60	104.990				
|	Cu	65	101.917				
|	Zn	66	101.592				
|>	Ge	72		98.741			
|	As	75	102.331				
|	Se	77					
|	Se	82	100.106				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	104.303				
|	Cd	114	101.055				
|>	In	115		95.882			
|	Sn	118					
⌊	Sb	123	105.446				
⌈	Ba	135	105.661				
|	Ce	140					
⌊>	Tb	159		96.163			
⌈	Ho	165					
|	Tl	203	97.915				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	101.292				
|	U	238	99.840				
⌊>	Bi	209		95.978			
⌈	Na	23					

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 17:55:12



Approved: February 28, 2011



	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 17:55:12

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 25, 2011 18:00:16
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19118.625	-0.00				ug/L
|	Be	9	4.000	0.00	0.0517	0.008	14.599	ug/L
|	Al	27	1716.815	0.00	-0.0583	0.048	81.998	ug/L
⌊>	Sc	45	306393.854	306393.85				ug/L
⌈	Ti	49	53.339	-0.00	0.0023	0.038	1666.011	ug/L
|	V	51	2152.961	-0.00	-0.0359	0.015	40.896	ug/L
|	Cr	52	7225.015	-0.00	-0.1277	0.027	21.110	ug/L
|	Cr	53	233.360	-0.00	-0.3544	0.073	20.517	ug/L
|	Mn	55	340.009	-0.00	-0.0990	0.001	1.455	ug/L
|	Co	59	82.335	-0.00	-0.0191	0.001	7.318	ug/L
|	Ni	60	43.001	-0.00	-0.0362	0.002	6.795	ug/L
|	Cu	65	105.002	0.00	-0.0046	0.003	66.145	ug/L
|	Zn	66	455.015	-0.00	-0.1613	0.026	16.066	ug/L
⌊>	Ge	72	473176.614	473176.61				ug/L
|	As	75	-122.687	-0.00	0.0205	0.051	246.328	ug/L
|	Se	77	58.000	-0.00	-0.2298	0.236	102.538	ug/L
|	Se	82	3.690	-0.00	-0.0713	0.145	202.823	ug/L
⌊	Rb	85	16.667	0.00				mg/L
	Y	89	286148.088	-4549.10				ug/L
	Rh	103	7.667	-0.67				ug/L
⌈	Mo	98	66.677	0.00	0.0417	0.004	9.149	ug/L
|	Ag	107	22.667	0.00	-0.0129	0.001	4.620	ug/L
|	Cd	114	-0.484	-0.00	0.0184	0.002	12.506	ug/L
⌊>	In	115	357702.439	357702.44				ug/L
|	Sn	118	137.601	0.00	0.0162	0.001	6.751	ug/L
⌊	Sb	123	121.415	0.00	0.0269	0.003	12.524	ug/L
⌈	Ba	135	7.667	-0.00	0.0113	0.002	21.374	ug/L
|	Ce	140	20.002	0.00				ug/L
⌊>	Tb	159	495015.142	495015.14				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	31.667	0.00	-0.0022	0.000	17.888	ug/L
|	Tl	205	50.005	0.00	-0.0104	0.001	6.110	ug/L
|	Pb	206	390.012	0.00	-0.0339	0.003	9.524	ug/L
|	Pb	207	354.343	0.00	-0.0248	0.005	19.387	ug/L
|	Pb	208	1623.069	0.00	-0.0202	0.003	12.999	ug/L
|	U	238	114.668	0.00	-0.0015	0.000	4.740	ug/L
⌊>	Bi	209	514599.576	514599.58				ug/L

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 18:02:27
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⌈	Na	23	40238.150	-0.22	-0.0085	0.000	3.688	mg/L
|	Mg	24	493.395	0.00	-0.0024	0.000	0.839	mg/L
|	K	39	559913.515	-0.06	0.0019	0.002	128.477	mg/L
|	Ca	43	173.352	0.00	0.0008	0.003	361.397	mg/L
|	Fe	54	40486.156	-0.01	-0.0035	0.003	80.795	mg/L
|	Fe	57	5858.971	-0.00	-0.0036	0.000	11.237	mg/L
⌊>	Sc-1	45	306393.854	306393.85				mg/L
	Cl	35	16666.545	-3118.34				mg/L
	Kr	83	35.667	-0.33				mg/L
	Br	81	6315.997	-844.57				mg/L
	P	31	9014.081	-1109.06				mg/L
	S	34	189604.744	-12161.76				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		101.763			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.784			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.868			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.397			
⌈	Na	23					

Sample ID: QC Std 7
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 18:02:27

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102031807

Sample Date/Time: Friday, February 25, 2011 18:07:01
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 38
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

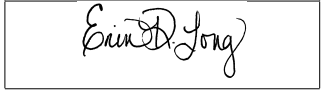
User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23026.676	-0.01				ug/L
|	Be	9	160.001	0.00	0.4564	0.037	8.056	ug/L
|	Al	27	45134634.462	109.80	5935.1781	104.974	1.769	ug/L
⌊>	Sc	45	411133.131	411133.13				ug/L
⌈	Ti	49	201952.408	0.42	351.7123	7.368	2.095	ug/L
|	V	51	588287.180	1.22	64.0427	0.828	1.293	ug/L
|	Cr	52	509043.654	1.04	66.3776	1.017	1.532	ug/L
|	Cr	53	58332.193	0.12	64.3693	1.371	2.130	ug/L
|	Mn	55	9997529.106	20.77	859.0277	11.994	1.396	ug/L
|	Co	59	269050.816	0.56	28.4610	0.170	0.596	ug/L
|	Ni	60	52179.651	0.11	26.5923	0.512	1.925	ug/L
|	Cu	65	41461.547	0.09	20.2956	0.451	2.224	ug/L
|	Zn	66	58642.717	0.12	47.9423	0.582	1.215	ug/L
| >	Ge	72	481463.526	481463.53				ug/L
|	As	75	333.931	0.00	0.5158	0.035	6.755	ug/L
|	Se	77	100.001	0.00	0.3928	0.266	67.776	ug/L
|	Se	82	75.210	0.00	0.7853	0.163	20.712	ug/L
⌊	Rb	85	22600.403	0.05				mg/L
	Y	89	395093.223	104396.03				ug/L
	Rh	103	22.000	13.67				ug/L
⌈	Mo	98	106.239	0.00	0.0623	0.001	2.301	ug/L
|	Ag	107	518.352	0.00	0.1128	0.001	0.921	ug/L
|	Cd	114	83.121	0.00	0.1068	0.021	20.017	ug/L
| >	In	115	355340.438	355340.44				ug/L
|	Sn	118	108.934	0.00	0.0078	0.001	7.446	ug/L
⌊	Sb	123	64.036	0.00	0.0094	0.003	29.603	ug/L
⌈	Ba	135	78305.538	0.16	58.5506	1.353	2.310	ug/L
|	Ce	140	444449.222	0.89				ug/L
⌊>	Tb	159	498916.740	498916.74				ug/L
⌈	Ho	165	8978.263	0.02				ug/L
|	Tl	203	130.002	0.00	0.0128	0.001	3.960	ug/L
|	Tl	205	326.705	0.00	0.0069	0.003	45.781	ug/L
|	Pb	206	30603.744	0.06	5.7190	0.041	0.722	ug/L
|	Pb	207	26550.476	0.05	5.2609	0.048	0.909	ug/L
|	Pb	208	122774.575	0.24	5.4675	0.033	0.595	ug/L
|	U	238	7741.074	0.02	0.1833	0.006	3.131	ug/L
⌊>	Bi	209	514144.470	514144.47				ug/L

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⌈	Na	23	986688.897	2.05	0.1236	0.004	3.028	mg/L
|	Mg	24	8313367.041	20.23	1.8868	0.058	3.051	mg/L
|	K	39	7180958.730	15.58	0.5867	0.012	2.084	mg/L
|	Ca	43	85553.166	0.21	3.5473	0.173	4.864	mg/L
|	Fe	54	15075736.233	36.54	19.3646	0.372	1.923	mg/L
|	Fe	57	6124794.754	14.88	19.1470	0.332	1.732	mg/L
⌊>	Sc-1	45	411133.131	411133.13				mg/L
	Cl	35	46745.043	26960.16				mg/L
	Kr	83	52.667	16.67				mg/L
	Br	81	31779.088	24618.52				mg/L
	P	31	153104.577	142981.44				mg/L
	S	34	186341.502	-15425.00				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		103.545			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.125			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.647			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.308			
⌈	Na	23					

Sample ID: L1102031807
Report Date/Time: Friday, February 25, 2011 18:09:12

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1102031807
Report Date/Time: Friday, February 25, 2011 18:09:12

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102031808 WG357299-01

Sample Date/Time: Friday, February 25, 2011 18:13:47
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 39
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21489.813	-0.00				ug/L
|	Be	9	138.001	0.00	0.4446	0.061	13.723	ug/L
|	Al	27	37562679.241	103.07	5571.5147	209.058	3.752	ug/L
⌊>	Sc	45	364648.905	364648.91				ug/L
⌈	Ti	49	83340.826	0.18	151.7681	2.661	1.754	ug/L
|	V	51	348497.273	0.75	39.5782	0.428	1.082	ug/L
|	Cr	52	353382.692	0.75	47.8983	0.082	0.172	ug/L
|	Cr	53	39371.359	0.08	45.2597	1.481	3.273	ug/L
|	Mn	55	8639480.024	18.77	776.4785	14.127	1.819	ug/L
|	Co	59	686798.238	1.49	76.0411	0.256	0.337	ug/L
|	Ni	60	75564.245	0.16	40.3061	0.438	1.087	ug/L
|	Cu	65	29875.550	0.06	15.2805	0.305	1.994	ug/L
|	Zn	66	81371.616	0.18	69.8251	0.698	0.999	ug/L
|>	Ge	72	460284.229	460284.23				ug/L
|	As	75	1385.165	0.00	1.7185	0.106	6.161	ug/L
|	Se	77	101.334	0.00	0.4844	0.175	36.089	ug/L
|	Se	82	41.189	0.00	0.3997	0.087	21.861	ug/L
⌊	Rb	85	25008.155	0.05				mg/L
	Y	89	368116.295	77419.11				ug/L
	Rh	103	140.669	132.34				ug/L
⌈	Mo	98	143.276	0.00	0.0842	0.002	2.398	ug/L
|	Ag	107	19413.688	0.06	5.0885	0.019	0.374	ug/L
|	Cd	114	139.140	0.00	0.1714	0.024	14.075	ug/L
|>	In	115	342689.527	342689.53				ug/L
|	Sn	118	142.934	0.00	0.0197	0.004	21.482	ug/L
⌊	Sb	123	67.535	0.00	0.0113	0.005	45.192	ug/L
⌈	Ba	135	66242.719	0.14	51.4785	0.782	1.519	ug/L
|	Ce	140	378381.606	0.79				ug/L
⌊>	Tb	159	479994.079	479994.08				ug/L
⌈	Ho	165	7453.526	0.02				ug/L
|	Tl	203	156.003	0.00	0.0176	0.002	12.667	ug/L
|	Tl	205	360.043	0.00	0.0098	0.004	37.333	ug/L
|	Pb	206	31867.033	0.06	6.1730	0.122	1.979	ug/L
|	Pb	207	27935.246	0.06	5.7392	0.082	1.426	ug/L
|	Pb	208	130111.649	0.26	6.0082	0.120	2.001	ug/L
|	U	238	15482.469	0.03	0.3839	0.001	0.232	ug/L
⌊>	Bi	209	496699.118	496699.12				ug/L

Sample ID: L1102031808 WG357299-01
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⌈	Na	23	2101906.572	5.42	0.3195	0.009	2.732	mg/L
|	Mg	24	12764336.658	35.02	3.2681	0.083	2.530	mg/L
|	K	39	8613859.004	21.75	0.8171	0.024	2.994	mg/L
|	Ca	43	896276.624	2.46	41.9941	1.416	3.371	mg/L
|	Fe	54	9670704.734	26.40	13.9919	0.584	4.171	mg/L
|	Fe	57	3982314.792	10.90	14.0333	0.421	3.000	mg/L
⌊>	Sc-1	45	364648.905	364648.91				mg/L
	Cl	35	44635.411	24850.52				mg/L
	Kr	83	55.001	19.00				mg/L
	Br	81	21416.244	14255.68				mg/L
	P	31	420938.802	410815.66				mg/L
	S	34	208076.973	6310.47				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		98.991			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		95.596			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		95.868			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		96.904			
⌈	Na	23					

Sample ID: L1102031808 WG357299-01
Report Date/Time: Friday, February 25, 2011 18:15:59
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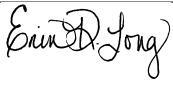
Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	



Approved: February 28, 2011



Method 6020 - Summary Report

Sample ID: L1102031809S WG357299-05

Sample Date/Time: Friday, February 25, 2011 18:20:33
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 40
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20688.406	-0.00				ug/L
|	Be	9	1405.432	0.00	4.4453	0.230	5.185	ug/L
|	Al	27	21326737.081	62.18	3361.2414	83.962	2.498	ug/L
⌊>	Sc	45	342913.901	342913.90				ug/L
⌈	Ti	49	34977.892	0.08	63.7330	0.195	0.307	ug/L
|	V	51	291400.395	0.63	33.1005	0.412	1.245	ug/L
|	Cr	52	242568.132	0.51	32.5846	0.288	0.883	ug/L
|	Cr	53	27370.147	0.06	31.3299	0.743	2.370	ug/L
|	Mn	55	6532181.966	14.21	587.9397	7.801	1.327	ug/L
|	Co	59	195350.372	0.42	21.6413	0.190	0.880	ug/L
|	Ni	60	50272.899	0.11	26.8378	0.198	0.739	ug/L
|	Cu	65	25835.270	0.06	13.2292	0.404	3.053	ug/L
|	Zn	66	43390.366	0.09	37.0395	0.246	0.664	ug/L
| >	Ge	72	459583.626	459583.63				ug/L
|	As	75	3037.829	0.01	3.5905	0.144	4.005	ug/L
|	Se	77	220.669	0.00	2.3809	0.370	15.533	ug/L
|	Se	82	195.190	0.00	2.3340	0.035	1.487	ug/L
⌊	Rb	85	15716.832	0.03				mg/L
	Y	89	352673.151	61975.96				ug/L
	Rh	103	90.001	81.67				ug/L
⌈	Mo	98	97.604	0.00	0.0589	0.002	3.785	ug/L
|	Ag	107	15421.706	0.04	3.9702	0.090	2.257	ug/L
|	Cd	114	4622.184	0.01	5.0024	0.168	3.364	ug/L
| >	In	115	348588.698	348588.70				ug/L
|	Sn	118	161.201	0.00	0.0246	0.003	13.698	ug/L
⌊	Sb	123	614.895	0.00	0.1828	0.003	1.508	ug/L
⌈	Ba	135	55395.581	0.11	42.4339	0.829	1.955	ug/L
|	Ce	140	286944.502	0.59				ug/L
⌊>	Tb	159	486984.884	486984.88				ug/L
⌈	Ho	165	5992.401	0.01				ug/L
|	Tl	203	29020.684	0.06	4.5190	0.055	1.209	ug/L
|	Tl	205	71606.092	0.14	4.5767	0.131	2.865	ug/L
|	Pb	206	49055.543	0.10	9.4412	0.197	2.091	ug/L
|	Pb	207	43460.008	0.09	8.8685	0.084	0.953	ug/L
|	Pb	208	201289.016	0.40	9.2279	0.071	0.774	ug/L
|	U	238	202012.614	0.40	4.9990	0.049	0.986	ug/L
⌊>	Bi	209	502889.523	502889.52				ug/L

Sample ID: L1102031809S WG357299-05
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⌈	Na	23	1353383.280	3.60	0.2136	0.004	1.765	mg/L
|	Mg	24	7803079.361	22.75	2.1229	0.014	0.669	mg/L
|	K	39	5926815.723	15.40	0.5797	0.015	2.511	mg/L
|	Ca	43	559522.716	1.63	27.8592	0.092	0.330	mg/L
|	Fe	54	5808610.942	16.80	8.9034	0.126	1.420	mg/L
|	Fe	57	2359045.011	6.86	8.8248	0.048	0.539	mg/L
⌊>	Sc-1	45	342913.901	342913.90				mg/L
	Cl	35	27109.363	7324.48				mg/L
	Kr	83	55.334	19.33				mg/L
	Br	81	13958.406	6797.84				mg/L
	P	31	232943.609	222820.47				mg/L
	S	34	203791.108	2024.60				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		98.840			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.241			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.264			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.112			
⌈	Na	23					

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1102031809S WG357299-05
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Method 6020 - Summary Report

Sample ID: L1102031810SD WG357299-06

Sample Date/Time: Friday, February 25, 2011 18:27:20
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 41
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21440.064	-0.00				ug/L
|	Be	9	1419.435	0.00	4.4996	0.471	10.472	ug/L
|	Al	27	28738099.402	83.91	4535.8617	205.705	4.535	ug/L
⌊>	Sc	45	342570.246	342570.25				ug/L
⌈	Ti	49	66027.263	0.14	120.3151	3.967	3.297	ug/L
|	V	51	321543.122	0.69	36.5243	0.466	1.275	ug/L
|	Cr	52	294584.649	0.62	39.7755	0.295	0.741	ug/L
|	Cr	53	33930.872	0.07	38.9503	0.523	1.342	ug/L
|	Mn	55	6054053.968	13.16	544.4853	9.447	1.735	ug/L
|	Co	59	177551.314	0.39	19.6539	0.467	2.374	ug/L
|	Ni	60	60423.276	0.13	32.2435	0.244	0.756	ug/L
|	Cu	65	29613.415	0.06	15.1602	0.292	1.924	ug/L
|	Zn	66	57608.038	0.12	49.3146	0.446	0.904	ug/L
| >	Ge	72	459961.941	459961.94				ug/L
|	As	75	4232.752	0.01	4.9376	0.100	2.026	ug/L
|	Se	77	290.671	0.00	3.4887	0.302	8.662	ug/L
|	Se	82	319.639	0.00	3.8925	0.253	6.512	ug/L
⌊	Rb	85	20166.183	0.04				mg/L
	Y	89	347240.112	56542.92				ug/L
	Rh	103	96.668	88.33				ug/L
⌈	Mo	98	105.864	0.00	0.0635	0.007	11.352	ug/L
|	Ag	107	15053.808	0.04	3.8951	0.067	1.731	ug/L
|	Cd	114	4551.074	0.01	4.9507	0.168	3.392	ug/L
| >	In	115	346780.226	346780.23				ug/L
|	Sn	118	123.201	0.00	0.0130	0.003	21.720	ug/L
⌊	Sb	123	414.006	0.00	0.1204	0.006	4.986	ug/L
⌈	Ba	135	56167.218	0.12	43.0721	0.278	0.646	ug/L
|	Ce	140	283114.836	0.58				ug/L
⌊>	Tb	159	486446.548	486446.55				ug/L
⌈	Ho	165	5788.924	0.01				ug/L
|	Tl	203	29273.418	0.06	4.5765	0.072	1.573	ug/L
|	Tl	205	73029.676	0.15	4.6865	0.075	1.599	ug/L
|	Pb	206	52599.844	0.10	10.1705	0.082	0.806	ug/L
|	Pb	207	46174.179	0.09	9.4651	0.147	1.552	ug/L
|	Pb	208	213604.727	0.42	9.8364	0.060	0.607	ug/L
|	U	238	199494.881	0.40	4.9559	0.063	1.271	ug/L
⌊>	Bi	209	500930.012	500930.01				ug/L

Sample ID: L1102031810SD WG357299-06
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⌈	Na	23	1493587.820	4.01	0.2377	0.006	2.630	mg/L
|	Mg	24	8674159.602	25.32	2.3629	0.048	2.052	mg/L
|	K	39	6485229.170	17.05	0.6414	0.007	1.014	mg/L
|	Ca	43	583180.382	1.70	29.0714	0.342	1.175	mg/L
|	Fe	54	7741457.156	22.47	11.9095	0.511	4.290	mg/L
|	Fe	57	3092217.524	9.01	11.5902	0.166	1.433	mg/L
⌊>	Sc-1	45	342570.246	342570.25				mg/L
	Cl	35	33658.567	13873.68				mg/L
	Kr	83	42.667	6.67				mg/L
	Br	81	17863.275	10702.71				mg/L
	P	31	272723.243	262600.11				mg/L
	S	34	200477.373	-1289.13				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		98.921			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.737			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.157			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.730			
⌈	Na	23					

Sample ID: L1102031810SD WG357299-06
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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1102031810SD WG357299-06
Report Date/Time: Friday, February 25, 2011 18:29:32
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Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102057103S WG357299-07

Sample Date/Time: Friday, February 25, 2011 18:34:07
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 42
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21807.233	-0.00				ug/L
|	Be	9	1430.769	0.00	4.4924	0.388	8.637	ug/L
|	Al	27	30970340.708	89.55	4840.3690	218.363	4.511	ug/L
⌊>	Sc	45	345882.886	345882.89				ug/L
⌈	Ti	49	22130.009	0.05	38.1283	0.906	2.376	ug/L
|	V	51	253799.722	0.52	27.2341	0.095	0.349	ug/L
|	Cr	52	112532.473	0.21	13.6880	0.181	1.320	ug/L
|	Cr	53	12732.707	0.02	13.4467	0.095	0.703	ug/L
|	Mn	55	2145012.886	4.42	182.6230	2.238	1.225	ug/L
|	Co	59	63414.739	0.13	6.6294	0.028	0.423	ug/L
|	Ni	60	15270.805	0.03	7.6744	0.147	1.909	ug/L
|	Cu	65	17910.873	0.04	8.6601	0.168	1.943	ug/L
|	Zn	66	47164.102	0.10	38.1196	0.439	1.152	ug/L
| >	Ge	72	485615.534	485615.53				ug/L
|	As	75	3337.277	0.01	3.7264	0.155	4.157	ug/L
|	Se	77	160.001	0.00	1.2810	0.155	12.118	ug/L
|	Se	82	145.968	0.00	1.6184	0.160	9.866	ug/L
⌊	Rb	85	29867.172	0.06				mg/L
	Y	89	295647.975	4950.79				ug/L
	Rh	103	6.000	-2.33				ug/L
⌈	Mo	98	109.828	0.00	0.0628	0.004	6.524	ug/L
|	Ag	107	17771.622	0.05	4.3797	0.080	1.817	ug/L
|	Cd	114	5133.396	0.01	5.3146	0.181	3.404	ug/L
| >	In	115	364304.348	364304.35				ug/L
|	Sn	118	176.802	0.00	0.0271	0.002	7.016	ug/L
⌊	Sb	123	1602.597	0.00	0.4713	0.012	2.528	ug/L
⌈	Ba	135	22493.173	0.05	17.0164	0.554	3.257	ug/L
|	Ce	140	148391.186	0.30				ug/L
⌊>	Tb	159	493201.677	493201.68				ug/L
⌈	Ho	165	936.805	0.00				ug/L
|	Tl	203	30839.121	0.06	4.6289	0.020	0.426	ug/L
|	Tl	205	78501.409	0.15	4.8368	0.030	0.615	ug/L
|	Pb	206	57409.564	0.11	10.6624	0.047	0.439	ug/L
|	Pb	207	49501.395	0.09	9.7445	0.090	0.920	ug/L
|	Pb	208	231072.267	0.44	10.2196	0.063	0.617	ug/L
|	U	238	221303.489	0.42	5.2777	0.171	3.245	ug/L
⌊>	Bi	209	521779.710	521779.71				ug/L

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⌈	Na	23	81102.451	-0.11	-0.0025	0.000	16.930	mg/L
|	Mg	24	712177.832	2.06	0.1898	0.005	2.503	mg/L
|	K	39	2394167.203	5.04	0.1925	0.011	5.752	mg/L
|	Ca	43	2050.416	0.01	0.0923	0.003	3.783	mg/L
|	Fe	54	7647499.761	21.98	11.6504	0.333	2.857	mg/L
|	Fe	57	3037655.701	8.76	11.2769	0.171	1.513	mg/L
⌊>	Sc-1	45	345882.886	345882.89				mg/L
	Cl	35	27051.876	7266.99				mg/L
	Kr	83	42.334	6.33				mg/L
	Br	81	6682.233	-478.33				mg/L
	P	31	44466.047	34342.91				mg/L
	S	34	175143.149	-26623.36				mg/L

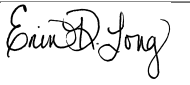
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		104.438			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		101.625			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.506			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		101.798			
⌈	Na	23					

Sample ID: L1102057103S WG357299-07
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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1102057103S WG357299-07
Report Date/Time: Friday, February 25, 2011 18:36:19
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Method 6020 - Summary Report

Sample ID: L1102057104SD WG357299-08

Sample Date/Time: Friday, February 25, 2011 18:40:54
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 43
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20788.264	-0.01				ug/L
|	Be	9	1470.775	0.00	4.4701	0.431	9.637	ug/L
|	Al	27	36807892.612	103.02	5568.7767	430.439	7.730	ug/L
⌊>	Sc	45	358374.657	358374.66				ug/L
⌈	Ti	49	45698.766	0.09	78.3038	1.016	1.298	ug/L
|	V	51	286239.219	0.58	30.5448	0.519	1.698	ug/L
|	Cr	52	128577.339	0.24	15.6858	0.207	1.321	ug/L
|	Cr	53	14708.951	0.03	15.5251	0.540	3.479	ug/L
|	Mn	55	780903.249	1.60	65.9666	0.804	1.218	ug/L
|	Co	59	55802.840	0.11	5.7920	0.096	1.654	ug/L
|	Ni	60	16054.706	0.03	8.0175	0.124	1.551	ug/L
|	Cu	65	19746.344	0.04	9.4905	0.209	2.205	ug/L
|	Zn	66	35357.417	0.07	28.2499	0.174	0.616	ug/L
|>	Ge	72	488823.572	488823.57				ug/L
|	As	75	3641.912	0.01	4.0269	0.056	1.382	ug/L
|	Se	77	167.335	0.00	1.3740	0.102	7.443	ug/L
|	Se	82	175.329	0.00	1.9527	0.198	10.152	ug/L
⌊	Rb	85	34563.311	0.07				mg/L
	Y	89	296491.889	5794.70				ug/L
	Rh	103	10.000	1.67				ug/L
⌈	Mo	98	105.020	0.00	0.0604	0.007	11.210	ug/L
|	Ag	107	18779.146	0.05	4.6237	0.091	1.972	ug/L
|	Cd	114	5073.713	0.01	5.2461	0.211	4.030	ug/L
|>	In	115	364639.622	364639.62				ug/L
|	Sn	118	173.602	0.00	0.0261	0.004	16.017	ug/L
⌊	Sb	123	2440.066	0.01	0.7222	0.010	1.337	ug/L
⌈	Ba	135	23227.181	0.05	17.4577	0.191	1.094	ug/L
|	Ce	140	131120.440	0.26				ug/L
⌊>	Tb	159	496347.814	496347.81				ug/L
⌈	Ho	165	923.468	0.00				ug/L
|	Tl	203	32360.271	0.06	4.8151	0.034	0.698	ug/L
|	Tl	205	78417.513	0.15	4.7904	0.156	3.258	ug/L
|	Pb	206	50217.674	0.09	9.2321	0.303	3.280	ug/L
|	Pb	207	43132.647	0.08	8.4025	0.153	1.817	ug/L
|	Pb	208	203673.660	0.38	8.9165	0.063	0.702	ug/L
|	U	238	225523.593	0.43	5.3328	0.077	1.445	ug/L
⌊>	Bi	209	526379.742	526379.74				ug/L

Sample ID: L1102057104SD WG357299-08
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⌈	Na	23	56870.285	-0.19	-0.0069	0.000	6.592	mg/L
|	Mg	24	821172.363	2.30	0.2121	0.015	7.201	mg/L
|	K	39	2695515.574	5.65	0.2154	0.016	7.343	mg/L
|	Ca	43	1126.843	0.00	0.0447	0.003	6.889	mg/L
|	Fe	54	8683988.441	24.15	12.7999	0.760	5.937	mg/L
|	Fe	57	3554644.051	9.92	12.7608	0.619	4.847	mg/L
⌊>	Sc-1	45	358374.657	358374.66				mg/L
	Cl	35	17031.830	-2753.06				mg/L
	Kr	83	39.334	3.33				mg/L
	Br	81	6598.177	-562.39				mg/L
	P	31	45561.592	35438.46				mg/L
	S	34	177771.703	-23994.80				mg/L

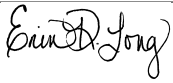
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		105.128			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		101.719			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.134			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		102.695			
⌈	Na	23					

Sample ID: L1102057104SD WG357299-08
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102057104SD WG357299-08
Report Date/Time: Friday, February 25, 2011 18:43:07
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Method 6020 - Summary Report

Sample ID: L1102057105

Sample Date/Time: Friday, February 25, 2011 18:47:42
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 44
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21573.490	0.00				ug/L
|	Be	9	39.333	0.00	0.1615	0.024	14.819	ug/L
|	Al	27	33660271.778	99.02	5352.7669	225.967	4.221	ug/L
|>	Sc	45	340229.340	340229.34				ug/L
⌈	Ti	49	25080.659	0.05	42.6904	2.510	5.880	ug/L
|	V	51	185090.639	0.37	19.5413	0.585	2.996	ug/L
|	Cr	52	69818.669	0.12	7.9615	0.168	2.114	ug/L
|	Cr	53	7483.550	0.01	7.5469	0.296	3.920	ug/L
|	Mn	55	581575.200	1.18	48.8163	0.897	1.838	ug/L
|	Co	59	6301.382	0.01	0.6255	0.015	2.416	ug/L
|	Ni	60	4140.900	0.01	2.0127	0.091	4.543	ug/L
|	Cu	65	6744.008	0.01	3.1851	0.062	1.935	ug/L
|	Zn	66	10850.327	0.02	8.2422	0.221	2.678	ug/L
|>	Ge	72	491602.075	491602.07				ug/L
|	As	75	197.490	0.00	0.3639	0.021	5.891	ug/L
|	Se	77	64.000	-0.00	-0.1731	0.183	105.937	ug/L
|	Se	82	7.731	-0.00	-0.0260	0.054	208.302	ug/L
⌊	Rb	85	28311.328	0.06				mg/L
	Y	89	300502.109	9804.92				ug/L
	Rh	103	4.000	-4.33				ug/L
⌈	Mo	98	74.608	0.00	0.0457	0.007	15.720	ug/L
|	Ag	107	62.334	0.00	-0.0030	0.002	77.622	ug/L
|	Cd	114	56.212	0.00	0.0778	0.011	13.500	ug/L
|>	In	115	358994.513	358994.51				ug/L
|	Sn	118	115.601	0.00	0.0095	0.003	27.782	ug/L
⌊	Sb	123	46.243	0.00	0.0038	0.002	48.601	ug/L
⌈	Ba	135	15021.759	0.03	11.2512	0.082	0.728	ug/L
|	Ce	140	121505.852	0.24				ug/L
|>	Tb	159	498171.674	498171.67				ug/L
⌈	Ho	165	880.128	0.00				ug/L
|	Tl	203	372.011	0.00	0.0492	0.003	5.103	ug/L
|	Tl	205	833.452	0.00	0.0382	0.006	15.953	ug/L
|	Pb	206	19870.606	0.04	3.6399	0.143	3.924	ug/L
|	Pb	207	16876.734	0.03	3.2773	0.078	2.373	ug/L
|	Pb	208	79764.481	0.15	3.4857	0.107	3.061	ug/L
|	U	238	20419.708	0.04	0.4858	0.014	2.833	ug/L
|>	Bi	209	518989.156	518989.16				ug/L

Sample ID: L1102057105
Report Date/Time: Friday, February 25, 2011 18:49:55
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⌈	Na	23	65768.842	-0.15	-0.0049	0.000	4.167	mg/L
|	Mg	24	685265.016	2.02	0.1857	0.010	5.196	mg/L
|	K	39	2271251.281	4.79	0.1833	0.008	4.518	mg/L
|	Ca	43	1143.513	0.00	0.0485	0.003	6.249	mg/L
|	Fe	54	6762955.294	19.75	10.4679	0.273	2.606	mg/L
|	Fe	57	2691589.641	7.89	10.1565	0.156	1.538	mg/L
⌊>	Sc-1	45	340229.340	340229.34				mg/L
	Cl	35	16526.981	-3257.91				mg/L
	Kr	83	31.000	-5.00				mg/L
	Br	81	6534.802	-625.76				mg/L
	P	31	37572.470	27449.33				mg/L
	S	34	177556.533	-24209.97				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		105.726			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.144			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.498			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		101.253			
⌈	Na	23					

Sample ID: L1102057105
Report Date/Time: Friday, February 25, 2011 18:49:55
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Mg	24
K	39
Ca	43
Fe	54
Fe	57
Sc-1	45
Cl	35
Kr	83
Br	81
P	31
S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: February 28, 2011



Method 6020 - Summary Report

Sample ID: L1102057106 WG357299-02

Sample Date/Time: Friday, February 25, 2011 18:54:30
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 45
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21389.637	-0.00				ug/L
|	Be	9	38.667	0.00	0.1567	0.016	10.088	ug/L
|	Al	27	37394056.696	107.35	5802.7702	247.571	4.266	ug/L
|>	Sc	45	348451.594	348451.59				ug/L
⌈	Ti	49	38230.098	0.08	64.7103	1.433	2.215	ug/L
|	V	51	253579.407	0.51	26.7032	0.557	2.085	ug/L
|	Cr	52	86903.861	0.16	10.1079	0.135	1.334	ug/L
|	Cr	53	9218.502	0.02	9.3754	0.035	0.371	ug/L
|	Mn	55	1403198.597	2.84	117.2066	1.408	1.201	ug/L
|	Co	59	15649.064	0.03	1.5846	0.054	3.434	ug/L
|	Ni	60	7076.241	0.01	3.4583	0.086	2.485	ug/L
|	Cu	65	10027.460	0.02	4.7328	0.130	2.755	ug/L
|	Zn	66	17055.039	0.03	13.1789	0.380	2.881	ug/L
|>	Ge	72	494791.656	494791.66				ug/L
|	As	75	697.379	0.00	0.8876	0.056	6.320	ug/L
|	Se	77	82.000	0.00	0.0855	0.204	238.961	ug/L
|	Se	82	3.933	-0.00	-0.0702	0.176	250.627	ug/L
⌊	Rb	85	33218.088	0.07				mg/L
	Y	89	298399.460	7702.27				ug/L
	Rh	103	8.333	0.00				ug/L
⌈	Mo	98	139.902	0.00	0.0774	0.002	3.115	ug/L
|	Ag	107	94.001	0.00	0.0044	0.001	14.318	ug/L
|	Cd	114	70.860	0.00	0.0914	0.010	10.428	ug/L
|>	In	115	367487.029	367487.03				ug/L
|	Sn	118	202.135	0.00	0.0341	0.004	11.976	ug/L
⌊	Sb	123	54.078	0.00	0.0058	0.002	32.097	ug/L
⌈	Ba	135	15244.432	0.03	11.5074	0.041	0.356	ug/L
|	Ce	140	130772.533	0.26				ug/L
|>	Tb	159	494308.683	494308.68				ug/L
⌈	Ho	165	980.147	0.00				ug/L
|	Tl	203	508.018	0.00	0.0706	0.013	18.485	ug/L
|	Tl	205	1286.879	0.00	0.0673	0.010	15.273	ug/L
|	Pb	206	26729.296	0.05	4.9962	0.123	2.454	ug/L
|	Pb	207	22366.218	0.04	4.4300	0.088	1.990	ug/L
|	Pb	208	106149.426	0.20	4.7288	0.086	1.819	ug/L
|	U	238	19975.804	0.04	0.4811	0.007	1.551	ug/L
|>	Bi	209	512587.507	512587.51				ug/L

Sample ID: L1102057106 WG357299-02
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⌈	Na	23	52978.750	-0.20	-0.0073	0.001	7.430	mg/L
|	Mg	24	746250.591	2.14	0.1975	0.007	3.778	mg/L
|	K	39	2421045.756	5.06	0.1933	0.005	2.636	mg/L
|	Ca	43	1440.248	0.00	0.0617	0.005	8.457	mg/L
|	Fe	54	9004583.731	25.71	13.6262	0.352	2.581	mg/L
|	Fe	57	3651293.702	10.46	13.4568	0.063	0.468	mg/L
⌊>	Sc-1	45	348451.594	348451.59				mg/L
	Cl	35	26470.340	6685.45				mg/L
	Kr	83	46.001	10.00				mg/L
	Br	81	6277.304	-883.26				mg/L
	P	31	49414.524	39291.39				mg/L
	S	34	178913.382	-22853.12				mg/L

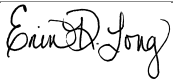
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		106.412			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		102.513			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.727			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.004			
⌈	Na	23					

Sample ID: L1102057106 WG357299-02
Report Date/Time: Friday, February 25, 2011 18:56:43
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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1102057106 WG357299-02
Report Date/Time: Friday, February 25, 2011 18:56:43
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Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102057107

Sample Date/Time: Friday, February 25, 2011 19:01:18
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 46
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

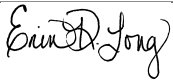
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21506.738	-0.00				ug/L
|	Be	9	57.334	0.00	0.2126	0.037	17.444	ug/L
|	Al	27	43392201.500	123.31	6665.4719	378.888	5.684	ug/L
⌊>	Sc	45	351712.167	351712.17				ug/L
⌈	Ti	49	42999.979	0.09	74.4354	2.787	3.744	ug/L
|	V	51	185200.087	0.38	19.8723	0.453	2.280	ug/L
|	Cr	52	100805.108	0.19	12.1949	0.300	2.464	ug/L
|	Cr	53	11357.595	0.02	11.9737	0.689	5.755	ug/L
|	Mn	55	2304028.864	4.76	196.8875	3.727	1.893	ug/L
|	Co	59	21143.209	0.04	2.1998	0.023	1.024	ug/L
|	Ni	60	5271.777	0.01	2.6204	0.095	3.644	ug/L
|	Cu	65	9889.660	0.02	4.7730	0.194	4.072	ug/L
|	Zn	66	29921.361	0.06	24.0726	0.675	2.804	ug/L
| >	Ge	72	483812.276	483812.28				ug/L
|	As	75	285.486	0.00	0.4615	0.061	13.264	ug/L
|	Se	77	62.667	-0.00	-0.1779	0.041	22.937	ug/L
|	Se	82	-3.096	-0.00	-0.1541	0.069	45.000	ug/L
⌊	Rb	85	46558.959	0.10				mg/L
	Y	89	306015.368	15318.18				ug/L
	Rh	103	9.000	0.67				ug/L
⌈	Mo	98	90.531	0.00	0.0538	0.007	12.763	ug/L
|	Ag	107	64.001	0.00	-0.0026	0.002	76.622	ug/L
|	Cd	114	1279.321	0.00	1.3564	0.024	1.795	ug/L
| >	In	115	359402.523	359402.52				ug/L
|	Sn	118	276.537	0.00	0.0578	0.003	5.320	ug/L
⌊	Sb	123	464.633	0.00	0.1313	0.011	8.370	ug/L
⌈	Ba	135	27933.260	0.06	21.2968	0.415	1.947	ug/L
|	Ce	140	1018504.610	2.08				ug/L
⌊>	Tb	159	489271.752	489271.75				ug/L
⌈	Ho	165	2070.423	0.00				ug/L
|	Tl	203	454.015	0.00	0.0622	0.001	1.910	ug/L
|	Tl	205	1240.201	0.00	0.0642	0.007	11.225	ug/L
|	Pb	206	32306.466	0.06	6.0452	0.165	2.737	ug/L
|	Pb	207	26833.272	0.05	5.3192	0.196	3.687	ug/L
|	Pb	208	127876.775	0.25	5.7001	0.242	4.248	ug/L
|	U	238	19656.196	0.04	0.4720	0.020	4.171	ug/L
⌊>	Bi	209	513870.532	513870.53				ug/L

Sample ID: L1102057107
Report Date/Time: Friday, February 25, 2011 19:03:31
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⌈	Na	23	160372.027	0.11	0.0104	0.001	5.195	mg/L
|	Mg	24	1988928.235	5.66	0.5257	0.016	3.032	mg/L
|	K	39	4382665.848	10.57	0.3993	0.016	4.039	mg/L
|	Ca	43	11157.373	0.03	0.5325	0.044	8.288	mg/L
|	Fe	54	7042523.624	19.88	10.5374	0.149	1.413	mg/L
|	Fe	57	2810267.161	7.97	10.2539	0.214	2.084	mg/L
⌊>	Sc-1	45	351712.167	351712.17				mg/L
	Cl	35	15917.994	-3866.89				mg/L
	Kr	83	49.334	13.33				mg/L
	Br	81	6362.691	-797.87				mg/L
	P	31	509125.541	499002.40				mg/L
	S	34	174707.690	-27058.82				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		104.051			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.258			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.721			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.255			
⌈	Na	23					

Sample ID: L1102057107
Report Date/Time: Friday, February 25, 2011 19:03:31
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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102057108

Sample Date/Time: Friday, February 25, 2011 19:08:05
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 47
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

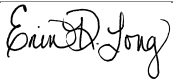
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19569.175	-0.01				ug/L
|	Be	9	71.334	0.00	0.2550	0.049	19.119	ug/L
|	Al	27	40501529.306	114.26	6176.5021	124.238	2.011	ug/L
⌊>	Sc	45	354304.477	354304.48				ug/L
⌈	Ti	49	74483.988	0.15	129.4322	5.506	4.254	ug/L
|	V	51	239518.874	0.49	25.8689	1.158	4.475	ug/L
|	Cr	52	75854.936	0.14	8.9364	0.436	4.878	ug/L
|	Cr	53	8067.415	0.02	8.3564	0.959	11.476	ug/L
|	Mn	55	2709945.546	5.62	232.3769	11.609	4.996	ug/L
|	Co	59	49230.117	0.10	5.1765	0.222	4.292	ug/L
|	Ni	60	8885.703	0.02	4.4716	0.147	3.298	ug/L
|	Cu	65	13309.987	0.03	6.4649	0.188	2.905	ug/L
|	Zn	66	27471.338	0.06	22.1336	1.211	5.471	ug/L
|>	Ge	72	482389.465	482389.46				ug/L
|	As	75	534.323	0.00	0.7308	0.012	1.703	ug/L
|	Se	77	73.334	0.00	-0.0141	0.166	1175.547	ug/L
|	Se	82	4.928	-0.00	-0.0581	0.050	85.768	ug/L
⌊	Rb	85	58217.304	0.12				mg/L
	Y	89	326445.169	35747.98				ug/L
	Rh	103	8.000	-0.33				ug/L
⌈	Mo	98	136.166	0.00	0.0780	0.005	6.398	ug/L
|	Ag	107	70.334	0.00	-0.0008	0.002	248.093	ug/L
|	Cd	114	173.624	0.00	0.2027	0.025	12.144	ug/L
|>	In	115	354541.932	354541.93				ug/L
|	Sn	118	181.202	0.00	0.0298	0.005	15.160	ug/L
⌊	Sb	123	150.872	0.00	0.0363	0.001	3.820	ug/L
⌈	Ba	135	31269.557	0.06	24.1718	1.290	5.338	ug/L
|	Ce	140	668701.038	1.39				ug/L
⌊>	Tb	159	482559.384	482559.38				ug/L
⌈	Ho	165	3240.851	0.01				ug/L
|	Tl	203	583.356	0.00	0.0849	0.005	5.473	ug/L
|	Tl	205	1390.236	0.00	0.0765	0.005	5.898	ug/L
|	Pb	206	34388.470	0.07	6.6565	0.355	5.336	ug/L
|	Pb	207	29927.433	0.06	6.1424	0.348	5.662	ug/L
|	Pb	208	138176.192	0.27	6.3725	0.255	3.996	ug/L
|	U	238	17987.344	0.04	0.4459	0.008	1.685	ug/L
⌊>	Bi	209	497660.686	497660.69				ug/L

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⌈	Na	23	122758.101	-0.00	0.0040	0.000	7.632	mg/L
|	Mg	24	2671010.920	7.54	0.7015	0.013	1.802	mg/L
|	K	39	6083268.933	15.29	0.5757	0.019	3.366	mg/L
|	Ca	43	8391.039	0.02	0.3955	0.028	6.968	mg/L
|	Fe	54	8152612.681	22.86	12.1185	0.279	2.304	mg/L
|	Fe	57	3296213.357	9.28	11.9446	0.197	1.653	mg/L
⌊>	Sc-1	45	354304.477	354304.48				mg/L
	Cl	35	16546.348	-3238.54				mg/L
	Kr	83	46.667	10.67				mg/L
	Br	81	6105.201	-1055.36				mg/L
	P	31	126306.360	116183.22				mg/L
	S	34	174823.607	-26942.90				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		103.745			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		98.902			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.380			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.092			
⌈	Na	23					

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| Mg 24
| K 39
| Ca 43
| Fe 54
| Fe 57
|> Sc-1 45
Cl 35
Kr 83
Br 81
P 31
S 34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 25, 2011 19:14:51
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19669.403	0.00				ug/L
|	Be	9	13244.115	0.04	47.0933	4.739	10.064	ug/L
|	Al	27	267839.978	0.88	47.3925	2.728	5.756	ug/L
⌊>	Sc	45	303734.273	303734.27				ug/L
⌈	Ti	49	58637.290	0.12	104.3821	1.721	1.649	ug/L
|	V	51	459499.307	0.97	51.1092	0.421	0.824	ug/L
|	Cr	52	384745.951	0.80	51.0679	0.135	0.264	ug/L
|	Cr	53	44633.906	0.09	50.2473	1.527	3.039	ug/L
|	Mn	55	588156.696	1.25	51.5691	0.022	0.042	ug/L
|	Co	59	469323.327	1.00	50.8064	0.782	1.538	ug/L
|	Ni	60	97906.329	0.21	51.0913	1.081	2.115	ug/L
|	Cu	65	99867.227	0.21	50.0886	0.827	1.651	ug/L
|	Zn	66	59712.354	0.13	49.9550	0.195	0.391	ug/L
| >	Ge	72	470690.605	470690.61				ug/L
|	As	75	45257.524	0.10	50.1217	0.545	1.088	ug/L
|	Se	77	3382.572	0.01	51.2971	0.269	0.524	ug/L
|	Se	82	4015.198	0.01	49.1148	1.242	2.528	ug/L
⌊	Rb	85	1644.485	0.00				mg/L
	Y	89	277996.657	-12700.53				ug/L
	Rh	103	15.333	7.00				ug/L
⌈	Mo	98	202490.582	0.58	105.5697	0.587	0.556	ug/L
|	Ag	107	200564.050	0.57	51.3663	1.119	2.179	ug/L
|	Cd	114	48075.214	0.14	51.3388	0.340	0.661	ug/L
| >	In	115	351945.088	351945.09				ug/L
|	Sn	118	168081.757	0.48	51.5376	0.499	0.969	ug/L
⌊	Sb	123	169231.450	0.48	52.6310	0.930	1.766	ug/L
⌈	Ba	135	67902.835	0.14	51.6979	0.787	1.522	ug/L
|	Ce	140	26.669	0.00				ug/L
⌊>	Tb	159	489895.567	489895.57				ug/L
⌈	Ho	165	6.667	0.00				ug/L
|	Tl	203	319042.603	0.65	50.7881	0.529	1.041	ug/L
|	Tl	205	789352.848	1.60	51.6423	0.801	1.551	ug/L
|	Pb	206	260421.727	0.53	51.6443	1.696	3.283	ug/L
|	Pb	207	246418.374	0.50	51.7910	0.953	1.840	ug/L
|	Pb	208	1101418.409	2.23	51.9766	1.035	1.992	ug/L
|	U	238	1985528.571	4.03	50.1979	0.376	0.749	ug/L
⌊>	Bi	209	492631.422	492631.42				ug/L

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⌈	Na	23	25346079.571	83.26	4.8507	0.318	6.563	mg/L
|	Mg	24	16049267.916	52.93	4.9411	0.255	5.152	mg/L
|	K	39	40686063.301	132.24	4.9485	0.291	5.884	mg/L
|	Ca	43	88885.469	0.29	4.9972	0.240	4.798	mg/L
|	Fe	54	2912663.217	9.46	5.0142	0.173	3.444	mg/L
|	Fe	57	1177783.754	3.87	4.9743	0.377	7.587	mg/L
⌊>	Sc-1	45	303734.273	303734.27				mg/L
	Cl	35	15429.236	-4355.65				mg/L
	Kr	83	38.000	2.00				mg/L
	Br	81	5994.466	-1166.10				mg/L
	P	31	10023.058	-100.08				mg/L
	S	34	190405.416	-11361.09				mg/L

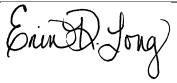
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51	102.218				
|	Cr	52	102.136				
|	Cr	53					
|	Mn	55	103.138				
|	Co	59	101.613				
|	Ni	60	102.183				
|	Cu	65	100.177				
|	Zn	66	99.910				
|>	Ge	72		101.229			
|	As	75	100.243				
|	Se	77					
|	Se	82	98.230				
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107	102.733				
|	Cd	114	102.678				
|>	In	115		98.178			
|	Sn	118					
⌊	Sb	123	105.262				
⌈	Ba	135	103.396				
|	Ce	140					
⌊>	Tb	159		97.845			
⌈	Ho	165					
|	Tl	203	101.576				
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208	103.953				
|	U	238	100.396				
⌊>	Bi	209		96.111			
⌈	Na	23					

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 19:17:04



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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 19:17:04

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 25, 2011 19:22:07
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19335.365	-0.00				ug/L
|	Be	9	4.667	0.00	0.0533	0.008	14.867	ug/L
|	Al	27	1766.825	0.00	-0.0622	0.048	76.644	ug/L
⌊>	Sc	45	319114.726	319114.73				ug/L
⌈	Ti	49	40.004	-0.00	-0.0245	0.017	67.657	ug/L
|	V	51	2191.173	-0.00	-0.0415	0.010	24.941	ug/L
|	Cr	52	7335.764	-0.00	-0.1526	0.019	12.339	ug/L
|	Cr	53	226.692	-0.00	-0.3720	0.054	14.603	ug/L
|	Mn	55	349.676	-0.00	-0.0994	0.001	1.323	ug/L
|	Co	59	92.335	-0.00	-0.0185	0.002	8.745	ug/L
|	Ni	60	35.667	-0.00	-0.0407	0.002	4.180	ug/L
|	Cu	65	102.002	0.00	-0.0082	0.003	38.499	ug/L
|	Zn	66	451.348	-0.00	-0.1795	0.022	12.417	ug/L
| >	Ge	72	492991.810	492991.81				ug/L
|	As	75	-122.041	-0.00	0.0267	0.048	181.303	ug/L
|	Se	77	59.334	-0.00	-0.2449	0.081	32.868	ug/L
|	Se	82	-5.064	-0.00	-0.1756	0.160	91.160	ug/L
⌊	Rb	85	10.000	-0.00				mg/L
	Y	89	293751.066	3053.88				ug/L
	Rh	103	5.000	-3.33				ug/L
⌈	Mo	98	84.864	0.00	0.0501	0.003	5.516	ug/L
|	Ag	107	19.667	0.00	-0.0138	0.000	2.956	ug/L
|	Cd	114	1.528	0.00	0.0205	0.005	23.842	ug/L
| >	In	115	365702.513	365702.51				ug/L
|	Sn	118	134.934	0.00	0.0145	0.002	15.705	ug/L
⌊	Sb	123	45.080	0.00	0.0032	0.004	128.968	ug/L
⌈	Ba	135	12.000	0.00	0.0145	0.003	18.271	ug/L
|	Ce	140	16.668	0.00				ug/L
⌊>	Tb	159	501246.754	501246.75				ug/L
⌈	Ho	165	6.667	0.00				ug/L
|	Tl	203	42.667	0.00	-0.0006	0.001	96.312	ug/L
|	Tl	205	76.675	0.00	-0.0088	0.002	20.402	ug/L
|	Pb	206	373.011	0.00	-0.0374	0.000	0.778	ug/L
|	Pb	207	350.010	0.00	-0.0260	0.001	4.656	ug/L
|	Pb	208	1598.734	0.00	-0.0216	0.002	7.027	ug/L
|	U	238	108.002	0.00	-0.0017	0.000	2.994	ug/L
⌊>	Bi	209	516934.751	516934.75				ug/L

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⌈	Na	23	37306.547	-0.23	-0.0093	0.000	3.508	mg/L
|	Mg	24	606.746	0.00	-0.0024	0.000	1.729	mg/L
|	K	39	539665.967	-0.19	-0.0032	0.003	78.036	mg/L
|	Ca	43	143.349	-0.00	-0.0012	0.002	137.558	mg/L
|	Fe	54	43234.797	-0.01	-0.0017	0.004	209.552	mg/L
|	Fe	57	6612.857	-0.00	-0.0015	0.003	209.027	mg/L
⌊>	Sc-1	45	319114.726	319114.73				mg/L
	Cl	35	14066.557	-5718.33				mg/L
	Kr	83	45.667	9.67				mg/L
	Br	81	6319.330	-841.23				mg/L
	P	31	10110.454	-12.68				mg/L
	S	34	178178.534	-23587.97				mg/L

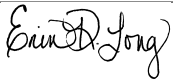
QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		106.025			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		102.015			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		100.113			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.852			
⌈	Na	23					

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 19:24:18
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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 19:24:18

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102057109

Sample Date/Time: Friday, February 25, 2011 19:28:52
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 48
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21957.620	-0.00				ug/L
|	Be	9	54.667	0.00	0.2052	0.059	28.626	ug/L
|	Al	27	39979602.382	114.33	6180.1792	327.421	5.298	ug/L
⌊>	Sc	45	350007.496	350007.50				ug/L
⌈	Ti	49	74927.170	0.15	129.9348	1.617	1.245	ug/L
|	V	51	238254.492	0.49	25.6773	0.193	0.753	ug/L
|	Cr	52	61124.523	0.11	6.9709	0.075	1.073	ug/L
|	Cr	53	6876.386	0.01	7.0141	0.218	3.108	ug/L
|	Mn	55	968852.694	2.00	82.8207	0.412	0.498	ug/L
|	Co	59	17074.403	0.04	1.7733	0.028	1.586	ug/L
|	Ni	60	7169.641	0.01	3.5897	0.026	0.737	ug/L
|	Cu	65	12847.047	0.03	6.2259	0.179	2.871	ug/L
|	Zn	66	23143.649	0.05	18.5214	0.147	0.795	ug/L
|>	Ge	72	483232.745	483232.74				ug/L
|	As	75	627.536	0.00	0.8300	0.008	0.932	ug/L
|	Se	77	52.667	-0.00	-0.3276	0.212	64.813	ug/L
|	Se	82	7.646	-0.00	-0.0259	0.106	409.551	ug/L
⌊	Rb	85	54720.860	0.11				mg/L
	Y	89	303431.379	12734.19				ug/L
	Rh	103	11.000	2.67				ug/L
⌈	Mo	98	196.013	0.00	0.1090	0.008	7.115	ug/L
|	Ag	107	77.001	0.00	0.0009	0.002	205.187	ug/L
|	Cd	114	97.247	0.00	0.1219	0.019	15.968	ug/L
|>	In	115	354512.671	354512.67				ug/L
|	Sn	118	135.868	0.00	0.0160	0.001	7.153	ug/L
⌊	Sb	123	127.953	0.00	0.0292	0.003	11.153	ug/L
⌈	Ba	135	23563.301	0.05	18.1362	0.223	1.228	ug/L
|	Ce	140	471583.638	0.97				ug/L
⌊>	Tb	159	484701.295	484701.29				ug/L
⌈	Ho	165	1613.626	0.00				ug/L
|	Tl	203	458.682	0.00	0.0647	0.002	3.199	ug/L
|	Tl	205	1300.215	0.00	0.0700	0.009	12.379	ug/L
|	Pb	206	32749.212	0.06	6.2919	0.165	2.626	ug/L
|	Pb	207	27430.186	0.05	5.5834	0.077	1.373	ug/L
|	Pb	208	129729.469	0.26	5.9372	0.081	1.360	ug/L
|	U	238	18987.539	0.04	0.4677	0.008	1.623	ug/L
⌊>	Bi	209	501013.204	501013.20				ug/L

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⌈	Na	23	102078.631	-0.06	0.0008	0.001	74.658	mg/L
|	Mg	24	2275485.503	6.50	0.6049	0.012	2.021	mg/L
|	K	39	5531866.106	13.93	0.5249	0.026	4.966	mg/L
|	Ca	43	7586.971	0.02	0.3614	0.011	3.074	mg/L
|	Fe	54	8283362.629	23.52	12.4671	0.145	1.162	mg/L
|	Fe	57	3340015.169	9.53	12.2624	0.648	5.288	mg/L
⌊>	Sc-1	45	350007.496	350007.50				mg/L
	Cl	35	15451.261	-4333.63				mg/L
	Kr	83	40.667	4.67				mg/L
	Br	81	6023.814	-1136.75				mg/L
	P	31	61786.299	51663.16				mg/L
	S	34	176599.331	-25167.17				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		103.926			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		98.894			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.808			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.746			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1102057110

Sample Date/Time: Friday, February 25, 2011 19:35:38
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 49
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21038.784	-0.00				ug/L
|	Be	9	70.000	0.00	0.2519	0.043	17.135	ug/L
|	Al	27	38245199.065	108.80	5881.3647	185.107	3.147	ug/L
⌊>	Sc	45	351333.905	351333.91				ug/L
⌈	Ti	49	93827.513	0.19	163.0319	1.307	0.802	ug/L
|	V	51	240743.845	0.49	25.9955	0.137	0.525	ug/L
|	Cr	52	62783.767	0.11	7.2051	0.044	0.611	ug/L
|	Cr	53	6969.792	0.01	7.1328	0.166	2.328	ug/L
|	Mn	55	1223904.274	2.54	104.8461	1.283	1.224	ug/L
|	Co	59	22771.793	0.05	2.3788	0.029	1.219	ug/L
|	Ni	60	7203.666	0.01	3.6137	0.067	1.849	ug/L
|	Cu	65	11885.847	0.02	5.7659	0.093	1.613	ug/L
|	Zn	66	27080.556	0.06	21.8052	0.154	0.708	ug/L
| >	Ge	72	482359.393	482359.39				ug/L
|	As	75	467.181	0.00	0.6588	0.078	11.907	ug/L
|	Se	77	54.667	-0.00	-0.2956	0.068	23.169	ug/L
|	Se	82	4.632	-0.00	-0.0612	0.074	121.080	ug/L
⌊	Rb	85	56890.621	0.12				mg/L
	Y	89	297500.021	6802.83				ug/L
	Rh	103	3.667	-4.67				ug/L
⌈	Mo	98	188.789	0.00	0.1055	0.014	13.485	ug/L
|	Ag	107	57.001	0.00	-0.0041	0.001	17.488	ug/L
|	Cd	114	189.016	0.00	0.2197	0.020	9.197	ug/L
| >	In	115	353661.513	353661.51				ug/L
|	Sn	118	155.735	0.00	0.0222	0.001	2.406	ug/L
⌊	Sb	123	266.834	0.00	0.0723	0.005	6.432	ug/L
⌈	Ba	135	23665.206	0.05	18.2818	0.238	1.300	ug/L
|	Ce	140	382236.284	0.79				ug/L
⌊>	Tb	159	482947.587	482947.59				ug/L
⌈	Ho	165	1420.244	0.00				ug/L
|	Tl	203	474.349	0.00	0.0665	0.004	5.861	ug/L
|	Tl	205	1053.495	0.00	0.0535	0.009	16.473	ug/L
|	Pb	206	30099.198	0.06	5.7182	0.101	1.775	ug/L
|	Pb	207	25689.547	0.05	5.1734	0.108	2.080	ug/L
|	Pb	208	120502.779	0.24	5.4555	0.095	1.740	ug/L
|	U	238	17420.673	0.03	0.4247	0.009	2.112	ug/L
⌊>	Bi	209	505781.937	505781.94				ug/L

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⌈	Na	23	93369.843	-0.08	-0.0007	0.000	60.703	mg/L
|	Mg	24	2330048.863	6.63	0.6169	0.008	1.296	mg/L
|	K	39	6277996.337	15.99	0.6019	0.023	3.892	mg/L
|	Ca	43	6859.707	0.02	0.3248	0.019	5.789	mg/L
|	Fe	54	8141199.649	23.04	12.2121	0.435	3.560	mg/L
|	Fe	57	3224924.320	9.16	11.7941	0.684	5.802	mg/L
⌊>	Sc-1	45	351333.905	351333.91				mg/L
	Cl	35	15082.033	-4702.85				mg/L
	Kr	83	42.334	6.33				mg/L
	Br	81	6195.252	-965.31				mg/L
	P	31	74515.284	64392.15				mg/L
	S	34	168120.326	-33646.18				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		103.738			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		98.656			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.458			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.676			
⌈	Na	23					

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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
|>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102057111

Sample Date/Time: Friday, February 25, 2011 19:42:24
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 50
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

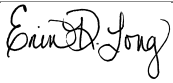
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20754.894	-0.01				ug/L
|	Be	9	82.000	0.00	0.2787	0.029	10.533	ug/L
|	Al	27	30496591.654	84.01	4541.3912	391.878	8.629	ug/L
⌊>	Sc	45	364283.966	364283.97				ug/L
⌈	Ti	49	90220.890	0.19	159.2793	4.126	2.591	ug/L
|	V	51	221776.440	0.46	24.3138	0.631	2.595	ug/L
|	Cr	52	203182.218	0.41	26.2114	0.493	1.882	ug/L
|	Cr	53	22694.661	0.05	25.0200	0.309	1.234	ug/L
|	Mn	55	10671523.234	22.48	929.9372	31.013	3.335	ug/L
|	Co	59	190838.093	0.40	20.4660	0.716	3.496	ug/L
|	Ni	60	6090.915	0.01	3.0958	0.033	1.079	ug/L
|	Cu	65	14534.368	0.03	7.1771	0.092	1.281	ug/L
|	Zn	66	41403.616	0.09	34.1696	0.369	1.080	ug/L
|>	Ge	72	474826.471	474826.47				ug/L
|	As	75	843.934	0.00	1.0788	0.045	4.214	ug/L
|	Se	77	56.000	-0.00	-0.2625	0.132	50.243	ug/L
|	Se	82	-4.035	-0.00	-0.1660	0.026	15.431	ug/L
⌊	Rb	85	36564.767	0.08				mg/L
	Y	89	288292.054	-2405.14				ug/L
	Rh	103	10.333	2.00				ug/L
⌈	Mo	98	176.382	0.00	0.0987	0.007	6.602	ug/L
|	Ag	107	83.335	0.00	0.0025	0.002	80.535	ug/L
|	Cd	114	840.126	0.00	0.9084	0.027	2.998	ug/L
|>	In	115	354946.208	354946.21				ug/L
|	Sn	118	169.068	0.00	0.0261	0.002	8.565	ug/L
⌊	Sb	123	222.583	0.00	0.0583	0.005	8.791	ug/L
⌈	Ba	135	46470.199	0.10	35.5359	0.675	1.900	ug/L
|	Ce	140	431891.427	0.89				ug/L
⌊>	Tb	159	487827.254	487827.25				ug/L
⌈	Ho	165	1283.545	0.00				ug/L
|	Tl	203	1228.421	0.00	0.1850	0.009	4.973	ug/L
|	Tl	205	3107.461	0.01	0.1860	0.007	3.590	ug/L
|	Pb	206	70638.437	0.14	13.6707	0.333	2.432	ug/L
|	Pb	207	60152.700	0.12	12.3409	0.411	3.334	ug/L
|	Pb	208	283233.599	0.56	13.0536	0.383	2.938	ug/L
|	U	238	24772.229	0.05	0.6106	0.012	1.932	ug/L
⌊>	Bi	209	501899.666	501899.67				ug/L

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⌈	Na	23	118921.810	-0.02	0.0029	0.001	46.420	mg/L
|	Mg	24	1155821.606	3.18	0.2944	0.017	5.716	mg/L
|	K	39	2936502.240	6.20	0.2357	0.019	8.141	mg/L
|	Ca	43	5231.892	0.01	0.2367	0.008	3.171	mg/L
|	Fe	54	23915886.507	65.67	34.8030	1.914	5.500	mg/L
|	Fe	57	9612307.766	26.42	34.0034	1.742	5.124	mg/L
⌊>	Sc-1	45	364283.966	364283.97				mg/L
	Cl	35	17121.980	-2662.91				mg/L
	Kr	83	42.334	6.33				mg/L
	Br	81	5649.596	-1510.97				mg/L
	P	31	164065.320	153942.18				mg/L
	S	34	175336.564	-26429.94				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		102.118			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.015			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.432			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.919			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102057112

Sample Date/Time: Friday, February 25, 2011 19:49:11
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 51
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21139.009	-0.01				ug/L
|	Be	9	52.667	0.00	0.1936	0.031	15.872	ug/L
|	Al	27	52835064.003	145.29	7853.6810	473.555	6.030	ug/L
⌊>	Sc	45	363992.353	363992.35				ug/L
⌈	Ti	49	40218.060	0.08	69.0181	0.709	1.028	ug/L
|	V	51	314325.677	0.64	33.6281	0.715	2.126	ug/L
|	Cr	52	136689.189	0.26	16.7757	0.686	4.087	ug/L
|	Cr	53	15279.862	0.03	16.1779	0.498	3.075	ug/L
|	Mn	55	629306.475	1.29	53.2292	2.162	4.062	ug/L
|	Co	59	11034.865	0.02	1.1248	0.036	3.161	ug/L
|	Ni	60	7724.059	0.02	3.8332	0.068	1.784	ug/L
|	Cu	65	14640.189	0.03	7.0328	0.124	1.759	ug/L
|	Zn	66	32093.079	0.06	25.6346	0.564	2.200	ug/L
| >	Ge	72	488048.695	488048.70				ug/L
|	As	75	1287.362	0.00	1.5261	0.046	2.983	ug/L
|	Se	77	62.000	-0.00	-0.1952	0.242	123.959	ug/L
|	Se	82	15.649	-0.00	0.0684	0.096	139.618	ug/L
⌊	Rb	85	53648.734	0.11				mg/L
	Y	89	294561.976	3864.79				ug/L
	Rh	103	8.667	0.33				ug/L
⌈	Mo	98	289.907	0.00	0.1561	0.003	2.119	ug/L
|	Ag	107	70.668	0.00	-0.0008	0.003	348.179	ug/L
|	Cd	114	1130.674	0.00	1.2064	0.036	2.989	ug/L
| >	In	115	357798.758	357798.76				ug/L
|	Sn	118	259.603	0.00	0.0530	0.001	2.511	ug/L
⌊	Sb	123	74.537	0.00	0.0125	0.004	35.240	ug/L
⌈	Ba	135	21903.857	0.05	16.9518	0.571	3.367	ug/L
|	Ce	140	192113.949	0.40				ug/L
⌊>	Tb	159	482169.156	482169.16				ug/L
⌈	Ho	165	1453.585	0.00				ug/L
|	Tl	203	493.017	0.00	0.0692	0.003	3.954	ug/L
|	Tl	205	1196.858	0.00	0.0625	0.005	7.594	ug/L
|	Pb	206	47525.155	0.09	9.0615	0.166	1.828	ug/L
|	Pb	207	40897.540	0.08	8.2654	0.091	1.101	ug/L
|	Pb	208	190352.697	0.37	8.6437	0.122	1.416	ug/L
|	U	238	24914.923	0.05	0.6074	0.015	2.529	ug/L
⌊>	Bi	209	507371.691	507371.69				ug/L

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⌈	Na	23	206640.482	0.22	0.0169	0.001	3.130	mg/L
|	Mg	24	1534831.666	4.22	0.3915	0.011	2.881	mg/L
|	K	39	3674051.906	8.21	0.3111	0.012	3.782	mg/L
|	Ca	43	3280.868	0.01	0.1449	0.007	4.811	mg/L
|	Fe	54	11168929.211	30.57	16.2022	0.884	5.453	mg/L
|	Fe	57	4309273.104	11.82	15.2150	0.786	5.168	mg/L
⌊>	Sc-1	45	363992.353	363992.35				mg/L
	Cl	35	15076.025	-4708.86				mg/L
	Kr	83	40.334	4.33				mg/L
	Br	81	6243.951	-916.61				mg/L
	P	31	700900.780	690777.64				mg/L
	S	34	180136.332	-21630.17				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		104.962			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.811			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.302			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.987			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102057112
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Method 6020 - Summary Report

Sample ID: L1102057113

Sample Date/Time: Friday, February 25, 2011 19:55:57
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 52
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20571.306	-0.00				ug/L
|	Be	9	86.000	0.00	0.3039	0.066	21.750	ug/L
|	Al	27	41376760.609	120.09	6491.3037	313.883	4.835	ug/L
|>	Sc	45	344989.430	344989.43				ug/L
⌈	Ti	49	23339.548	0.05	39.9344	1.296	3.246	ug/L
|	V	51	291416.035	0.59	31.0921	0.648	2.084	ug/L
|	Cr	52	109784.174	0.21	13.2264	0.335	2.535	ug/L
|	Cr	53	12752.741	0.02	13.3717	0.610	4.559	ug/L
|	Mn	55	3074782.347	6.29	260.0114	5.550	2.135	ug/L
|	Co	59	22362.867	0.05	2.3032	0.026	1.128	ug/L
|	Ni	60	6077.241	0.01	2.9966	0.044	1.455	ug/L
|	Cu	65	12597.055	0.03	6.0306	0.098	1.631	ug/L
|	Zn	66	18487.259	0.04	14.5051	0.284	1.959	ug/L
|>	Ge	72	489073.940	489073.94				ug/L
|	As	75	1622.321	0.00	1.8792	0.058	3.071	ug/L
|	Se	77	71.334	0.00	-0.0596	0.167	279.994	ug/L
|	Se	82	23.313	0.00	0.1581	0.130	82.139	ug/L
⌊	Rb	85	50880.628	0.10				mg/L
	Y	89	304707.714	14010.53				ug/L
	Rh	103	8.667	0.33				ug/L
⌈	Mo	98	229.315	0.00	0.1259	0.011	8.501	ug/L
|	Ag	107	131.336	0.00	0.0147	0.002	14.738	ug/L
|	Cd	114	22.648	0.00	0.0429	0.005	11.445	ug/L
|>	In	115	355133.578	355133.58				ug/L
|	Sn	118	109.601	0.00	0.0080	0.004	55.855	ug/L
⌊	Sb	123	27.156	-0.00	-0.0019	0.001	76.158	ug/L
⌈	Ba	135	33727.117	0.07	25.8179	0.347	1.344	ug/L
|	Ce	140	204626.073	0.42				ug/L
|>	Tb	159	487370.557	487370.56				ug/L
⌈	Ho	165	1643.633	0.00				ug/L
|	Tl	203	527.686	0.00	0.0752	0.002	2.690	ug/L
|	Tl	205	1363.563	0.00	0.0738	0.001	0.807	ug/L
|	Pb	206	27784.160	0.05	5.3006	0.095	1.790	ug/L
|	Pb	207	23565.644	0.05	4.7657	0.146	3.064	ug/L
|	Pb	208	109755.817	0.22	4.9891	0.034	0.673	ug/L
|	U	238	23245.935	0.05	0.5713	0.024	4.252	ug/L
|>	Bi	209	502890.929	502890.93				ug/L

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⌈	Na	23	60907.665	-0.17	-0.0059	0.000	6.823	mg/L
|	Mg	24	754976.799	2.19	0.2020	0.009	4.485	mg/L
|	K	39	2263726.369	4.68	0.1791	0.011	6.204	mg/L
|	Ca	43	2180.456	0.01	0.0990	0.006	5.679	mg/L
|	Fe	54	10591002.383	30.57	16.2021	0.208	1.282	mg/L
|	Fe	57	4216876.672	12.21	15.7103	0.319	2.029	mg/L
⌊>	Sc-1	45	344989.430	344989.43				mg/L
	Cl	35	29209.267	9424.38				mg/L
	Kr	83	40.667	4.67				mg/L
	Br	81	6507.451	-653.11				mg/L
	P	31	62781.795	52658.66				mg/L
	S	34	180954.416	-20812.09				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		105.182			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.067			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.341			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.112			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: L1102050607

Sample Date/Time: Friday, February 25, 2011 20:02:44
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 16
Method File: C:\elandata\Method\6020a.mth
Sample Description: 100

User ID: JYH
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	16563.825	-0.00				ug/L
|	Be	9	3.333	0.00	0.0509	0.012	23.996	ug/L
|	Al	27	3617.327	0.01	0.3450	0.099	28.833	ug/L
|>	Sc	45	277233.850	277233.85				ug/L
⌈	Ti	49	60.006	0.00	0.0215	0.039	180.168	ug/L
|	V	51	1805.350	-0.00	-0.0605	0.027	45.176	ug/L
|	Cr	52	6828.399	-0.00	-0.1178	0.009	7.340	ug/L
|	Cr	53	926.803	0.00	0.5046	0.191	37.851	ug/L
|	Mn	55	58531.118	0.13	5.3415	0.033	0.611	ug/L
|	Co	59	211.338	0.00	-0.0037	0.001	15.456	ug/L
|	Ni	60	188.004	0.00	0.0458	0.011	23.921	ug/L
|	Cu	65	430.347	0.00	0.1727	0.014	7.998	ug/L
|	Zn	66	2322.960	0.00	1.5448	0.044	2.823	ug/L
|>	Ge	72	442700.501	442700.50				ug/L
|	As	75	1270.279	0.00	1.6490	0.188	11.407	ug/L
|	Se	77	100.001	0.00	0.5253	0.202	38.547	ug/L
|	Se	82	509.336	0.00	6.5355	0.849	12.996	ug/L
⌊	Rb	85	667.362	0.00				mg/L
	Y	89	265711.078	-24986.11				ug/L
	Rh	103	30.667	22.33				ug/L
⌈	Mo	98	65.087	0.00	0.0435	0.006	12.706	ug/L
|	Ag	107	49.334	0.00	-0.0054	0.006	108.573	ug/L
|	Cd	114	-1.244	-0.00	0.0174	0.004	24.247	ug/L
|>	In	115	330719.404	330719.40				ug/L
|	Sn	118	159.868	0.00	0.0269	0.002	8.035	ug/L
⌊	Sb	123	42.161	0.00	0.0037	0.002	55.252	ug/L
⌈	Ba	135	25679.546	0.06	20.5331	0.333	1.620	ug/L
|	Ce	140	80.008	0.00				ug/L
|>	Tb	159	466690.323	466690.32				ug/L
⌈	Ho	165	6.667	0.00				ug/L
|	Tl	203	133.336	0.00	0.0156	0.001	8.869	ug/L
|	Tl	205	350.041	0.00	0.0108	0.006	54.930	ug/L
|	Pb	206	484.017	0.00	-0.0046	0.009	206.024	ug/L
|	Pb	207	414.679	0.00	-0.0024	0.005	196.555	ug/L
|	Pb	208	1972.765	0.00	0.0065	0.006	87.789	ug/L
|	U	238	1566.139	0.00	0.0382	0.000	0.863	ug/L
|>	Bi	209	459391.294	459391.29				ug/L

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⌈	Na	23	244951958.766	885.02	51.5188	2.488	4.829	mg/L
|	Mg	24	1475058.935	5.33	0.4956	0.029	5.906	mg/L
|	K	39	1341421.411	2.96	0.1147	0.008	7.002	mg/L
|	Ca	43	19427.489	0.07	1.1893	0.049	4.144	mg/L
|	Fe	54	40591.054	0.01	0.0042	0.003	69.136	mg/L
|	Fe	57	6642.871	0.00	0.0027	0.002	83.065	mg/L
⌊>	Sc-1	45	277233.850	277233.85				mg/L
	Cl	35	1357431.190	1337646.30				mg/L
	Kr	83	40.334	4.33				mg/L
	Br	81	344163.593	337003.03				mg/L
	P	31	8964.704	-1158.43				mg/L
	S	34	162497.418	-39269.09				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		95.209			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		92.257			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		93.211			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		89.626			
⌈	Na	23					

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	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1102050607
Report Date/Time: Friday, February 25, 2011 20:04:56
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Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Friday, February 25, 2011 20:09:30
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17665.855	0.00				ug/L
|	Be	9	12186.760	0.04	48.2950	0.215	0.444	ug/L
|	Al	27	246740.724	0.90	48.7789	2.016	4.133	ug/L
⌊>	Sc	45	271624.865	271624.86				ug/L
⌈	Ti	49	52844.599	0.12	101.7463	3.454	3.395	ug/L
|	V	51	419361.074	0.96	50.4459	1.488	2.950	ug/L
|	Cr	52	355211.278	0.80	50.9864	0.308	0.603	ug/L
|	Cr	53	40847.337	0.09	49.7264	0.496	0.998	ug/L
|	Mn	55	534976.422	1.23	50.7289	0.731	1.441	ug/L
|	Co	59	420447.264	0.97	49.2250	0.948	1.926	ug/L
|	Ni	60	87881.710	0.20	49.5904	0.361	0.728	ug/L
|	Cu	65	92131.059	0.21	49.9700	0.114	0.228	ug/L
|	Zn	66	55209.888	0.13	49.9507	0.301	0.603	ug/L
| >	Ge	72	435234.094	435234.09				ug/L
|	As	75	41959.655	0.10	50.2566	0.602	1.197	ug/L
|	Se	77	3135.825	0.01	51.4304	0.442	0.859	ug/L
|	Se	82	3778.755	0.01	49.9873	0.486	0.973	ug/L
⌊	Rb	85	1554.803	0.00				mg/L
	Y	89	266921.833	-23775.36				ug/L
	Rh	103	17.667	9.33				ug/L
⌈	Mo	98	189697.925	0.58	106.8444	0.993	0.929	ug/L
|	Ag	107	179621.854	0.55	49.6827	0.391	0.787	ug/L
|	Cd	114	42797.089	0.13	49.3808	1.344	2.721	ug/L
| >	In	115	325793.747	325793.75				ug/L
|	Sn	118	152561.489	0.47	50.5272	0.404	0.800	ug/L
⌊	Sb	123	152572.159	0.47	51.2493	0.155	0.303	ug/L
⌈	Ba	135	61263.724	0.14	51.1229	1.098	2.147	ug/L
|	Ce	140	40.004	0.00				ug/L
⌊>	Tb	159	447042.465	447042.47				ug/L
⌈	Ho	165	10.001	0.00				ug/L
|	Tl	203	278902.682	0.63	49.0585	1.143	2.331	ug/L
|	Tl	205	690749.713	1.55	49.9330	0.650	1.302	ug/L
|	Pb	206	231757.782	0.52	50.7764	0.389	0.766	ug/L
|	Pb	207	215476.891	0.48	50.0416	1.351	2.701	ug/L
|	Pb	208	971615.240	2.18	50.6555	0.109	0.216	ug/L
|	U	238	1741959.634	3.91	48.6638	1.208	2.483	ug/L
⌊>	Bi	209	445855.931	445855.93				ug/L

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Na	23	23185415.375	85.06	4.9552	0.158	3.194	mg/L
Mg	24	14622792.082	53.87	5.0295	0.197	3.910	mg/L
K	39	36147296.127	131.30	4.9133	0.211	4.296	mg/L
Ca	43	79475.871	0.29	4.9903	0.112	2.252	mg/L
Fe	54	2663241.251	9.67	5.1243	0.127	2.486	mg/L
Fe	57	1071350.630	3.92	5.0509	0.177	3.511	mg/L
> Sc-1	45	271624.865	271624.86				mg/L
Cl	35	15996.117	-3788.77				mg/L
Kr	83	39.667	3.67				mg/L
Br	81	14533.960	7373.40				mg/L
P	31	8151.994	-1971.14				mg/L
S	34	165948.654	-35817.85				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	100.892				
Cr	52	101.973				
Cr	53					
Mn	55	101.458				
Co	59	98.450				
Ni	60	99.181				
Cu	65	99.940				
Zn	66	99.901				
> Ge	72		93.603			
As	75	100.513				
Se	77					
Se	82	99.975				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	99.365				
Cd	114	98.762				
> In	115		90.883			
Sn	118					
Sb	123	102.499				
Ba	135	102.246				
Ce	140					
> Tb	159		89.286			
Ho	165					
Tl	203	98.117				
Tl	205					
Pb	206					
Pb	207					
Pb	208	101.311				
U	238	97.328				
> Bi	209		86.985			
Na	23					

Sample ID: QC Std 6
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|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
\└>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Friday, February 25, 2011 20:11:42

Approved: February 28, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Friday, February 25, 2011 20:16:46
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: JYH

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	16613.834	0.00				ug/L
|	Be	9	6.000	0.00	0.0614	0.012	19.757	ug/L
|	Al	27	1250.078	-0.00	-0.1048	0.034	32.719	ug/L
⌊>	Sc	45	263948.902	263948.90				ug/L
⌈	Ti	49	40.004	-0.00	-0.0162	0.049	305.855	ug/L
|	V	51	2082.457	-0.00	-0.0246	0.004	14.514	ug/L
|	Cr	52	6852.083	-0.00	-0.1017	0.020	19.275	ug/L
|	Cr	53	240.027	-0.00	-0.3238	0.055	16.840	ug/L
|	Mn	55	328.342	-0.00	-0.0976	0.001	1.200	ug/L
|	Co	59	79.334	-0.00	-0.0188	0.001	6.467	ug/L
|	Ni	60	32.667	-0.00	-0.0402	0.003	7.955	ug/L
|	Cu	65	90.001	0.00	-0.0085	0.006	67.909	ug/L
|	Zn	66	436.347	-0.00	-0.1462	0.026	18.022	ug/L
|>	Ge	72	437027.756	437027.76				ug/L
|	As	75	-109.474	-0.00	0.0252	0.030	118.613	ug/L
|	Se	77	42.667	-0.00	-0.4108	0.042	10.113	ug/L
|	Se	82	6.919	-0.00	-0.0241	0.190	790.086	ug/L
⌊	Rb	85	15.667	0.00				mg/L
	Y	89	267244.810	-23452.38				ug/L
	Rh	103	7.333	-1.00				ug/L
⌈	Mo	98	75.380	0.00	0.0508	0.011	22.497	ug/L
|	Ag	107	16.000	0.00	-0.0142	0.001	10.257	ug/L
|	Cd	114	-4.066	-0.00	0.0141	0.003	21.573	ug/L
|>	In	115	319161.502	319161.50				ug/L
|	Sn	118	131.201	0.00	0.0190	0.003	14.267	ug/L
⌊	Sb	123	33.914	-0.00	0.0013	0.002	178.320	ug/L
⌈	Ba	135	11.333	0.00	0.0152	0.003	21.949	ug/L
|	Ce	140	23.336	0.00				ug/L
⌊>	Tb	159	434831.343	434831.34				ug/L
⌈	Ho	165	3.334	0.00				ug/L
|	Tl	203	29.334	0.00	-0.0018	0.000	11.999	ug/L
|	Tl	205	53.339	0.00	-0.0097	0.002	17.089	ug/L
|	Pb	206	332.676	0.00	-0.0337	0.001	3.049	ug/L
|	Pb	207	307.341	0.00	-0.0235	0.004	19.008	ug/L
|	Pb	208	1344.049	0.00	-0.0222	0.002	9.056	ug/L
|	U	238	70.668	0.00	-0.0023	0.000	4.786	ug/L
⌊>	Bi	209	438180.575	438180.57				ug/L

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⌈	Na	23	36553.688	-0.21	-0.0081	0.000	5.432	mg/L
|	Mg	24	430.052	0.00	-0.0024	0.000	1.321	mg/L
|	K	39	548348.456	0.20	0.0114	0.004	38.596	mg/L
|	Ca	43	130.014	-0.00	-0.0005	0.002	350.202	mg/L
|	Fe	54	37052.893	-0.00	0.0010	0.004	398.534	mg/L
|	Fe	57	6075.791	0.00	0.0015	0.002	117.505	mg/L
⌊>	Sc-1	45	263948.902	263948.90				mg/L
	Cl	35	14163.359	-5621.53				mg/L
	Kr	83	47.667	11.67				mg/L
	Br	81	7850.414	689.85				mg/L
	P	31	7415.427	-2707.71				mg/L
	S	34	159952.620	-41813.88				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		93.989			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		89.032			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		86.848			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		85.488			
⌈	Na	23					

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 20:18:57
Page 2

Approved: February 28, 2011

	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Friday, February 25, 2011 20:18:57

Approved: February 28, 2011

2.1.3 Metals CVAA Data (Mercury)

2.1.3.1 Summary Data

Login Number: L11020574

Department: Metals - AA

Analyst: Pierce Morris

METHOD

Preparation: SW-846 7470

Analysis: SW-846 7470

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG357502 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 22246
Approved By: Sheri Pfalzgraf

LABORATORY REPORT

L11020574

03/07/11 10:27

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA

P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-1DM-21811-W	L11020574-01	7470A	1	19-FEB-11

Microbac Laboratories Inc.

Report Number: **L11020574**
Report Date : **March 7, 2011**

Sample Number:	**L11020574-01**	PrePrep Method:	**NONE**	Instrument:	**HYDRA**
Client ID:	**SWMU-57-1DM-21811-W**	Prep Method:	**7470A**	Prep Date:	**02/24/2011 09:08**
Matrix:	**Water**	Analytical Method:	**7470A**	Cal Date:	**02/24/2011 13:20**
Workgroup Number:	**WG357502**	Analyst:	**PDM**	Run Date:	**02/24/2011 14:05**
Collect Date:	**02/18/2011 15:45**	Dilution:	**1**	File ID:	**HY.022411.140516**
Sample Tag:	**01**	Units:	**mg/L**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Mercury	**7439-97-6**	**0.000133**	**J**	**0.000200**	**0.000100**

J Estimated value ; the analyte concentration was less than the low standard (LOQ)

2.1.3.2 QC Summary

Example Cold Vapor Mercury Calculations
Hydra AA Mercury Analyzer

1.0 Initial Calibration (ICAL) Parameters
The system performs linear regression from data consisting of a blank and five standards.

2.0 Calculating the concentration (C) of an element in water using data from run log and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted to Volume (mL)	40
Vi = Aliquot Volume (mL)	40
D = Manual dilution factor, if required (10X = 10)	1
Cx = Concentration of element in ppb (ug/L)	0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Ws} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted to volume (mL)	40
Ws = Aliquot weight (g)	0.6
D = Manual dilution factor	1
Cx = Concentration of element in ug/kg	6.67

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

1 Cx = Concentration calculated as received (wet basis)	6.67
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (ug/kg)	8.33

8.33 ug/kg = 0.00833 mg/kg

Microbac Laboratories Inc.
Metals Digest Log

Workgroup: WG357469
Analyst: BRG
Spike Analyst: BRG
Method: 7470A
Run Date: 02/24/2011 09:08
Hotblock Start Temp: 95.6 @ 08:45
Hotblock End Temp: 97.3 @ 10:45

SOP: ME404 Revison 12
Spike Solution: STD44127
Spike Witness: VC
Digestion Tubes Lot #: COA15251
HNO3 Lot #: COA15168
KMnO4 1:1 Lot #: RGT15577
H2SO4 Lot #: COA14202
K2S2O8 1:1 Lot #: RGT15459
Mercury Water ICV Lot #: STD44129
HG H2O STDS 10PPM Lot #: STD44135

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG357469-02	BLANK	1	40 mL	40 mL		
2	WG357088-01	FBLK	18	4 mL	40 mL		
3	WG357390-01	FBLK	17	4 mL	40 mL		
4	WG357469-03	LCS	1	40 mL	40 mL	4 mL	
5	L11020502-17	SAMP	18	4 mL	40 mL		02/28/11
6	L11020506-10	SAMP	18	4 mL	40 mL		02/28/11
7	L11020506-11	SAMP	18	4 mL	40 mL		02/28/11
8	L11020572-01	SAMP	17	4 mL	40 mL		02/28/11
9	L11020572-02	SAMP	17	4 mL	40 mL		02/28/11
10	L11020572-03	SAMP	17	4 mL	40 mL		02/28/11
11	L11020572-04	SAMP	17	4 mL	40 mL		02/28/11
12	L11020572-05	SAMP	17	4 mL	40 mL		02/28/11
13	L11020572-06	SAMP	17	4 mL	40 mL		02/28/11
14	L11020572-07	SAMP	17	4 mL	40 mL		02/28/11
15	WG357469-01	REF	1	40 mL	40 mL		
16	L11020574-01	SAMP	1	40 mL	40 mL		03/04/11
17	L11020587-01	SAMP	17	4 mL	40 mL		02/28/11
18	L11020588-01	SAMP	17	4 mL	40 mL		03/01/11
19	L11020612-02	SAMP	1	40 mL	40 mL		02/28/11
20	L11020612-03	SAMP	1	40 mL	40 mL		02/28/11
21	WG357469-04	MS	1	36 mL	40 mL	4 mL	
22	WG357469-05	MSD	1	36 mL	40 mL	4 mL	

WG357088-01	CALWET Blank
L11020502-17	CALWET; High NA
L11020506-10	CALWET; High NA
L11020506-11	CALWET; High NA

Analyst: Brenda Gregory

Reviewer: Vicki Collins

HB_DIG - Modified 09/30/2009
PDF ID: 1928509
Report generated: 02/24/2011 11:35

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 022411A.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 12
Maintenance Log ID: 36568

Calibration Std: STD44135 ICV Std: STD44129 Post Spike: STD44135
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

357502
Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.022411.131017	WG357632-01	Calibration Point		1		02/24/11 13:10
2	HY.022411.131200	WG357632-02	Calibration Point		1		02/24/11 13:12
3	HY.022411.131352	WG357632-03	Calibration Point		1		02/24/11 13:13
4	HY.022411.131634	WG357632-04	Calibration Point		1		02/24/11 13:16
5	HY.022411.131827	WG357632-05	Calibration Point		1		02/24/11 13:18
6	HY.022411.132020	WG357632-06	Calibration Point		1		02/24/11 13:20
7	HY.022411.132202	WG357632-07	Initial Calibration Verification		1		02/24/11 13:22
8	HY.022411.132357	WG357632-08	Initial Calib Blank		1		02/24/11 13:23
9	HY.022411.132541	WG357632-09	CCV		1		02/24/11 13:25
10	HY.022411.132724	WG357632-10	CCB		1		02/24/11 13:27
11	HY.022411.133115	WG357469-02	Method/Prep Blank	40/40	1		02/24/11 13:31
12	HY.022411.133326	WG357469-03	Laboratory Control S	40/40	1		02/24/11 13:33
13	HY.022411.133521	WG357088-01	Fluid Blank		1		02/24/11 13:35
14	HY.022411.133706	WG357390-01	Fluid Blank		1		02/24/11 13:37
15	HY.022411.133850	L11020502-17	GB-81-5	4/40	1		02/24/11 13:38
16	HY.022411.134034	WG357502-01	Post Digestion Spike		1	L11020502-17	02/24/11 13:40
17	HY.022411.134232	L11020506-10	GB-66-1	4/40	1		02/24/11 13:42
18	HY.022411.134435	L11020506-11	GB-66-1-DUP	4/40	1		02/24/11 13:44
19	HY.022411.134629	L11020572-01	SWMU-57-B4-0-6-WC	4/40	1		02/24/11 13:46
20	HY.022411.134812	WG357502-02	Post Digestion Spike		1	L11020572-01	02/24/11 13:48
21	HY.022411.134957	WG357632-11	CCV		1		02/24/11 13:49
22	HY.022411.135211	WG357632-12	CCB		1		02/24/11 13:52
23	HY.022411.135406	L11020572-02	SWMU-57-SB7-0-2-WC	4/40	1		02/24/11 13:54
24	HY.022411.135558	L11020572-03	SWMU-57-PS-0-6-WC	4/40	1		02/24/11 13:55
25	HY.022411.135740	L11020572-04	SWMU-57-SB2-0-2-WC	4/40	1		02/24/11 13:57
26	HY.022411.135933	L11020572-05	SWMU-57-SB3-0-2-WC	4/40	1		02/24/11 13:59
27	HY.022411.140118	L11020572-06	SWMU-57-SB18-0-2-WC	4/40	1		02/24/11 14:01
28	HY.022411.140303	L11020572-07	SWMU-57-PS2-0-6-WC	4/40	1		02/24/11 14:03
29	HY.022411.140516	WG357469-01	Reference Sample	40/40	1	L11020574-01	02/24/11 14:05
30	HY.022411.140709	WG357469-04	Matrix Spike	36/40	1	L11020574-01	02/24/11 14:07
31	HY.022411.140915	WG357469-05	Matrix Spike Duplica	36/40	1	L11020574-01	02/24/11 14:09
32	HY.022411.141100	L11020587-01	OH VALLEY COAL	4/40	1		02/24/11 14:11
33	HY.022411.141244	WG357632-13	CCV		1		02/24/11 14:12
34	HY.022411.141427	WG357632-14	CCB		1		02/24/11 14:14

Page: 1 Approved: February 28, 2011

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 022411A.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 12
Maintenance Log ID: 36568

Calibration Std: STD44135 ICV Std: STD44129 Post Spike: STD44135
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

357502
Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	HY.022411.141611	L11020588-01	SANDBLAST SAND	4/40	1		02/24/11 14:16
36	HY.022411.141808	L11020612-02	AV-OU7-VBII-C1-022111	40/40	1		02/24/11 14:18
37	HY.022411.141952	WG357502-03	Post Digestion Spike		1	L11020612-02	02/24/11 14:19
38	HY.022411.142138	L11020612-03	AV-OU7-VBII-C2-022111	40/40	1		02/24/11 14:21
39	HY.022411.142341	WG357502-04	Post Digestion Spike		1	L11020506-10	02/24/11 14:23
40	HY.022411.142629	WG357502-05	Post Digestion Spike		1	L11020506-11	02/24/11 14:26
41	HY.022411.142833	WG357632-15	CCV		1		02/24/11 14:28
42	HY.022411.143027	WG357632-16	CCB		1		02/24/11 14:30

  Approved: February 28, 2011

Maren Berry

Microbac Laboratories Inc.

Data Checklist

Date: 24-FEB-2011
Analyst: PDM
Analyst: NA
Method: 7470
Instrument: HYDRA
Curve Workgroup: 357632
Runlog ID: 39217
Analytical Workgroups: 357502

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	0502,0506,0572,0574,0612
Client Forms	X
Level X	
Level 3	0502,0506
Level 4	0572,0574,0612
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	PDM
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
25-FEB-2011
Pierce Morris

Secondary Reviewer:
28-FEB-2011
Maren Berry

CHECKLIST1 - Modified 03/05/2008
Generated: FEB-28-2011 10:30:01

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method 7470A AAB#: WG357502

Login Number: L11020574

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-1DM-21811-W	01	02/18/11					02/24/11	5.7	28		02/24/11	5.9	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1930060
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L11020574	Work Group:	WG357502
Blank File ID:	HY.022411.133115	Blank Sample ID:	WG357469-02
Prep Date:	02/24/11 09:08	Instrument ID:	HYDRA
Analyzed Date:	02/24/11 13:31	Method:	7470A
Analyst:	PDM		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG357469-03	HY.022411.133326	02/24/11 13:33	01
SWMU-57-1DM-21811-W	L11020574-01	HY.022411.140516	02/24/11 14:05	01

Report Name: BLANK_SUMMARY
PDF File ID: 1930061
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11020574 Prep Date: 02/24/11 09:08 Sample ID: WG357469-02
Instrument ID: HYDRA Run Date: 02/24/11 13:31 Prep Method: 7470A
File ID: HY.022411.133115 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG357502 Matrix: Water Units: mg/L
Contract #: Cal ID: HYDRA-24-FEB-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Mercury	0.000100	0.000200	0.000100	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1930062
25-FEB-2011 13:40

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357469-03
Instrument ID: HYDRA Run Time: 13:33 Prep Method: 7470A
File ID: HY.022411.133326 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG357502 Matrix: Water Units: mg/L
QC Key: DOD4 Lot#: STD44127 Cal ID: HYDRA-24-FEB-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00368	92.0	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1930063
Report generated: 02/25/2011 13:40

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11020574 Cal ID:HYDRA- Worknum:WG357502
Instrument ID:HYDRA Contract #: Method:7470A
Parent ID:WG357469-01 File ID:HY.022411.140516 Dil:1 Matrix:WATER
Sample ID:WG357469-04 MS File ID:HY.022411.140709 Dil:1 Units:mg/L
Sample ID:WG357469-05 MSD File ID:HY.022411.140915 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury	0.000133	0.00444	0.00447	97.5	0.00444	0.00437	95.3	2.26	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008
PDF File ID:1930064
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11020574 **Worknum:** WG357502
Instrument ID: HYDRA **Method:** 7470A
Post Spike ID: WG357502-03 **File ID:** HY.022411.141952 **Dil:** 1 **Units:** ug/L
Sample ID: L11020612-02 **File ID:** HY.022411.141808 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.17		0.227		1	96.6	85 - 115	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1930059
Report generated: 02/25/2011 13:40

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L11020574
Analytical Method: 7470A
ICAL Worknum: WG357632

Workgroup (AAB#): WG357502
Instrument ID: HYDRA
Initial Calibration Date: 02/24/2011 13:20

Analyte	WG357632-01		WG357632-02		WG357632-03		WG357632-04		WG357632-05		WG357632-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	-10	0.200	671	1.00	3317	2.00	6838	5.00	16825	10.0	34237

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 1930065
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L11020574
Analytical Method: 7470A
ICAL Worknum: WG357632

Workgroup (AAB#): WG357502
Instrument ID: HYDRA
Initial Calibration Date: 02/24/2011 13:20

Analyte	R	Q
Mercury	1.000	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 1930065
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357632-08
Instrument ID: HYDRA Run Time: 13:23 Method: 7470A
File ID: HY.022411.132357 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG357502 Cal ID: HYDRA - 24-FEB-11
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

U = Result is less than 2 x MDL
F = Result is between MDL and 2 x MDL
* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1930067
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020574	Run Date:	02/24/2011	Sample ID:	WG357632-10
Instrument ID:	HYDRA	Run Time:	13:27	Method:	7470A
File ID:	HY.022411.132724	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG357502	Cal ID:	HYDRA - 24-FEB-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1930069
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020574	Run Date:	02/24/2011	Sample ID:	WG357632-12
Instrument ID:	HYDRA	Run Time:	13:52	Method:	7470A
File ID:	HY.022411.135211	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG357502	Cal ID:	HYDRA - 24-FEB-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1930069
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020574	Run Date:	02/24/2011	Sample ID:	WG357632-14
Instrument ID:	HYDRA	Run Time:	14:14	Method:	7470A
File ID:	HY.022411.141427	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG357502	Cal ID:	HYDRA - 24-FEB-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1930069
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11020574	Run Date:	02/24/2011	Sample ID:	WG357632-16
Instrument ID:	HYDRA	Run Time:	14:30	Method:	7470A
File ID:	HY.022411.143027	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG357502	Cal ID:	HYDRA - 24-FEB-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1930069
Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357632-07

Instrument ID: HYDRA Run Time: 13:22 Method: 7470A

File ID: HY.022411.132202 Analyst: PDM Units: ug/L

Workgroup (AAB#): WG357502 Cal ID: HYDRA - 24-FEB-11

QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.03	102	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008

PDF File ID: 1930066

Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357632-09

Instrument ID: HYDRA Run Time: 13:25 Method: 7470A

File ID: HY.022411.132541 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357502 Cal ID: HYDRA - 24-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00201	mg/L	101	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1930068

Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357632-11

Instrument ID: HYDRA Run Time: 13:49 Method: 7470A

File ID: HY.022411.134957 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357502 Cal ID: HYDRA - 24-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00205	mg/L	103	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1930068

Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357632-13

Instrument ID: HYDRA Run Time: 14:12 Method: 7470A

File ID: HY.022411.141244 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357502 Cal ID: HYDRA - 24-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00206	mg/L	103	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1930068

Report generated 02/25/2011 13:40

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11020574 Run Date: 02/24/2011 Sample ID: WG357632-15

Instrument ID: HYDRA Run Time: 14:28 Method: 7470A

File ID: HY.022411.142833 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG357502 Cal ID: HYDRA - 24-FEB-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00199	mg/L	99.5	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1930068

Report generated 02/25/2011 13:40

2.1.3.3 Raw Data

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number:L11020588
Analytical Method:7470A
ICAL Worknum:WG357632

Workgroup (AAB#):WG357502
Instrument ID:HYDRA
Initial Calibration Date:02/24/2011 13:20

Analyte	WG357632-01		WG357632-02		WG357632-03		WG357632-04		WG357632-05		WG357632-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	-10	0.200	671	1.00	3317	2.00	6838	5.00	16825	10.0	34237

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 1930053
Report generated 02/25/2011 13:40

Approved: February 25, 2011

Pierce Morris

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L11020588

Analytical Method: 7470A

ICAL Worknum: WG357632

Workgroup (AAB#): WG357502

Instrument ID: HYDRA

Initial Calibration Date: 02/24/2011 13:20

Analyte	R	Q
Mercury	1.000	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 1930053
Report generated 02/25/2011 13:40

Approved: February 25, 2011

Pierce Morris

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 13:10:17 24 Feb 11 HG

Hg .000 ppb -10

*** Standard: 2 Rep: 1 Seq: 2 13:12:00 24 Feb 11 HG

Hg .200 ppb 671

*** Standard: 3 Rep: 1 Seq: 3 13:13:52 24 Feb 11 HG

Hg 1.00 ppb 3317

*** Standard: 4 Rep: 1 Seq: 4 13:16:34 24 Feb 11 HG

Hg 2.00 ppb 6838

*** Standard: 5 Rep: 1 Seq: 5 13:18:27 24 Feb 11 HG

Hg 5.00 ppb 16825

*** Standard: 6 Rep: 1 Seq: 6 13:20:20 24 Feb 11 HG

Hg 10.0 ppb 34237

*** Check Standard: 2 Ck2ICV Seq: 7 13:22:02 24 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.	2.03	2.00	ppb	.000

*** Check Standard: 3 Ck3ICB Seq: 8 13:23:57 24 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		-8.25	-.016	.200	ppb	.000

*** Check Standard: 4 Ck4CCV Seq: 9 13:25:41 24 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.	2.01	2.00	ppb	.000

*** Check Standard: 5 Ck5CCB Seq: 10 13:27:24 24 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		4.18	.008	.200	ppb	.000

*** Sample ID: WG35746902 Seq: 11 13:31:15 24 Feb 11 HG
PBW 01
Hg .053 ppb .000 .053

*** Sample ID: WG35746903 Seq: 12 13:33:26 24 Feb 11 HG
LCSW 01
Hg 3.68 ppb .000 3.68

Approved: February 25, 2011
Pierre Morris

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: WG35708801 Seq: 13 13:35:21 24 Feb 11 HG								
				SPLP BLANK				
Hg	.022	ppb	.000	.022				
*** Sample ID: WG35739001 Seq: 14 13:37:06 24 Feb 11 HG								
				TCLP BLANK				
Hg	.051	ppb	.000	.051				
*** Sample ID: 1102050217 Seq: 15 13:38:50 24 Feb 11 HG								
Hg	.018	ppb	.000	.018				
*** Sample ID: WG35750201 Seq: 16 13:40:34 24 Feb 11 HG								
				1102050217PS.9				
Hg	.675	ppb	.000	.675				
*** Sample ID: 1102050610 Seq: 17 13:42:32 24 Feb 11 HG								
Hg	.053	ppb	.000	.053				
*** Sample ID: 1102050611 Seq: 18 13:44:35 24 Feb 11 HG								
Hg	.002	ppb	.000	.002				
*** Sample ID: 1102057201 Seq: 19 13:46:29 24 Feb 11 HG								
Hg	.123	ppb	.000	.123				
*** Sample ID: WG35750202 Seq: 20 13:48:12 24 Feb 11 HG								
				1102057201PS.9				
Hg	1.04	ppb	.000	1.04				

*** Check Standard: 4 Ck4CCV Seq: 21 13:49:57 24 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.	2.05	2.00	ppb	.000

*** Check Standard: 5 Ck5CCB Seq: 22 13:52:11 24 Feb 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		13.5	.027	.200	ppb	.000

*** Sample ID: 1102057202 Seq: 23 13:54:06 24 Feb 11 HG								
Hg	.043	ppb	.000	.043				
*** Sample ID: 1102057203 Seq: 24 13:55:58 24 Feb 11 HG								
Hg	.033	ppb	.000	.033				

Approved: February 25, 2011
Pierce Morris

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID: 1102057204            Seq:  25     13:57:40 24 Feb 11   HG

Hg    .039    ppb       .000      .039

*** Sample ID: 1102057205            Seq:  26     13:59:33 24 Feb 11   HG

Hg    .017    ppb       .000      .017

*** Sample ID: 1102057206            Seq:  27     14:01:18 24 Feb 11   HG

Hg    .049    ppb       .000      .049

*** Sample ID: 1102057207            Seq:  28     14:03:03 24 Feb 11   HG

Hg    .056    ppb       .000      .056

*** Sample ID: 1102057401            Seq:  29     14:05:16 24 Feb 11   HG
                          WG35746901
Hg    .133    ppb       .000      .133

*** Sample ID: WG35746904            Seq:  30     14:07:09 24 Feb 11   HG
                        1102057401S
Hg    4.02    ppb       .000      4.02

*** Sample ID: WG35746905            Seq:  31     14:09:15 24 Feb 11   HG
                        1102057401SD
Hg    3.93    ppb       .000      3.93

*** Sample ID: 1102058701            Seq:  32     14:11:00 24 Feb 11   HG

Hg   -.005    ppb       .000     -.005

*** Check Standard: 4  Ck4CCV        Seq:  33     14:12:44 24 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          103.     2.06    2.00   ppb        .000

*** Check Standard: 5  Ck5CCB        Seq:  34     14:14:27 24 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          5.79     .012    .200   ppb        .000

*** Sample ID: 1102058801            Seq:  35     14:16:11 24 Feb 11   HG

Hg    .030    ppb       .000      .030

*** Sample ID: 1102061202            Seq:  36     14:18:08 24 Feb 11   HG

Hg    .227    ppb       .000      .227
```

Approved: February 25, 2011

Pierre Morris

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID: WG35750203            Seq:  37     14:19:52 24 Feb 11   HG
                          1102061202PS.9
Hg    1.17    ppb       .000      1.17

*** Sample ID: 1102061203            Seq:  38     14:21:38 24 Feb 11   HG

Hg    .156    ppb       .000      .156

*** Sample ID: WG35750204            Seq:  39     14:23:41 24 Feb 11   HG
                          1102050610PS.9
Hg    .801    ppb       .000      .801

*** Sample ID: WG35750205            Seq:  40     14:26:29 24 Feb 11   HG
                          1102050611PS.9
Hg    .847    ppb       .000      .847

*** Check Standard: 4  Ck4CCV        Seq:  41     14:28:33 24 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          99.6     1.99    2.00   ppb        .000

*** Check Standard: 5  Ck5CCB        Seq:  42     14:30:27 24 Feb 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          3.16     .006    .200   ppb        .000
```

Approved: February 25, 2011

Pierre Morris

3.0 Attachments

Microbac Laboratories Inc.
Analyst Listing
March 7, 2011

ADC – ANTHONY D. CANTER	AJF – AMANDA J. FICKIESEN	ALB – ANNIE L. BROWN
ALV – AMY L. VALENTINE	AML – TONY M. LONG	AZH – AFTER HOURS
BLG – BRENDA L. GREENWALT	BRG – BRENDA R. GREGORY	CAA – CASSIE A. AUGENSTEIN
CAF – CHERYL A. FLOWERS	CEB – CHAD E. BARNES	CLC – CHRYS L. CRAWFORD
CLS – CARA L. STRICKLER	CLW – CHARISSA L. WINTERS	CPD – CHAD P. DAVIS
CSH – CHRIS S. HILL	DDE – DEBRA D. ELLIOTT	DEL – DON E. LIGHTFRITZ
DEV – DAVID E. VANDENBERG	DGB – DOUGLAS G. BUTCHER	DIH – DEANNA I. HESSON
DLB – DAVID L. BUMGARNER	DLP – DOROTHY L. PAYNE	DLR – DIANNA L. RAUCH
ECL – ERIC C. LAWSON	EDL – ERIN D. LONG	ERP – ERIN R. PORTER
FJB – FRANCES J. BOLDEN	HAV – HEMA VILASAGAR	HJR – HOLLY J. REED
JAL – JOHN A. LENT	JBK – JEREMY B. KINNEY	JDH – JUSTIN D. HESSON
JKT – JANE K. THOMPSON	JLL – JOHN L. LENT	JWR – JOHN W. RICHARDS
JWS – JACK W. SHEAVES	JYH – JI Y. HU	KEB – KATIE E. BARNES
KHR – KIM H. RHODES	KRA – KATHY R. ALBERTSON	LKN – LINDA K. NEDEFF
LSB – LESLIE S. BUCINA	MDA – MIKE D. ALBERTSON	MDC – MIKE D. COCHRAN
MES – MARY E. SCHILLING	MMB – MAREN M. BEERY	MRT – MICHELLE R. TAYLOR
MSW – MATT S. WILSON	PDM – PIERCE D. MORRIS	PWD – PAUL W. DENT
RAH – ROY A. HALSTEAD	RB – BOB BUCHANAN	REK – BOB E. KYER
RLK – ROBIN L. KLINGER	RWC – RODNEY W. CAMPBELL	SLM – STEPHANIE L. MOSSBURG
SLP – SHERI L. PFALZGRAF	TIP – TAE I. PARRISH	TMB – TIFFANY M. BAILEY
TMM – TAMMY M. MORRIS	VC – VICKI COLLIER	WJB – WILL J. BEASLEY
WTD – WADE T. DELONG		

Microbac Laboratories Inc.
List of Valid Qualifiers
March 07, 2011

Qualkey: DOD

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	The reported result is associated with a contaminated method blank.
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
I	Semiquantitative result (out of instrument calibration range)
J	Estimated concentration; sample matrix interference.
J	Estimated value ; the analyte concentration was greater than the highest standard
J	Estimated value ; the analyte concentration was less than the low standard (LOQ)
J	The reported result is an estimated value.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Nontarget analyte; the analyte is a tentativlely identified compound (TIC) by GC/MS
NA	Not applicable
ND	Not detected at or above the reporting limit (RL).
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Analyte was not detected. The concentration is below the reported LOD.
UJ	Undetected; the analyte was analyzed for, but not detected.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)
Z	Cannot be resolved from isomer - see below

*****Special Notes for Organic Analytes**

Qualkey: DOD

1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methylphenol and 4-Methylphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound an are matrix dependent.

COC No. A 2498

156 Starlite Drive
Marietta, OH 45750

KEMRON
ENVIRONMENTAL SERVICES

CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4308
Fax: 740-376-2536

Company Name: UXB-KEMRON

Project Contact: MARY LOU ROCHOTTE | Contact Phone #: 740-373-4308

Turn Around Requirements: 10-DAY | Location: SWMU-57 RFAAP

Project ID: MW0669-400-002 (IDM-CHAR.)

Sampler (print): JONAH ANDERSON | Signature:

Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	TAL-METALS	TOTAL # (LAB USE)
SWMU-57-IDM-0811	X		2-18-11	1545	W	1		1	

Program: ☐ CWA ☐ RCRA ☐ DOD ☐ AFCEE ☐ Other

ADDITIONAL REQUIREMENTS: IN ACCORDANCE W/ QAPP FOR RFAAP

Microbac OVD 221000012530
Received: 02/19/2011 15:23
By: ROBIN KLINGER

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	2-19-11	1335	Robin L. Klinger		

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks:
			Robin L. Klinger	2-19-11	1335	

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

Page _____ of _____

1000012530

COOLER INSPECTION

Received: 02/19/2011 15:23
Delivery Method: Client
Opened By: Robin Klinger
Comments:

Login(s): L11020574|

Cooler(s)

Cooler #	Temp Gun	Temp	Tracking #	COC #	Comments
5474	G	1.0		2498	

1	NA	Were shipping coolers sealed?
2	NA	Were custody seals intact?
3	Yes	Were cooler temperatures in range of 0-6?
4	Yes	Was ice present?
5	Yes	Were COC's received/information complete/signed and dated?
6	Yes	Were sample containers and labels intact and match COC?
7	Yes	Were the correct containers and volumes received?
8	Yes	Were samples received within EPA hold times?
9	Yes	Were correct perservatives used? (water only)
10	Yes	Were pH ranges acceptable? (voa's excluded)
11	NA	Were VOA samples free of headspace (less than 6mm)?

Discrepancies:

Microbac - Ohio Valley Division
158 Starlite Drive
Marietta, OH 45750
Tel: (740)373-4071 Fax: (740)373-4835

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L11020574
Account: 2820
Project: 2820.216
Samples: 1
Due Date: 04-MAR-2011

Samplenum	Container ID	Products
L11020574-01	799631	AG AL AS-MS BA BE CA CD-MS CO CR-MS CU FE HG K

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	22-FEB-2011 15:25	RLK	
2	ANALYZ	W1	DIG	22-FEB-2011 15:44	ERP	RLK
3	STORE	DIG	A2	24-FEB-2011 14:46	RLK	ERP

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login

L11040306 – Decon

158 Starlite Drive, Marietta, OH 45750 • T:740-373-4071 • F:740-373-4835 • http://www.microbac.com

Laboratory Report Number: L11040306

Client: Mary Lou Rochette, 156 Starlite Drive, Marietta, OH, 45750

Please find enclosed the analytical results for the samples you submitted to Microbac Laboratories.

Review and compilation of your report was completed by Microbac's Sales and Service Team. If you have questions, comments or require further assistance regarding this report, please contact your team member noted in the reviewed box below at 800-373-4071. Team member e-mail addresses also appear here for your convenience.

Kathy Albertson	*Team Chemist/Data Specialist*	Kathy.Albertson@microbac.com
Stephanie Mossburg	*Team Chemist/Data Specialist*	Stephanie.Mossburg@microbac.com
Tony Long	*Team Chemist/Data Specialist*	Tony.Long@microbac.com
Amanda Fickiesen	*Client Services Specialist*	Amanda.Fickiesen@microbac.com
Annie Brown	*Client Services Specialist*	Annie.Brown@microbac.com

This report was reviewed on May 05, 2011.

Stephanie Mossburg - Team Chemist/Data Specialist

I certify that all test results meet all of the requirements of the DoD QSM and other applicable contract terms and conditions. Any exceptions are attached to this cover page or addressed in the method narratives presented in this report. All results for soil samples are reported on a 'dry-weight' basis unless specified otherwise. Analytical results for water and wastes are reported on a 'as received' basis unless specified otherwise. A statement of uncertainty for each analysis is available upon request. This laboratory report shall not be reproduced, except in full, without the written approval of Microbac Laboratories, DoD ELAP certification number 2936.01. The reported results are related only to the samples analyzed as received.

This report was certified on May 05, 2011.

David Vandenberg - Managing Director

State of origin: Virginia
Accrediting authority: N/A ID:N/A
QAPP: DOD Ver 4.1
This report contains a total of 808 pages.

Look closer. Go further. Do more.

Microbac REPORT L11040306
PREPARED FOR Kemron Environmental Services
WORK ID:

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1.0 Introduction

LABORATORY REPORT

L11040306

05/05/11 10:21

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA
Invoice Number: 616502
P.O. Number: MSA

Sample Summary

Client ID	Lab ID	Date Collected	Date Received
SWMU-57-4711-WC	L11040306-01	04/07/2011 14:30	04/08/2011

L1_A_PROD_COVER - Modified 02/06/2008
PDF File ID: 1978338
Report generated: 05/05/2011 10:21

Report Number: **L11040306**
Report Date : **May 5, 2011**

Sample Number: **L11040306-01**
Client ID: **SWMU-57-4711-WC**
Matrix: **Water**
Workgroup Number: **WG361466**
Collect Date: **04/07/2011 14:30**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **7470A**
Analytical Method: **7470A**
Analyst: **PDM**
Dilution: **1**
Units: **mg/L**

Instrument: **HYDRA**
Prep Date: **04/11/2011 08:37**
Cal Date: **04/12/2011 13:37**
Run Date: **04/12/2011 15:06**
File ID: **HY.041211.150615**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Mercury	7439-97-6		U	0.000200	0.000100

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11040306-01**
Client ID: **SWMU-57-4711-WC**
Matrix: **Water**
Workgroup Number: **WG361560**
Collect Date: **04/07/2011 14:30**
Sample Tag: **DL01**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **KHR**
Dilution: **10**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **04/11/2011 08:14**
Cal Date: **04/12/2011 11:18**
Run Date: **04/12/2011 20:32**
File ID: **P2.041211.203235**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Aluminum, Total	7429-90-5	81.0		1.00	0.500
Calcium, Total	7440-70-2	28.1		2.00	1.00
Manganese, Total	7439-96-5	2.84		0.100	0.0500

Sample Number: **L11040306-01**
Client ID: **SWMU-57-4711-WC**
Matrix: **Water**
Workgroup Number: **WG361560**
Collect Date: **04/07/2011 14:30**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **KHR**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **04/11/2011 08:14**
Cal Date: **04/12/2011 11:18**
Run Date: **04/12/2011 20:25**
File ID: **P2.041211.202559**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Arsenic, Total	7440-38-2	0.0240		0.0100	0.00500
Barium, Total	7440-39-3	0.251		0.0100	0.00500
Cadmium, Total	7440-43-9	0.0150		0.0100	0.00500
Chromium, Total	7440-47-3	0.0976		0.0200	0.0100
Cobalt, Total	7440-48-4	0.0340		0.0200	0.0100
Copper, Total	7440-50-8	0.126		0.0200	0.0100
Lead, Total	7439-92-1	0.0524		0.00500	0.00250
Magnesium, Total	7439-95-4	7.31		0.500	0.250
Nickel, Total	7440-02-0	0.0572		0.0400	0.0200
Potassium, Total	7440-09-7	6.65		1.00	0.500
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	47.1		0.500	0.250
Zinc, Total	7440-66-6	0.610		0.0200	0.0100

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11040306**
Report Date : **May 5, 2011**

Sample Number: **L11040306-01**
Client ID: **SWMU-57-4711-WC**
Matrix: **Water**
Workgroup Number: **WG361560**
Collect Date: **04/07/2011 14:30**
Sample Tag: **02**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **KHR**
Dilution: **1**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **04/11/2011 08:14**
Cal Date: **04/15/2011 11:20**
Run Date: **04/15/2011 13:51**
File ID: **P2.041511.135145**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Beryllium, Total	7440-41-7		U	0.0100	0.00500
Vanadium, Total	7440-62-2	0.177		0.0100	0.00500

U Analyte was not detected. The concentration is below the reported LOD.

Sample Number: **L11040306-01**
Client ID: **SWMU-57-4711-WC**
Matrix: **Water**
Workgroup Number: **WG361560**
Collect Date: **04/07/2011 14:30**
Sample Tag: **DL02**

PrePrep Method: **NONE**
Prep Method: **3005A**
Analytical Method: **6010B**
Analyst: **KHR**
Dilution: **20**
Units: **mg/L**

Instrument: **PE-ICP2**
Prep Date: **04/11/2011 08:14**
Cal Date: **04/15/2011 11:20**
Run Date: **04/15/2011 13:57**
File ID: **P2.041511.135730**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Iron, Total	7439-89-6	93.9	B	2.00	1.00

B The reported result is associated with a contaminated method blank.

Sample Number: **L11040306-01**
Client ID: **SWMU-57-4711-WC**
Matrix: **Water**
Workgroup Number: **WG361365**
Collect Date: **04/07/2011 14:30**
Sample Tag: **01**

PrePrep Method: **NONE**
Prep Method: **3015**
Analytical Method: **6020**
Analyst: **EDL**
Dilution: **1**
Units: **mg/L**

Instrument: **ELAN-ICP**
Prep Date: **04/11/2011 07:33**
Cal Date: **04/11/2011 09:24**
Run Date: **04/11/2011 22:25**
File ID: **EL.041111.222542**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Antimony, Total	7440-36-0	0.0175		0.00100	0.000500
Selenium, Total	7782-49-2	0.00150		0.00100	0.000500
Thallium, Total	7440-28-0	0.000504		0.000200	0.000100

Sample Number: **L11040306-01**
Client ID: **SWMU-57-4711-WC**
Matrix: **Water**
Workgroup Number: **WG361175**
Collect Date: **04/07/2011 14:30**

PrePrep Method: **NONE**
Prep Method: **SM5210B**
Analytical Method: **SM5210B**
Analyst: **TMM**
Dilution: **1**
Units: **mg/L**

Instrument: **YSI-5000**
Prep Date: **04/08/2011 08:10**
Cal Date:
Run Date: **04/08/2011 08:10**
File ID: **00.1104080810-15**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Biochemical Oxygen Demand		9.74		3.00	1.00

Report Number: **L11040306**
Report Date : **May 5, 2011**

Sample Number:	**L11040306-01**	PrePrep Method:	**NONE**	Instrument:	**UV-120-1V**
Client ID:	**SWMU-57-4711-WC**	Prep Method:	**METHOD**	Prep Date:	**04/14/2011 09:10**
Matrix:	**Water**	Analytical Method:	**410.4 MOD**	Cal Date:	**04/04/2011 09:00**
Workgroup Number:	**WG361906**	Analyst:	**DIH**	Run Date:	**04/14/2011 09:10**
Collect Date:	**04/07/2011 14:30**	Dilution:	**1**	File ID:	**1V.1104140910-23**
		Units:	**mg/L**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Chemical Oxygen Demand		**73.7**		**20.0**	**10.0**

Login Number: L11040306

Department: Login

Chain of Custody:

Shipment Conditions

COC #	Cooler #	Temperature
2171	0013927	1.0

Sample Management: All samples were received intact.

Sample Identification

Lab ID	Client ID
L11040306-01	SWMU-57-4711-WC

Narrative ID: 25308
Approved By: Stephanie Mossburg
Stephanie Mossburg

2.0 Full Sample Data Package

2.1 Metals Data

2.1.1 Metals I C P Data

2.1.1.1 Summary Data

Login Number: L11040306

Department: Metals

Analyst: Kim Rhodes

METHOD

Preparation: SW-846 3005

Analysis: SW-846 6010

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: WG361560 - Due to continuing calibration verification failure for beryllium on 12-APR-2011 at 21:05, all batch QA/QC and client sample 01 were reanalyzed on a later calibration for beryllium.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: WG361560 - The method blank associated with this analytical batch yielded a result for iron that exceeded the limit of detection but was less than the limit of quantitation. However, the reported sample result exceeded that of the method blank by greater than a factor of ten. The iron result was reported with a 'B' qualifier to indicate the association with a noncompliant method blank.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG361560 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: WG361560 - Client sample 01 required dilution analyses in order to obtain results for aluminum, calcium, iron and manganese within the calibration range.

Narrative ID: 25645
Approved By: Sheri Pfalzgraf



LABORATORY REPORT

L11040306

05/05/11 10:21

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA
Invoice Number: 616502
P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-4711-WC	L11040306-01	6010B	10	08-APR-11
SWMU-57-4711-WC	L11040306-01	6010B	1	08-APR-11
SWMU-57-4711-WC	L11040306-01	6010B	1	08-APR-11
SWMU-57-4711-WC	L11040306-01	6010B	20	08-APR-11

Microbac Laboratories Inc.

Report Number: **L11040306**
Report Date : **May 5, 2011**

Sample Number:	**L11040306-01**	PrePrep Method:	**NONE**	Instrument:	**PE-ICP2**
Client ID:	**SWMU-57-4711-WC**	Prep Method:	**3005A**	Prep Date:	**04/11/2011 08:14**
Matrix:	**Water**	Analytical Method:	**6010B**	Cal Date:	**04/12/2011 11:18**
Workgroup Number:	**WG361560**	Analyst:	**KHR**	Run Date:	**04/12/2011 20:32**
Collect Date:	**04/07/2011 14:30**	Dilution:	**10**	File ID:	**P2.041211.203235**
Sample Tag:	**DL01**	Units:	**mg/L**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Aluminum, Total	**7429-90-5**	**81.0**		**1.00**	**0.500**
Calcium, Total	**7440-70-2**	**28.1**		**2.00**	**1.00**
Manganese, Total	**7439-96-5**	**2.84**		**0.100**	**0.0500**

Report Number: **L11040306**
Report Date : **May 5, 2011**

Sample Number:	L11040306-01	PrePrep Method:	NONE	Instrument:	PE-ICP2
Client ID:	SWMU-57-4711-WC	Prep Method:	3005A	Prep Date:	04/11/2011 08:14
Matrix:	Water	Analytical Method:	6010B	Cal Date:	04/12/2011 11:18
Workgroup Number:	WG361560	Analyst:	KHR	Run Date:	04/12/2011 20:25
Collect Date:	04/07/2011 14:30	Dilution:	1	File ID:	P2.041211.202559
Sample Tag:	01	Units:	mg/L		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Arsenic, Total	7440-38-2	0.0240		0.0100	0.00500
Barium, Total	7440-39-3	0.251		0.0100	0.00500
Cadmium, Total	7440-43-9	0.0150		0.0100	0.00500
Chromium, Total	7440-47-3	0.0976		0.0200	0.0100
Cobalt, Total	7440-48-4	0.0340		0.0200	0.0100
Copper, Total	7440-50-8	0.126		0.0200	0.0100
Lead, Total	7439-92-1	0.0524		0.00500	0.00250
Magnesium, Total	7439-95-4	7.31		0.500	0.250
Nickel, Total	7440-02-0	0.0572		0.0400	0.0200
Potassium, Total	7440-09-7	6.65		1.00	0.500
Silver, Total	7440-22-4		U	0.0100	0.00500
Sodium, Total	7440-23-5	47.1		0.500	0.250
Zinc, Total	7440-66-6	0.610		0.0200	0.0100

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11040306**
Report Date : **May 5, 2011**

Sample Number:	L11040306-01	PrePrep Method:	NONE	Instrument:	PE-ICP2
Client ID:	SWMU-57-4711-WC	Prep Method:	3005A	Prep Date:	04/11/2011 08:14
Matrix:	Water	Analytical Method:	6010B	Cal Date:	04/15/2011 11:20
Workgroup Number:	WG361560	Analyst:	KHR	Run Date:	04/15/2011 13:51
Collect Date:	04/07/2011 14:30	Dilution:	1	File ID:	P2.041511.135145
Sample Tag:	02	Units:	mg/L		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Beryllium, Total	7440-41-7		U	0.0100	0.00500
Vanadium, Total	7440-62-2	0.177		0.0100	0.00500

U Analyte was not detected. The concentration is below the reported LOD.

Report Number: **L11040306**
Report Date : **May 5, 2011**

Sample Number:	L11040306-01	PrePrep Method:	NONE	Instrument:	PE-ICP2
Client ID:	SWMU-57-4711-WC	Prep Method:	3005A	Prep Date:	04/11/2011 08:14
Matrix:	Water	Analytical Method:	6010B	Cal Date:	04/15/2011 11:20
Workgroup Number:	WG361560	Analyst:	KHR	Run Date:	04/15/2011 13:57
Collect Date:	04/07/2011 14:30	Dilution:	20	File ID:	P2.041511.135730
Sample Tag:	DL02	Units:	mg/L		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Iron, Total	7439-89-6	93.9	B	2.00	1.00

B The reported result is associated with a contaminated method blank.

2.1.1.2 QC Summary Data

Example 6010 Calculations
Perkin Elmer Optima 4300 DV

1.0 Initial Calibration (ICAL) Parameters
The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system in ug/mL (ppm)	0.1
Vf = Final volume (mL)	50
Vi = Initial volume (mL)	50
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in ug/mL (mg/L)	0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (mg/L) (ppm)	0.1
Vf = Final volume (mL)	50
Vi = Initial weight (g)	1
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in ug/g (mg/kg)	5

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:	**Example:**
Cx = Concentration calculated as received (wet basis)	5
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (mg/kg)	6.25

Microbac Laboratories Inc.
Metals Digest Log

Workgroup: WG361324
Analyst: REK
Spike Analyst: REK
Method: 3005A
Run Date: 04/11/2011 08:14
Hotblock Start Temp: 95.1 @ 06:40
Hotblock End Temp: 95.2 @ 10:40

SOP: ME401 Revison 13
Spike Solution: STD39933
Spike Witness: VC
HCL Lot #: COA15185
Digestion Tubes Lot #: COA15342
HNO3 Lot #: COA15353
ICP;WG353481 Filter Lot COA15312

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG361324-02	BLANK	1	50 mL	50 mL		
2	WG361324-03	LCS	1	50 mL	50 mL	5 mL	
3	L11040220-02	SAMP	1	50 mL	50 mL		04/15/11
4	L11040220-04	SAMP	1	50 mL	50 mL		04/15/11
5	L11040220-06	SAMP	1	50 mL	50 mL		04/15/11
6	L11040220-08	SAMP	1	50 mL	50 mL		04/15/11
7	L11040220-10	SAMP	1	50 mL	50 mL		04/15/11
8	L11040220-12	SAMP	1	50 mL	50 mL		04/15/11
9	WG361324-01	REF	1	50 mL	50 mL		
10	L11040220-16	SAMP	1	50 mL	50 mL		04/15/11
11	L11040220-18	SAMP	1	50 mL	50 mL		04/15/11
12	L11040220-20	SAMP	1	50 mL	50 mL		04/15/11
13	L11040220-22	SAMP	1	50 mL	50 mL		04/15/11
14	L11040220-24	SAMP	1	50 mL	50 mL		04/15/11
15	L11040220-26	SAMP	1	50 mL	50 mL		04/15/11
16	L11040220-28	SAMP	1	50 mL	50 mL		04/15/11
17	L11040220-30	SAMP	1	50 mL	50 mL		04/15/11
18	L11040220-32	SAMP	1	50 mL	50 mL		04/15/11
19	L11040252-01	SAMP	1	50 mL	50 mL		04/18/11
20	L11040264-01	SAMP	1	50 mL	50 mL		04/18/11
21	L11040302-01	SAMP	1	50 mL	50 mL		04/15/11
22	L11040304-01	SAMP	1	50 mL	50 mL		04/19/11
23	L11040306-01	SAMP	1	50 mL	50 mL		04/15/11
24	WG361324-04	MS	1	50 mL	50 mL	5 mL	
25	WG361324-05	MSD	1	50 mL	50 mL	5 mL	

L11040220-02	FILTERED DIGESTATE
L11040220-04	FILTERED DIGESTATE
L11040220-06	FILTERED DIGESTATE
L11040220-08	FILTERED DIGESTATE
L11040220-10	FILTERED DIGESTATE
L11040220-12	FILTERED DIGESTATE
L11040220-18	FILTERED DIGESTATE
L11040220-20	FILTERED DIGESTATE
L11040220-22	FILTERED DIGESTATE

HB_DIG - Modified 09/30/2009
PDF ID: 1971500
Report generated: 04/11/2011 13:47

Microbac Laboratories Inc.
Metals Digest Log

Workgroup:	WG361324	**SOP:**	ME401 Revison 13
Analyst:	REK	**Spike Solution:**	STD39933
Spike Analyst:	REK	**Spike Witness:**	VC
Method:	3005A	**HCL Lot #:**	COA15185
Run Date:	04/11/2011 08:14	**Digestion Tubes Lot #:**	COA15342
Hotblock Start Temp:	95.1 @ 06:40	**HNO3 Lot #:**	COA15353
Hotblock End Temp:	95.2 @ 10:40	**ICP;WG353481 Filter Lot**	COA15312

L11040220-24	FILTERED DIGESTATE
L11040220-26	FILTERED DIGESTATE
L11040220-28	FILTERED DIGESTATE
L11040220-30	FILTERED DIGESTATE
L11040304-01	FILTERED DIGESTATE
L11040306-01	FILTERED DIGESTATE

Analyst: _____

Reviewer: Brenda Gregory

HB_DIG - Modified 09/30/2009
PDF ID: 1971500
Report generated: 04/11/2011 13:47

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 041211H2.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 37066

Calibration Std: STD44857 ICV Std: STD44627 Post Spike: STD39932
ICSA: STD44698 ICSAB: STD44828 Int. Std: STD44769
CCV: STD44672 LLCCV:

Workgroups: 361500, 361557, 361126, 361560

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.041211.105151	WG361588-01	Calibration Point		1		04/12/11 10:51
2	P2.041211.105826	WG361588-02	Calibration Point		1		04/12/11 10:58
3	P2.041211.110503	WG361588-03	Calibration Point		1		04/12/11 11:05
4	P2.041211.111140	WG361588-04	Calibration Point		1		04/12/11 11:11
5	P2.041211.111823	WG361588-05	Calibration Point		1		04/12/11 11:18
6	P2.041211.112507	WG361588-06	Initial Calibration Verification		1		04/12/11 11:25
7	P2.041211.113149	WG361588-07	Initial Calib Blank		1		04/12/11 11:31
8	P2.041211.113826	WG361588-08	Low Level Initial Calibration V		1		04/12/11 11:38
9	P2.041211.114502	WG361588-09	Low Level Initial Calibration V		1		04/12/11 11:45
10	P2.041211.115139	WG361588-10	Interference Check		1		04/12/11 11:51
11	P2.041211.115719	WG361588-11	Interference Check		1		04/12/11 11:57
12	P2.041211.120307	WG361588-12	Interference Check		1		04/12/11 12:03
13	P2.041211.120845	WG361588-13	CCV		1		04/12/11 12:08
14	P2.041211.121526	WG361588-14	CCB		1		04/12/11 12:15
15	P2.041211.122202	WG361174-02	Method/Prep Blank	50/50	1		04/12/11 12:22
16	P2.041211.122839	WG361174-03	Laboratory Control S	50/50	1		04/12/11 12:28
17	P2.041211.123521	L11040241-01	MW-18-040611	50/50	1		04/12/11 12:35
18	P2.041211.124203	L11040241-02	MW-16I-040611	50/50	1		04/12/11 12:42
19	P2.041211.124744	WG361174-01	Reference Sample		1	L11040241-03	04/12/11 12:47
20	P2.041211.125325	WG361174-04	Matrix Spike	50/50	1	L11040241-03	04/12/11 12:53
21	P2.041211.125908	WG361174-05	Matrix Spike Duplica	50/50	1	L11040241-03	04/12/11 12:59
22	P2.041211.130450	L11040182-01	IA N\&S	50/50	1		04/12/11 13:04
23	P2.041211.131132	WG361500-01	Post Digestion Spike		1	L11040182-01	04/12/11 13:11
24	P2.041211.131815	WG361500-02	Serial Dilution		5	L11040182-01	04/12/11 13:18
25	P2.041211.132457	WG361588-15	CCV		1		04/12/11 13:24
26	P2.041211.133137	WG361588-16	CCB		1		04/12/11 13:31
27	P2.041211.133813	L11040241-06	TW-01-040611	50/50	1		04/12/11 13:38
28	P2.041211.134356	L11040241-07	MW-19-040611	50/50	1		04/12/11 13:43
29	P2.041211.135037	L11040241-08	MW-20-040611	50/50	1		04/12/11 13:50
30	P2.041211.135719	L11040241-09	DUP-GW-040611-01	50/50	1		04/12/11 13:57
31	P2.041211.140300	L11040241-10	DUP-GW-040611-02	50/50	1		04/12/11 14:03
32	P2.041211.140842	L11040216-29	ER0017	50/50	1		04/12/11 14:08
33	P2.041211.141520	L11040216-30	ER0018	50/50	1		04/12/11 14:15
34	P2.041211.142118	WG361588-17	Interference Check		1		04/12/11 14:21

Page: 1 Approved: April 13, 2011

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 041211H2.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 37066

Calibration Std: STD44857 ICV Std: STD44627 Post Spike: STD39932
ICSA: STD44698 ICSAB: STD44828 Int. Std: STD44769
CCV: STD44672 LLCCV:

Workgroups: 361500, 361557, 361126, 361560

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.041211.142659	WG361588-18	Interference Check		1		04/12/11 14:26
36	P2.041211.143237	WG361588-19	CCV		1		04/12/11 14:32
37	P2.041211.143917	WG361588-20	CCB		1		04/12/11 14:39
38	P2.041211.144553	WG361588-21	Low Level Continuing Calibra		1		04/12/11 14:45
39	P2.041211.145232	WG361588-22	Low Level Continuing Calibra		1		04/12/11 14:52
40	P2.041211.145910	L11040166-01	T1360	50/50	1		04/12/11 14:59
41	P2.041211.150550	L11040166-02	T1362	50/50	2		04/12/11 15:05
42	P2.041211.151230	L11040166-03	T1363	50/50	5		04/12/11 15:12
43	P2.041211.151914	L11040166-04	T1365	50/50	5		04/12/11 15:19
44	P2.041211.152558	L11040166-05	T1343	50/50	1		04/12/11 15:25
45	P2.041211.153242	L11040247-01	WATER WELL\#1	50/50	1		04/12/11 15:32
46	P2.041211.153924	L11040247-02	WATER WELL\#2	50/50	1		04/12/11 15:39
47	P2.041211.154606	L11040183-01	FTGWEF284	50/50	1		04/12/11 15:46
48	P2.041211.155248	L11040184-01	POND OUTFALL	50/50	1		04/12/11 15:52
49	P2.041211.155926	WG361588-23	CCV		1		04/12/11 15:59
50	P2.041211.160607	WG361588-24	CCB		1		04/12/11 16:06
51	P2.041211.161040	WG361498-02	Method/Prep Blank	5/50	1		04/12/11 16:10
52	P2.041211.161719	WG361498-03	Laboratory Control S	5/50	1		04/12/11 16:17
53	P2.041211.162405	WG361498-01	Reference Sample		1	L11040292-02	04/12/11 16:24
54	P2.041211.163048	WG361498-04	Matrix Spike	5/50	1	L11040292-02	04/12/11 16:30
55	P2.041211.163747	WG361498-05	Matrix Spike Duplica	5/50	1	L11040292-02	04/12/11 16:37
56	P2.041211.164431	L11040292-04	GT110009	5/50	1		04/12/11 16:44
57	P2.041211.165114	L11040292-06	GT110010	5/50	1		04/12/11 16:51
58	P2.041211.165754	WG361557-01	Post Digestion Spike		1	L11040292-04	04/12/11 16:57
59	P2.041211.170435	WG361557-02	Serial Dilution		5	L11040292-04	04/12/11 17:04
60	P2.041211.171118	WG361588-25	CCV		1		04/12/11 17:11
61	P2.041211.171759	WG361588-26	CCB		1		04/12/11 17:17
62	P2.041211.172435	L11040302-03	SANITARY LEACHATE 2	5/50	1		04/12/11 17:24
63	P2.041211.173114	L11040305-01	SR-SS-55-SP2	5/50	1		04/12/11 17:31
64	P2.041211.173758	L11040305-02	SR-SS-54-SP2	5/50	1		04/12/11 17:37
65	P2.041211.174441	L11040305-03	SR-SS-38-SP2	5/50	1		04/12/11 17:44
66	P2.041211.175125	L11040305-04	SR-SS-56B-SP2	5/50	1		04/12/11 17:51
67	P2.041211.175809	L11040305-05	SR-SS-56A-SP2	5/50	1		04/12/11 17:58
68	P2.041211.180453	L11040305-06	SR-SS-27-SP2	5/50	1		04/12/11 18:04

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Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 041211H2.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 37066

Calibration Std: STD44857 ICV Std: STD44627 Post Spike: STD39932
ICSA: STD44698 ICSAB: STD44828 Int. Std: STD44769
CCV: STD44672 LLCCV:

Workgroups: 361500, 361557, 361126, 361560

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	P2.041211.181232	L11040305-07	SR-SS-28-SP2	5/50	1		04/12/11 18:12
70	P2.041211.181916	L11040335-01	B182 SOIL	5/50	1		04/12/11 18:19
71	P2.041211.182559	WG361453-01	Fluid Blank		1		04/12/11 18:25
72	P2.041211.183242	WG361588-27	CCV		1		04/12/11 18:32
73	P2.041211.183920	WG361588-28	CCB		1		04/12/11 18:39
74	P2.041211.184556	L11040176-01	EQT	50/50	5		04/12/11 18:45
75	P2.041211.185239	L11040177-01	CONNIE GASTON WATER V	50/50	1		04/12/11 18:52
76	P2.041211.185919	L11040009-01	IDL1-ICP-PE2		1		04/12/11 18:59
77	P2.041211.190559	L11040009-02	IDL2-ICP-PE2		1		04/12/11 19:05
78	P2.041211.191238	L11040009-03	IDL3-ICP-PE2		1		04/12/11 19:12
79	P2.041211.191918	L11040009-04	IDL4-ICP-PE2		1		04/12/11 19:19
80	P2.041211.192558	L11040009-05	IDL5-ICP-PE2		1		04/12/11 19:25
81	P2.041211.193239	L11040009-06	IDL6-ICP-PE2		1		04/12/11 19:32
82	P2.041211.193918	L11040009-07	IDL7-ICP-PE2		1		04/12/11 19:39
83	P2.041211.194559	WG361588-29	CCV		1		04/12/11 19:45
84	P2.041211.195236	WG361588-30	CCB		1		04/12/11 19:52
85	P2.041211.195912	WG361324-02	Method/Prep Blank	50/50	1		04/12/11 19:59
86	P2.041211.200552	WG361324-03	Laboratory Control S	50/50	1		04/12/11 20:05
87	P2.041211.201234	L11040302-01	SANITARY LEACHATE	50/50	1		04/12/11 20:12
88	P2.041211.201919	L11040304-01	W9039	50/50	10		04/12/11 20:19
89	P2.041211.202559	L11040306-01	SWMU-57-4711-WC	50/50	1		04/12/11 20:25
90	P2.041211.203235	L11040306-01	SWMU-57-4711-WC	50/50	10		04/12/11 20:32
91	P2.041211.203915	L11040264-01	13693-W0001	50/50	1		04/12/11 20:39
92	P2.041211.204555	L11040252-01	2087-W0001	50/50	1		04/12/11 20:45
93	P2.041211.205234	WG361560-01	Post Digestion Spike		1	L11040252-01	04/12/11 20:52
94	P2.041211.205916	WG361560-02	Serial Dilution		5	L11040252-01	04/12/11 20:59
95	P2.041211.210556	WG361588-31	CCV		1		04/12/11 21:05
96	P2.041211.211233	WG361588-32	CCB		1		04/12/11 21:12
97	P2.041211.212035	L11040220-02	MW-16	50/50	1		04/12/11 21:20
98	P2.041211.212720	L11040220-04	MW-18	50/50	1		04/12/11 21:27
99	P2.041211.213405	L11040220-06	MW-48	50/50	1		04/12/11 21:34
100	P2.041211.214050	L11040220-08	MW-28	50/50	1		04/12/11 21:40
101	P2.041211.214734	L11040220-10	MW-2	50/50	1		04/12/11 21:47
102	P2.041211.215419	L11040220-12	MW-5	50/50	1		04/12/11 21:54

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 041211H2.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 37066

Calibration Std: STD44857 ICV Std: STD44627 Post Spike: STD39932
ICSA: STD44698 ICSAB: STD44828 Int. Std: STD44769
CCV: STD44672 LLCCV:

Workgroups: 361500, 361557, 361126, 361560

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	P2.041211.220103	L11040220-16	MW-12		1	WG361324-01	04/12/11 22:01
104	P2.041211.220748	WG361324-04	Matrix Spike	50/50	1	L11040220-16	04/12/11 22:07
105	P2.041211.221433	WG361324-05	Matrix Spike Duplica	50/50	1	L11040220-16	04/12/11 22:14
106	P2.041211.222118	L11040220-18	MW-39S	50/50	1		04/12/11 22:21
107	P2.041211.222805	WG361588-33	CCV		1		04/12/11 22:28
108	P2.041211.223443	WG361588-34	CCB		1		04/12/11 22:34
109	P2.041211.224119	L11040220-20	MW-31	50/50	1		04/12/11 22:41
110	P2.041211.224804	L11040220-22	MW-35	50/50	1		04/12/11 22:48
111	P2.041211.225542	L11040220-24	MW-37	50/50	1		04/12/11 22:55
112	P2.041211.230126	L11040220-26	MW-36	50/50	1		04/12/11 23:01
113	P2.041211.230811	L11040220-28	MW-46	50/50	1		04/12/11 23:08
114	P2.041211.231456	L11040220-30	MW-32	50/50	1		04/12/11 23:14
115	P2.041211.232141	L11040220-32	FB-1	50/50	1		04/12/11 23:21
116	P2.041211.232822	WG361588-35	CCV		1		04/12/11 23:28
117	P2.041211.233500	WG361588-36	CCB		1		04/12/11 23:35

Comments

Seq.	Rerun	Dil.	Reason	Analytes
11			The ICSAB was reanalyzed to verify the calcium result.	

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 041511H2.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 37118

Calibration Std: STD44857 ICV Std: STD45009 Post Spike: STD39932
ICSA: STD44698 ICSAB: STD44828 Int. Std: STD44957
CCV: STD45008 LLCCV: STD45003

Workgroups: 361903, 361560, 361697, 361879, 361885, 362020, 361886

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	P2.041511.105327	WG362037-01	Calibration Point		1		04/15/11 10:53
2	P2.041511.110003	WG362037-02	Calibration Point		1		04/15/11 11:00
3	P2.041511.110640	WG362037-03	Calibration Point		1		04/15/11 11:06
4	P2.041511.111317	WG362037-04	Calibration Point		1		04/15/11 11:13
5	P2.041511.112000	WG362037-05	Calibration Point		1		04/15/11 11:20
6	P2.041511.112644	WG362037-06	Initial Calibration Verification		1		04/15/11 11:26
7	P2.041511.113326	WG362037-07	Initial Calib Blank		1		04/15/11 11:33
8	P2.041511.114003	WG362037-08	Low Level Initial Calibration V		1		04/15/11 11:40
9	P2.041511.114640	WG362037-09	Low Level Initial Calibration V		1		04/15/11 11:46
10	P2.041511.115317	WG362037-10	Interference Check		1		04/15/11 11:53
11	P2.041511.115858	WG362037-11	Interference Check		1		04/15/11 11:58
12	P2.041511.120436	WG362037-12	CCV		1		04/15/11 12:04
13	P2.041511.121117	WG362037-13	CCB		1		04/15/11 12:11
14	P2.041511.121752	WG361865-01	Method/Prep Blank	50/50	1		04/15/11 12:17
15	P2.041511.122430	WG361865-02	Laboratory Control S	50/50	1		04/15/11 12:24
16	P2.041511.123111	WG361865-03	Laboratory Control S	50/50	1		04/15/11 12:31
17	P2.041511.123749	L11040463-01	PFG3022	50/50	1		04/15/11 12:37
18	P2.041511.124426	WG361903-01	Post Digestion Spike		1	L11040463-01	04/15/11 12:44
19	P2.041511.125108	WG361903-02	Serial Dilution		5	L11040463-01	04/15/11 12:51
20	P2.041511.125746	WG362037-14	CCV		1		04/15/11 12:57
21	P2.041511.130426	WG362037-15	CCB		1		04/15/11 13:04
22	P2.041511.131103	WG362037-16	Low Level Continuing Calibra		1		04/15/11 13:11
23	P2.041511.131816	WG361324-02	Method/Prep Blank	50/50	1		04/15/11 13:18
24	P2.041511.132454	WG361324-03	Laboratory Control S	50/50	1		04/15/11 13:24
25	P2.041511.133137	WG361324-01	Reference Sample		1	L11040220-16	04/15/11 13:31
26	P2.041511.133821	WG361324-04	Matrix Spike	50/50	1	L11040220-16	04/15/11 13:38
27	P2.041511.134503	WG361324-05	Matrix Spike Duplica	50/50	1	L11040220-16	04/15/11 13:45
28	P2.041511.135145	L11040306-01	SWMU-57-4711-WC	50/50	1		04/15/11 13:51
29	P2.041511.135730	L11040306-01	SWMU-57-4711-WC	50/50	20		04/15/11 13:57
30	P2.041511.140408	L11040220-08	MW-28	50/50	1		04/15/11 14:04
31	P2.041511.141050	WG361560-03	Post Digestion Spike		1	L11040220-08	04/15/11 14:10
32	P2.041511.141733	WG361560-04	Serial Dilution		5	L11040220-08	04/15/11 14:17
33	P2.041511.142411	WG362037-17	CCV		1		04/15/11 14:24
34	P2.041511.143053	WG362037-18	CCB		1		04/15/11 14:30

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Esther L. Babgard

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 041511H2.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 37118

Calibration Std: STD44857 ICV Std: STD45009 Post Spike: STD39932
ICSA: STD44698 ICSAB: STD44828 Int. Std: STD44957
CCV: STD45008 LLCCV: STD45003

Workgroups: 361903, 361560, 361697, 361879, 361885, 362020, 361886

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	P2.041511.143729	L11040302-01	SANITARY LEACHATE	50/50	1		04/15/11 14:37
36	P2.041511.144413	L11040403-04	OUTFALL 003/COMP	50/50	2		04/15/11 14:44
37	P2.041511.145055	WG361751-02	Method/Prep Blank	50/50	1		04/15/11 14:50
38	P2.041511.145734	WG361751-03	Laboratory Control S	50/50	1		04/15/11 14:57
39	P2.041511.150417	WG362037-19	CCV		1		04/15/11 15:04
40	P2.041511.151058	WG362037-20	CCB		1		04/15/11 15:10
41	P2.041511.151734	WG361751-01	Reference Sample		1	L11040429-01	04/15/11 15:17
42	P2.041511.152417	WG361751-04	Matrix Spike	50/50	1	L11040429-01	04/15/11 15:24
43	P2.041511.153100	WG361751-05	Matrix Spike Duplica	50/50	1	L11040429-01	04/15/11 15:31
44	P2.041511.153742	L11040433-02	KA8017	50/50	1		04/15/11 15:37
45	P2.041511.154323	L11040433-01	KA8016	50/50	1		04/15/11 15:43
46	P2.041511.155003	WG361879-01	Post Digestion Spike		1	L11040433-01	04/15/11 15:50
47	P2.041511.155645	WG361879-02	Serial Dilution		5	L11040433-01	04/15/11 15:56
48	P2.041511.160323	WG362037-21	CCV		1		04/15/11 16:03
49	P2.041511.161003	WG362037-22	CCB		1		04/15/11 16:10
50	P2.041511.161639	WG362037-23	Low Level Continuing Calibra		1		04/15/11 16:16
51	P2.041511.162318	WG361021-02	Method/Prep Blank	50/50	1		04/15/11 16:23
52	P2.041511.162956	WG361021-03	Laboratory Control S	50/50	1		04/15/11 16:29
53	P2.041511.163638	L11040056-01	LOWE JR.	50/50	1		04/15/11 16:36
54	P2.041511.164220	L11040056-02	MELVE LOWE	50/50	1		04/15/11 16:42
55	P2.041511.164859	L11040056-03	CARLOS LOWE	50/50	1		04/15/11 16:48
56	P2.041511.165539	L11040056-04	PAUL LOWE-1	50/50	1		04/15/11 16:55
57	P2.041511.170218	L11040056-05	PAUL LOWE-1 BOTTOM	50/50	1		04/15/11 17:02
58	P2.041511.170857	L11040056-06	PAUL LOWE-2	50/50	1		04/15/11 17:08
59	P2.041511.171536	WG362037-24	CCV		1		04/15/11 17:15
60	P2.041511.172215	WG362037-25	CCB		1		04/15/11 17:22
61	P2.041511.172852	L11040056-07	PAUL LOWE-2 BOTTOM	50/50	1		04/15/11 17:28
62	P2.041511.173531	L11040056-08	KEN BROWNING	50/50	1		04/15/11 17:35
63	P2.041511.174113	WG361885-01	Post Digestion Spike		1	L11040056-08	04/15/11 17:41
64	P2.041511.174656	WG361885-02	Serial Dilution		5	L11040056-08	04/15/11 17:46
65	P2.041511.175335	L11040056-09	G. MEEKS	50/50	1		04/15/11 17:53
66	P2.041511.175917	L11040056-10	EUGENE LOWE	50/50	1		04/15/11 17:59
67	P2.041511.180557	L11040204-01	MW-15-040511	50/50	1		04/15/11 18:05
68	P2.041511.181240	L11040204-02	MW-05S-040511	50/50	1		04/15/11 18:12

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Sheri L. Babgard

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 041511H2.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 37118

Calibration Std: STD44857 ICV Std: STD45009 Post Spike: STD39932
ICSA: STD44698 ICSAB: STD44828 Int. Std: STD44957
CCV: STD45008 LLCCV: STD45003

Workgroups: 361903, 361560, 361697, 361879, 361885, 362020, 361886

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	P2.041511.181924	WG361021-01	Reference Sample		1	L11040204-03	04/15/11 18:19
70	P2.041511.182608	WG362037-26	CCV		1		04/15/11 18:26
71	P2.041511.183249	WG362037-27	CCB		1		04/15/11 18:32
72	P2.041511.183924	WG361021-04	Matrix Spike	50/50	1	L11040204-03	04/15/11 18:39
73	P2.041511.184608	WG361021-05	Matrix Spike Duplica	50/50	1	L11040204-03	04/15/11 18:46
74	P2.041511.185251	L11040204-06	MW-14-040511	50/50	1		04/15/11 18:52
75	P2.041511.185934	L11040204-07	MW-06-040511	50/50	1		04/15/11 18:59
76	P2.041511.190616	L11040204-08	MW-06-040511	50/50	1		04/15/11 19:06
77	P2.041511.191258	L11040204-09	MW-28-040511	50/50	1		04/15/11 19:12
78	P2.041511.191941	L11040204-10	MW-28-040511	50/50	1		04/15/11 19:19
79	P2.041511.192624	WG361973-02	Method/Prep Blank		1		04/15/11 19:26
80	P2.041511.193303	WG362037-28	Interference Check		1		04/15/11 19:33
81	P2.041511.193843	WG362037-29	Interference Check		1		04/15/11 19:38
82	P2.041511.194421	WG362037-30	CCV		1		04/15/11 19:44
83	P2.041511.195101	WG362037-31	CCB		1		04/15/11 19:51
84	P2.041511.195737	WG361973-03	Laboratory Control S		1		04/15/11 19:57
85	P2.041511.200421	FBLK 361768-01	FBLK 361768-01		1		04/15/11 20:04
86	P2.041511.201104	WG361934-01	Fluid Blank		1		04/15/11 20:11
87	P2.041511.201747	L11040410-01	COMPOSITE		1		04/15/11 20:17
88	P2.041511.202431	L11040477-01	13837-SSP0110		1		04/15/11 20:24
89	P2.041511.203115	WG362016-01	Post Digestion Spike		1	L11040477-01	04/15/11 20:31
90	P2.041511.203759	WG362016-02	Serial Dilution		5	L11040477-01	04/15/11 20:37
91	P2.041511.204442	WG362037-32	CCV		1		04/15/11 20:44
92	P2.041511.205122	WG362037-33	CCB		1		04/15/11 20:51
93	P2.041511.205758	WG361973-01	Reference Sample		1	L11040477-02	04/15/11 20:57
94	P2.041511.210443	WG361973-04	Matrix Spike		1	L11040477-02	04/15/11 21:04
95	P2.041511.211127	WG361973-05	Matrix Spike Duplica		1	L11040477-02	04/15/11 21:11
96	P2.041511.211811	WG361935-03	Method/Prep Blank	50/50	1		04/15/11 21:18
97	P2.041511.212450	WG361935-04	Laboratory Control S	50/50	1		04/15/11 21:24
98	P2.041511.213134	L11040452-01	EFFLUENT	50/50	1		04/15/11 21:31
99	P2.041511.213818	WG362037-34	CCV		1		04/15/11 21:38
100	P2.041511.214458	WG362037-35	CCB		1		04/15/11 21:44
101	P2.041511.215135	L11040457-01	UF\#1 PERMEATE	50/50	1		04/15/11 21:51
102	P2.041511.215814	L11040496-01	FC 101		1	WG361935-01	04/15/11 21:58

Page: 3 Approved: April 18, 2011

Esther L. Babgard

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 041511H2.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 37118

Calibration Std: STD44857 ICV Std: STD45009 Post Spike: STD39932
ICSA: STD44698 ICSAB: STD44828 Int. Std: STD44957
CCV: STD45008 LLCCV: STD45003

Workgroups: 361903, 361560, 361697, 361879, 361885, 362020, 361886

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	P2.041511.220457	WG361935-05	Duplicate	50/50	1	L11040496-01	04/15/11 22:04
104	P2.041511.221137	WG361935-06	Matrix Spike	50/50	1	L11040496-01	04/15/11 22:11
105	P2.041511.221820	L11040457-02	CARBON UNIT/COMP	50/50	1		04/15/11 22:18
106	P2.041511.222500	WG362020-01	Post Digestion Spike		1	L11040457-02	04/15/11 22:25
107	P2.041511.223141	WG362020-02	Serial Dilution		5	L11040457-02	04/15/11 22:31
108	P2.041511.223821	WG362037-36	CCV		1		04/15/11 22:38
109	P2.041511.224503	WG362037-37	CCB		1		04/15/11 22:45
110	P2.041511.225138	L11040496-02	FC 102		1		04/15/11 22:51
111	P2.041511.225822	L11040496-03	FC 103		1		04/15/11 22:58
112	P2.041511.230507	L11040496-04	FC 104		1		04/15/11 23:05
113	P2.041511.231147	L11040497-01	MANHOLE/GRAB	50/50	1		04/15/11 23:11
114	P2.041511.231827	L11040497-02	MANHOLE/COMP	50/50	1		04/15/11 23:18
115	P2.041511.232512	L11040498-01	001/COMP.	50/50	1		04/15/11 23:25
116	P2.041511.233156	L11040506-01	MANHOLE/COMP	50/50	1		04/15/11 23:31
117	P2.041511.233844	L11040506-03	CATEGORICAL/COMP	50/50	1		04/15/11 23:38
118	P2.041511.234532	L11040512-02	LTL-G-MWL6-DIS		1	WG361935-02	04/15/11 23:45
119	P2.041511.235217	WG361935-07	Matrix Spike	50/50	1	L11040512-02	04/15/11 23:52
120	P2.041511.235900	WG362037-38	CCV		1		04/15/11 23:59
121	P2.041611.000542	WG362037-39	CCB		1		04/16/11 00:05
122	P2.041611.001217	L11040512-04	LTL-G-MWL13A-DIS	50/50	1		04/16/11 00:12
123	P2.041611.001902	L11040512-06	LTL-G-MWL14A-DIS	50/50	1		04/16/11 00:19
124	P2.041611.002549	L11040512-08	LTL-K-EQBLK-1-DIS	50/50	1		04/16/11 00:25
125	P2.041611.003229	L11040512-11	LTL-G-MWL1-DIS	50/50	1		04/16/11 00:32
126	P2.041611.003915	WG361173-04	Method/Prep Blank	50/50	1		04/16/11 00:39
127	P2.041611.004555	WG361173-05	Laboratory Control S	50/50	1		04/16/11 00:45
128	P2.041611.005239	WG362037-40	CCV		1		04/16/11 00:52
129	P2.041611.005920	WG362037-41	CCB		1		04/16/11 00:59
130	P2.041611.010556	WG361173-01	Reference Sample		1	L11040160-01	04/16/11 01:05
131	P2.041611.011144	WG361173-06	Matrix Spike	50/50	1	L11040160-01	04/16/11 01:11
132	P2.041611.011733	WG361173-07	Matrix Spike Duplica	50/50	1	L11040160-01	04/16/11 01:17
133	P2.041611.012323	L11040160-04	DRL-K-EQBLK-4	50/50	1		04/16/11 01:23
134	P2.041611.013003	WG361886-01	Post Digestion Spike		1	L11040160-04	04/16/11 01:30
135	P2.041611.013647	WG361886-02	Serial Dilution		5	L11040160-04	04/16/11 01:36
136	P2.041611.014328	WG362037-42	CCV		1		04/16/11 01:43

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Sheri L. Babgard

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: PE-ICP2 Dataset: 041511H2.CSV
Analyst1: KHR Analyst2: N/A
Method: 6010 SOP: ME600E Rev: 10
Maintenance Log ID: 37118

Calibration Std: STD44857 ICV Std: STD45009 Post Spike: STD39932
ICSA: STD44698 ICSAB: STD44828 Int. Std: STD44957
CCV: STD45008 LLCCV: STD45003

Workgroups: 361903, 361560, 361697, 361879, 361885, 362020, 361886

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
137	P2.041611.015008	WG362037-43	CCB		1		04/16/11 01:50
138	P2.041611.015644	WG361173-02	Reference Sample		1	L11040161-02	04/16/11 01:56
139	P2.041611.020333	WG361173-08	Duplicate	50/50	1	L11040161-02	04/16/11 02:03
140	P2.041611.021021	L11040161-04	DRL-G-MW-17B-DIS	50/50	1		04/16/11 02:10
141	P2.041611.021706	L11040161-06	DRL-G-MW-18B-DIS	50/50	1		04/16/11 02:17
142	P2.041611.022351	L11040161-08	DRL-G-MW-19B-DIS	50/50	1		04/16/11 02:23
143	P2.041611.023036	L11040161-10	DRL-G-MW-20B-DIS	50/50	1		04/16/11 02:30
144	P2.041611.023726	L11040161-12	DRL-K-EQBLK-2-DIS	50/50	1		04/16/11 02:37
145	P2.041611.024407	WG362037-44	CCV		1		04/16/11 02:44
146	P2.041611.025047	WG362037-45	CCB		1		04/16/11 02:50
147	P2.041611.025724	WG361173-03	Reference Sample		1	L11040207-02	04/16/11 02:57
148	P2.041611.030409	WG361173-09	Matrix Spike	50/50	1	L11040207-02	04/16/11 03:04
149	P2.041611.031054	WG361173-10	Matrix Spike Duplica	50/50	1	L11040207-02	04/16/11 03:10
150	P2.041611.031739	L11040207-08	DRL-G-MW-12A-DIS	50/50	1		04/16/11 03:17
151	P2.041611.032509	L11040207-10	DRL-G-MW-12B-DIS	50/50	1		04/16/11 03:25
152	P2.041611.033154	L11040207-12	DRL-G-MW-13-DIS	50/50	1		04/16/11 03:31
153	P2.041611.033900	L11040207-14	DRL-G-MW-13A-DIS	50/50	1		04/16/11 03:39
154	P2.041611.034545	L11040207-16	DRL-K-EQBLK-3-DIS	50/50	1		04/16/11 03:45
155	P2.041611.035226	L11040236-01	EFFLUENT/OUTLET 001/CC	50/50	1		04/16/11 03:52
156	P2.041611.035910	L11040238-05	001/COMP.	50/50	1		04/16/11 03:59
157	P2.041611.040559	WG362037-46	CCV		1		04/16/11 04:05
158	P2.041611.041240	WG362037-47	CCB		1		04/16/11 04:12

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Esther L. Babgard

Microbac

Microbac Laboratories Inc.

Data Checklist

Date: 12-APR-2011
Analyst: KHR
Analyst: NA
Method: 6010
Instrument: PE-ICP2
Curve Workgroup: 361588
Runlog ID: 39975
Analytical Workgroups: 361500, 361557, 361126, 361560

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	X
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	X
Client Forms	X
Level X	
Level 3	182, 183, 184
Level 4	216, 241, 305, 220, 252, 264, 304, 306
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	KHR
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
13-APR-2011

Secondary Reviewer:
13-APR-2011

CHECKLIST1 - Modified 03/05/2008
Generated: APR-13-2011 14:51:20

Microbac Laboratories Inc.

Data Checklist

Date: 15-APR-2011
Analyst: KHR
Analyst: NA
Method: 6010
Instrument: PE-ICP2
Curve Workgroup: 362037
Runlog ID: 40055
Analytical Workgroups: 361903, 361560, 361697, 361879, 361885, 362020, 361886

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	X
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	X
Client Forms	X
Level X	
Level 3	
Level 4	463, 220, 306, 433, 056, 204
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	KHR
Secondary Reviewer	SLP
Comments	

Primary Reviewer:
18-APR-2011

Secondary Reviewer:
18-APR-2011

CHECKLIST1 - Modified 03/05/2008
Generated: APR-18-2011 14:27:11

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 6010B AAB#: WG361560

Login Number: L11040306

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-4711-WC	01	04/07/11					04/11/11	3.7	180		04/15/11	8	180	
SWMU-57-4711-WC	01	04/07/11					04/11/11	3.7	180		04/12/11	5.2	180	
SWMU-57-4711-WC	01	04/07/11					04/11/11	3.7	180		04/15/11	8	180	
SWMU-57-4711-WC	01	04/07/11					04/11/11	3.7	180		04/12/11	5.3	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1974552
Report generated 04/15/2011 15:25

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L11040306
Work Group: WG361560
Blank File ID: P2.041211.195912
Blank Sample ID: WG361324-02
Prep Date: 04/11/11 08:14
Instrument ID: PE-ICP2
Analyzed Date: 04/12/11 19:59
Method: 6010B
Analyst: KHR

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG361324-03	P2.041211.200552	04/12/11 20:05	01
SWMU-57-4711-WC	L11040306-01	P2.041211.202559	04/12/11 20:25	01
SWMU-57-4711-WC	L11040306-01	P2.041211.203235	04/12/11 20:32	DL01
LCS	WG361324-03	P2.041511.132454	04/15/11 13:24	02
SWMU-57-4711-WC	L11040306-01	P2.041511.135145	04/15/11 13:51	02
SWMU-57-4711-WC	L11040306-01	P2.041511.135730	04/15/11 13:57	DL02

Report Name: BLANK_SUMMARY
PDF File ID: 1974553
Report generated 04/15/2011 15:25

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L11040306	Work Group:	WG361560
Blank File ID:	P2.041511.131816	Blank Sample ID:	WG361324-02
Prep Date:	04/11/11 08:14	Instrument ID:	PE-ICP2
Analyzed Date:	04/15/11 13:18	Method:	6010B
Analyst:	KHR		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG361324-03	P2.041211.200552	04/12/11 20:05	01
SWMU-57-4711-WC	L11040306-01	P2.041211.202559	04/12/11 20:25	01
SWMU-57-4711-WC	L11040306-01	P2.041211.203235	04/12/11 20:32	DL01
LCS	WG361324-03	P2.041511.132454	04/15/11 13:24	02
SWMU-57-4711-WC	L11040306-01	P2.041511.135145	04/15/11 13:51	02
SWMU-57-4711-WC	L11040306-01	P2.041511.135730	04/15/11 13:57	DL02

Report Name: BLANK_SUMMARY
PDF File ID: 1974553
Report generated 04/15/2011 15:25

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11040306 Prep Date: 04/11/11 08:14 Sample ID: WG361324-02
Instrument ID: PE-ICP2 Run Date: 04/12/11 19:59 Prep Method: 3005A
File ID: P2.041211.195912 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG361560 Matrix: Water Units: mg/L
Contract #: Cal ID: PE-ICP-12-APR-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Aluminum, Total	0.0500	0.100	0.0500	1	U
Arsenic, Total	0.00500	0.0100	0.00500	1	U
Barium, Total	0.00500	0.0100	0.00500	1	U
Cadmium, Total	0.00500	0.0100	0.00500	1	U
Calcium, Total	0.100	0.200	0.100	1	U
Chromium, Total	0.0100	0.0200	0.0100	1	U
Cobalt, Total	0.0100	0.0200	0.0100	1	U
Copper, Total	0.0100	0.0200	0.0100	1	U
Iron, Total	0.0500	0.100	0.0754	1	*
Lead, Total	0.00250	0.00500	0.00250	1	U
Magnesium, Total	0.250	0.500	0.250	1	U
Manganese, Total	0.00500	0.0100	0.00500	1	U
Nickel, Total	0.0200	0.0400	0.0200	1	U
Potassium, Total	0.500	1.00	0.500	1	U
Silver, Total	0.00500	0.0100	0.00500	1	U
Sodium, Total	0.250	0.500	0.250	1	U
Vanadium, Total	0.00500	0.0100	0.00500	1	U
Zinc, Total	0.0100	0.0200	0.0100	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1974554
15-APR-2011 15:39

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11040306 Prep Date: 04/11/11 08:14 Sample ID: WG361324-02
Instrument ID: PE-ICP2 Run Date: 04/15/11 13:18 Prep Method: 3005A
File ID: P2.041511.131816 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG361560 Matrix: Water Units: mg/L
Contract #: Cal ID: PE-ICP-15-APR-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Beryllium, Total	0.00500	0.0100	0.00500	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1974554
15-APR-2011 15:39

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361324-03
Instrument ID: PE-ICP2 Run Time: 20:05 Prep Method: 3005A
File ID: P2.041211.200552 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG361560 Matrix: Water Units: mg/L
QC Key: DOD4 Lot#: STD39933 Cal ID: PE-ICP-12-APR-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Aluminum, Total	5.00	5.45	109	80 - 120	
Arsenic, Total	0.200	0.211	105	80 - 120	
Barium, Total	0.500	0.534	107	80 - 120	
Cadmium, Total	0.0250	0.0249	99.5	80 - 120	
Calcium, Total	5.00	5.43	109	80 - 120	
Chromium, Total	0.250	0.262	105	80 - 120	
Cobalt, Total	0.100	0.107	107	80 - 120	
Copper, Total	0.250	0.274	110	80 - 120	
Iron, Total	2.00	1.96	98.0	80 - 120	
Lead, Total	0.250	0.265	106	80 - 120	
Magnesium, Total	5.00	4.99	99.8	80 - 120	
Manganese, Total	0.250	0.274	110	80 - 120	
Nickel, Total	0.250	0.267	107	80 - 120	
Potassium, Total	25.0	24.1	96.6	80 - 120	
Silver, Total	0.200	0.217	109	80 - 120	
Sodium, Total	25.0	24.9	99.6	80 - 120	
Vanadium, Total	0.500	0.529	106	80 - 120	
Zinc, Total	0.500	0.523	105	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1974555
Report generated: 04/15/2011 15:39

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11040306 Run Date: 04/15/2011 Sample ID: WG361324-03
Instrument ID: PE-ICP2 Run Time: 13:24 Prep Method: 3005A
File ID: P2.041511.132454 Analyst: KHR Method: 6010B
Workgroup (AAB#): WG361560 Matrix: Water Units: mg/L
QC Key: DOD4 Lot#: STD39933 Cal ID: PE-ICP-15-APR-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Beryllium, Total	0.0250	0.0240	96.0	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1974555
Report generated: 04/15/2011 15:39

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11040306 Cal ID:PE-ICP2- Worknum:WG361560

Instrument ID:PE-ICP2 Contract #: Method:6010B

Parent ID:WG361324-01 File ID:P2.041211.220103 Dil:1 Matrix:WATER

Sample ID:WG361324-04 MS File ID:P2.041211.220748 Dil:1 Units:mg/L

Sample ID:WG361324-05 MSD File ID:P2.041211.221433 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Aluminum	ND	5.00	5.20	104	5.00	5.16	103	0.718	80 - 120	20	
Arsenic	0.00543	0.200	0.212	103	0.200	0.210	102	0.707	80 - 120	20	
Barium	0.180	0.500	0.691	102	0.500	0.689	102	0.360	80 - 120	20	
Cadmium	ND	0.0250	0.0234	93.7	0.0250	0.0227	90.9	3.03	80 - 120	20	
Calcium	67.3	5.00	74.0	135	5.00	75.6	166	2.08	80 - 120	20	*
Chromium	ND	0.250	0.255	102	0.250	0.252	101	1.33	80 - 120	20	
Cobalt	ND	0.100	0.103	103	0.100	0.101	101	1.89	80 - 120	20	
Copper	ND	0.250	0.257	103	0.250	0.253	101	1.71	80 - 120	20	
Iron	ND	2.00	1.98	99.0	2.00	1.96	97.8	1.28	80 - 120	20	
Lead	ND	0.250	0.257	103	0.250	0.254	101	1.46	80 - 120	20	
Magnesium	12.9	5.00	18.0	101	5.00	18.2	106	1.34	80 - 120	20	
Manganese, Dissolved	2.21	0.250	2.49	113	0.250	2.55	135	2.15	80 - 120	20	*
Nickel	ND	0.250	0.253	101	0.250	0.249	99.5	1.82	80 - 120	20	
Potassium	2.43	25.0	26.4	95.7	25.0	26.3	95.3	0.345	80 - 120	20	
Silver	ND	0.200	0.207	104	0.200	0.206	103	0.930	80 - 120	20	
Sodium, Dissolved	28.7	25.0	55.0	105	25.0	54.4	103	1.01	80 - 120	20	
Vanadium, Dissolved	ND	0.500	0.519	104	0.500	0.512	102	1.28	80 - 120	20	
Zinc	ND	0.500	0.496	99.2	0.500	0.491	98.2	1.04	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008

PDF File ID:1974556

Report generated 04/15/2011 15:39

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11040306 Cal ID:PE-ICP2- Worknum:WG361560

Instrument ID:PE-ICP2 Contract #: Method:6010B

Parent ID:WG361324-01 File ID:P2.041511.133137 Dil:1 Matrix:WATER

Sample ID:WG361324-04 MS File ID:P2.041511.133821 Dil:1 Units:mg/L

Sample ID:WG361324-05 MSD File ID:P2.041511.134503 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Beryllium, Dissolved	ND	0.0250	0.0244	97.6	0.0250	0.0242	96.9	0.725	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008

PDF File ID:1974556

Report generated 04/15/2011 15:39

Microbac Laboratories Inc.
Serial Dilution Report

Login: L11040306 **Worknum:** WG361560
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG361560-02 **File ID:** P2.041211.205916 **Dil:** 5 **Units:** mg/L
Sample: L11040252-01 **File ID:** P2.041211.204555 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	.0594	F	ND	U		
Arsenic	ND	U	ND	U		
Barium	ND	U	ND	U		
Beryllium	ND	U	ND	U		
Cadmium	ND	U	ND	U		
Calcium	.316	X	.545	F	72.50	
Chromium	ND	U	ND	U		
Cobalt	ND	U	ND	U		
Copper	.0152	F	ND	U		
Iron	.0958	F	ND	U		
Lead	ND	U	ND	U		
Magnesium	ND	U	ND	U		
Manganese	ND	U	ND	U		
Nickel	ND	U	ND	U		
Potassium	ND	U	ND	U		
Silver	ND	U	ND	U		
Sodium	.446	F	ND	U		
Vanadium	ND	U	ND	U		
Zinc	ND	U	ND	U		

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 50 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 50 times the MDL.

SERIAL_DIL - Modified 09/22/2008
PDF File ID: 1974550
04/15/2011 15:38

Microbac Laboratories Inc.
Serial Dilution Report

Login: L11040306 **Worknum:** WG361560
Instrument: PE-ICP2 **Method:** 6010B
Serial Dil: WG361560-04 **File ID:** P2.041511.141733 **Dil:** 5 **Units:** mg/L
Sample: L11040220-08 **File ID:** P2.041511.140408 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Aluminum	1.34	X	1.37	X	2.24	
Arsenic	.00525	F	ND	U		
Barium	.0381	X	.03915	F	2.76	
Beryllium	ND	U	ND	U		
Cadmium	ND	U	ND	U		
Calcium	8.29		8.55		3.14	
Chromium	ND	U	ND	U		
Cobalt	ND	U	ND	U		
Copper	ND	U	ND	U		
Iron	1.25	X	1.235	X	1.20	
Lead	ND	U	ND	U		
Magnesium	3.15	X	3.105	X	1.43	
Manganese	.0239	X	ND	U		
Nickel	ND	U	ND	U		
Potassium	1.62	X	ND	U		
Silver	ND	U	ND	U		
Sodium	45.9		45.5		0.87	
Vanadium	ND	U	ND	U		
Zinc	.0121	F	ND	U		

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 50 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 50 times the MDL.

SERIAL_DIL - Modified 09/22/2008
PDF File ID: 1974550
04/15/2011 15:38

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11040306 **Worknum:** WG361560
Instrument ID: PE-ICP2 **Method:** 6010B
Post Spike ID: WG361560-01 **File ID:** P2.041211.205234 **Dil:** 1 **Units:** mg/L
Sample ID: L11040252-01 **File ID:** P2.041211.204555 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	5.32		0.0594	F	5	105.2	75 - 125	
ARSENIC	0.204		0	U	.2	102.1	75 - 125	
BARIUM	0.509		0	U	.5	101.9	75 - 125	
BERYLLIUM	0.0267		0	U	.025	106.8	75 - 125	
CADMIUM	0.0237		0	U	.025	94.9	75 - 125	
CALCIUM	5.46		0.316		5	103.6	75 - 125	
CHROMIUM	0.251		0	U	.25	100.4	75 - 125	
COBALT	0.102		0	U	.1	102.3	75 - 125	
COPPER	0.273		0.0152	F	.25	103.6	75 - 125	
IRON	2.01		0.0958	F	2	96.2	75 - 125	
LEAD	0.254		0	U	.25	101.5	75 - 125	
MAGNESIUM	4.93		0	U	5	98.6	75 - 125	
MANGANESE	0.262		0	U	.25	104.7	75 - 125	
NICKEL	0.254		0	U	.25	101.8	75 - 125	
POTASSIUM	23.6		0	U	25	94.6	75 - 125	
SILVER	0.206		0	U	.2	103.0	75 - 125	
SODIUM	24.4		0.446	F	25	96.1	75 - 125	
VANADIUM	0.502		0	U	.5	100.5	75 - 125	
ZINC	0.507		0	U	.5	101.3	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1974551
Report generated: 04/15/2011 15:39

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11040306 **Worknum:** WG361560
Instrument ID: PE-ICP2 **Method:** 6010B
Post Spike ID: WG361560-03 **File ID:** P2.041511.141050 **Dil:** 1 **Units:** mg/L
Sample ID: L11040220-08 **File ID:** P2.041511.140408 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ALUMINUM	6.10		1.34		5	97.9	75 - 125	
ARSENIC	0.212		0.00525	F	.2	103.5	75 - 125	
BARIUM	0.518		0.0381		.5	96.8	75 - 125	
BERYLLIUM	0.0230		0	U	.025	92.2	75 - 125	
CADMIUM	0.0232		0	U	.025	92.9	75 - 125	
CALCIUM	12.5		8.29		5	101.1	75 - 125	
CHROMIUM	0.238		0	U	.25	95.4	75 - 125	
COBALT	0.0982		0	U	.1	98.2	75 - 125	
COPPER	0.232		0	U	.25	92.7	75 - 125	
IRON	3.12		1.25		2	99.7	75 - 125	
LEAD	0.244		0	U	.25	97.8	75 - 125	
MAGNESIUM	7.84		3.15		5	100.2	75 - 125	
MANGANESE	0.271		0.0239		.25	99.7	75 - 125	
NICKEL	0.248		0	U	.25	99.3	75 - 125	
POTASSIUM	25.8		1.62		25	97.6	75 - 125	
SILVER	0.185		0	U	.2	92.5	75 - 125	
SODIUM	66.8		45.9		25	102.1	75 - 125	
VANADIUM	0.488		0	U	.5	97.6	75 - 125	
ZINC	0.486		0.0121	F	.5	95.1	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1974551
Report generated: 04/15/2011 15:39

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L11040306**	Workgroup (AAB#):	**WG361560**
Analytical Method:	**6010B**	Instrument ID:	**PE-ICP2**
ICAL Worknum:	**WG361588**	Initial Calibration Date:	**12-APR-2011 11:18**

	WG361588-01		WG361588-02		WG361588-03		WG361588-04		WG361588-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	-119	.1	471	.2	1020	10	51400	20	94800	.998774	
ARSENIC	0	2.12	NA	NA	.008	5.62	.4	388	.8	716	.999108	
BARIUM	0	-33.9	.01	525	.02	1090	1	54300	2	100000	.998983	
BERYLLIUM	0	-520	.0005	259	.001	507	.05	25900	.1	48300	.999423	
CADMIUM	0	17.8	.0005	8.15	.001	15.8	.05	767	.1	1410	.999157	
CALCIUM	0	-41.8	NA	NA	.2	19.9	10	948	20	1760	.999322	
CHROMIUM	0	-31.5	.005	556	.01	1160	.5	57500	1	107000	.999033	
COBALT	0	-18.1	.002	34.6	.004	65.5	.1	3500	.4	6390	.998798	
COPPER	0	-1500	.005	846	.01	1540	.5	74500	1	138000	.99932	
IRON	0	2.07	.04	10.3	.08	23.9	4	1220	8	2300	.998764	
LEAD	0	38.4	.005	19.8	.01	48.6	.5	2580	1	4720	.998008	
MAGNESIUM	0	-2.88	.1	71.1	.2	149	10	7500	20	14100	.999379	
MANGANESE	0	162	.005	2310	.01	4750	.5	234000	1	428000	.998772	
NICKEL	0	1.68	.005	144	.01	303	.5	15600	1	28900	.999173	
POTASSIUM	0	301	.5	1230	1	2490	50	133000	100	248000	1	
SILVER	0	-1250	.004	765	.008	1700	.4	82300	.8	153000	.998199	
SODIUM	0	673	.5	6690	1	13200	50	649000	100	1200000	1	
VANADIUM	0	4070	.01	1360	.02	2850	1	150000	2	281000	.999444	
ZINC	0	52.5	.01	286	.02	588	1	30000	2	56000	.99935	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

INT_CAL_ICP - Modified 03/06/2008
PDF File ID: 1974559
Report generated: 15-APR-2011 15:26

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L11040306**	Workgroup (AAB#):	**WG361560**
Analytical Method:	**6010B**	Instrument ID:	**PE-ICP2**
ICAL Worknum:	**WG362037**	Initial Calibration Date:	**15-APR-2011 11:20**

	WG362037-01		WG362037-02		WG362037-03		WG362037-04		WG362037-05			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ALUMINUM	0	-205	.1	549	.2	1120	10	52000	20	101000	.999299	
ARSENIC	0	-0.0751	NA	NA	.008	5.02	.4	227	.8	441	.999914	
BARIUM	0	-38.4	.01	557	.02	1100	1	56400	2	111000	.999924	
BERYLLIUM	0	-552	.0005	272	.001	541	.05	27300	.1	53100	.999917	
CADMIUM	0	18.9	.0005	8.15	.001	14.6	.05	790	.1	1540	.998618	
CALCIUM	0	-24.4	NA	NA	.2	17.0	10	942	20	1860	.999964	
CHROMIUM	0	-73.6	.005	611	.01	1220	.5	60000	1	118000	.999942	
COBALT	0	-13.2	.002	29.8	.004	65.3	.1	3610	.4	7090	.999953	
COPPER	0	-1390	.005	825	.01	1570	.5	76700	1	151000	.999959	
IRON	0	0.387	.04	13.6	.08	25.4	4	1200	8	2350	.999949	
LEAD	0	32.1	.005	20.4	.01	48.5	.5	2650	1	5190	.999753	
MAGNESIUM	0	-5.36	.1	74.1	.2	147	10	7340	20	14300	.999933	
MANGANESE	0	118	.005	2450	.01	4740	.5	244000	1	470000	.999757	
NICKEL	0	-7.31	.005	167	.01	314	.5	16200	1	31800	.999638	
POTASSIUM	0	56.4	.5	1420	1	2690	50	135000	100	263000	1	
SILVER	0	-944	.004	713	.008	1470	.4	84900	.8	167000	.999566	
SODIUM	0	70.3	.5	6940	1	13700	50	667000	100	1280000	1	
VANADIUM	0	3960	.01	1510	.02	2960	1	156000	2	311000	.999777	
ZINC	0	19.0	.01	304	.02	616	1	31600	2	62100	.999962	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

INT_CAL_ICP - Modified 03/06/2008
PDF File ID: 1974559
Report generated: 15-APR-2011 15:26

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361588-07
Instrument ID: PE-ICP2 Run Time: 11:31 Method: 6010B
File ID: P2.041211.113149 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG361560 Cal ID: PE-ICP2 - 12-APR-11
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ALUMINUM	.05	.1	.05	U
ARSENIC	.005	.01	.005	U
BARIUM	.005	.01	.005	U
BERYLLIUM	.005	.01	.005	U
CADMIUM	.005	.01	.005	U
CALCIUM	.1	.2	.1	U
CHROMIUM	.01	.02	.01	U
COBALT	.01	.02	.01	U
COPPER	.01	.02	.01	U
IRON	.05	.1	.05	U
LEAD	.0025	.005	.0025	U
MAGNESIUM	.25	.5	.25	U
MANGANESE	.005	.01	.005	U
NICKEL	.02	.04	.02	U
POTASSIUM	.5	1	.5	U
SILVER	.005	.01	.005	U
SODIUM	.25	.5	.25	U
VANADIUM	.005	.01	.005	U
ZINC	.01	.02	.01	U

U = Result is less than 2 x MDL
F = Result is between MDL and 2 x MDL
* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1974561
Report generated 04/15/2011 15:26

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11040306 Run Date: 04/15/2011 Sample ID: WG362037-07
Instrument ID: PE-ICP2 Run Time: 11:33 Method: 6010B
File ID: P2.041511.113326 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG361560 Cal ID: PE-ICP2 - 15-APR-11
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ALUMINUM	.05	.1	.05	U
ARSENIC	.005	.01	.005	U
BARIUM	.005	.01	.005	U
BERYLLIUM	.005	.01	.005	U
CADMIUM	.005	.01	.005	U
CALCIUM	.1	.2	.1	U
CHROMIUM	.01	.02	.01	U
COBALT	.01	.02	.01	U
COPPER	.01	.02	.01	U
IRON	.05	.1	.05	U
LEAD	.0025	.005	.00254	F
MAGNESIUM	.25	.5	.25	U
MANGANESE	.005	.01	.005	U
NICKEL	.02	.04	.02	U
POTASSIUM	.5	1	.5	U
SILVER	.005	.01	.005	U
SODIUM	.25	.5	.25	U
VANADIUM	.005	.01	.005	U
ZINC	.01	.02	.01	U

U = Result is less than 2 x MDL
F = Result is between MDL and 2 x MDL
* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1974561
Report generated 04/15/2011 15:26

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361588-14

Instrument ID: PE-ICP2 Run Time: 12:15 Method: 6010B

File ID: P2.041211.121526 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 12-APR-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1974564
Report generated 04/15/2011 15:26

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11040306 | Run Date: 04/12/2011 | Sample ID: WG361588-16

Instrument ID: PE-ICP2 | Run Time: 13:31 | Method: 6010B

File ID: P2.041211.133137 | Analyst: KHR | Units: mg/L

Workgroup (AAB#): WG361560 | Cal ID: PE-ICP - 12-APR-11

Matrix: WATER | QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1974564
Report generated 04/15/2011 15:26

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361588-20

Instrument ID: PE-ICP2 Run Time: 14:39 Method: 6010B

File ID: P2.041211.143917 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 12-APR-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1974564
Report generated 04/15/2011 15:26

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361588-30

Instrument ID: PE-ICP2 Run Time: 19:52 Method: 6010B

File ID: P2.041211.195236 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 12-APR-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

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CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361588-32

Instrument ID: PE-ICP2 Run Time: 21:12 Method: 6010B

File ID: P2.041211.211233 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 12-APR-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

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CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11040306 Run Date: 04/15/2011 Sample ID: WG362037-13

Instrument ID: PE-ICP2 Run Time: 12:11 Method: 6010B

File ID: P2.041511.121117 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 15-APR-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

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CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11040306 Run Date: 04/15/2011 Sample ID: WG362037-15

Instrument ID: PE-ICP2 Run Time: 13:04 Method: 6010B

File ID: P2.041511.130426 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 15-APR-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00250	U
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

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CONTINUING CALIBRATION BLANK (CCB)

Login Number: L11040306 Run Date: 04/15/2011 Sample ID: WG362037-18

Instrument ID: PE-ICP2 Run Time: 14:30 Method: 6010B

File ID: P2.041511.143053 Analyst: KHR Units: mg/L

Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 15-APR-11

Matrix: WATER QAPP: DOD4

Analytes	MDL	RDL	Concentration	Qualifier
Aluminum	0.0500	0.100	0.0500	U
Arsenic	0.00500	0.0100	0.00500	U
Barium	0.00500	0.0100	0.00500	U
Beryllium	0.00500	0.0100	0.00500	U
Cadmium	0.00500	0.0100	0.00500	U
Calcium	0.100	0.200	0.100	U
Chromium	0.0100	0.0200	0.0100	U
Cobalt	0.0100	0.0200	0.0100	U
Copper	0.0100	0.0200	0.0100	U
Iron	0.0500	0.100	0.0500	U
Lead	0.00250	0.00500	0.00265	F
Magnesium	0.250	0.500	0.250	U
Manganese	0.00500	0.0100	0.00500	U
Nickel	0.0200	0.0400	0.0200	U
Potassium	0.500	1.00	0.500	U
Silver	0.00500	0.0100	0.00500	U
Sodium	0.250	0.500	0.250	U
Vanadium	0.00500	0.0100	0.00500	U
Zinc	0.0100	0.0200	0.0100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

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INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361588-06
Instrument ID: PE-ICP2 Run Time: 11:25 Method: 6010B
File ID: P2.041211.112507 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 12-APR-11
QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Aluminum		10	10.1	101	90 - 110	
Arsenic		.4	0.406	101	90 - 110	
Barium		1	1.01	101	90 - 110	
Beryllium		.05	0.0506	101	90 - 110	
Cadmium		.05	0.0482	96.3	90 - 110	
Calcium		10	10.5	105	90 - 110	
Chromium		.5	0.499	99.7	90 - 110	
Cobalt		.2	0.204	102	90 - 110	
Copper		.5	0.502	100	90 - 110	
Iron		4	3.97	99.2	90 - 110	
Lead		.5	0.510	102	90 - 110	
Magnesium		10	10.0	100	90 - 110	
Manganese		.5	0.510	102	90 - 110	
Nickel		.5	0.502	100	90 - 110	
Potassium		50	49.6	99.2	90 - 110	
Silver		.4	0.396	98.9	90 - 110	
Sodium		50	47.6	95.2	90 - 110	
Vanadium		1	0.976	97.6	90 - 110	
Zinc		1	1.00	100	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 1974560
Report generated 04/15/2011 15:26

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)
(Alternate Source)

Login Number: L11040306 Run Date: 04/15/2011 Sample ID: WG362037-06
Instrument ID: PE-ICP2 Run Time: 11:26 Method: 6010B
File ID: P2.041511.112644 Analyst: KHR Units: mg/L
Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 15-APR-11
QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Aluminum		10	9.99	99.9	90 - 110	
Arsenic		.4	0.380	95.0	90 - 110	
Barium		1	0.990	99.0	90 - 110	
Beryllium		.05	0.0481	96.2	90 - 110	
Cadmium		.05	0.0483	96.6	90 - 110	
Calcium		10	10.1	101	90 - 110	
Chromium		.5	0.489	97.7	90 - 110	
Cobalt		.2	0.196	97.9	90 - 110	
Copper		.5	0.485	97.0	90 - 110	
Iron		4	4.09	102	90 - 110	
Lead		.5	0.500	100	90 - 110	
Magnesium		10	10.3	103	90 - 110	
Manganese		.5	0.505	101	90 - 110	
Nickel		.5	0.494	98.7	90 - 110	
Potassium		50	49.9	99.8	90 - 110	
Silver		.4	0.387	96.8	90 - 110	
Sodium		50	48.1	96.3	90 - 110	
Vanadium		1	0.959	95.9	90 - 110	
Zinc		1	0.985	98.5	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008
PDF File ID: 1974560
Report generated 04/15/2011 15:26

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361588-13
Instrument ID: PE-ICP2 Run Time: 12:08 Method: 6010B
File ID: P2.041211.120845 Analyst: KHR QC Key: DOD4
Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 12-APR-11
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.1	mg/L	101	90 - 110		
Arsenic		0.400	0.417	mg/L	104	90 - 110		
Barium		1.00	1.03	mg/L	103	90 - 110		
Beryllium		0.0500	0.0534	mg/L	107	90 - 110		
Cadmium		0.0500	0.0499	mg/L	99.8	90 - 110		
Calcium		10.0	10.8	mg/L	108	90 - 110		
Chromium		0.500	0.510	mg/L	102	90 - 110		
Cobalt		0.200	0.209	mg/L	104	90 - 110		
Copper		0.500	0.522	mg/L	104	90 - 110		
Iron		4.00	3.98	mg/L	99.4	90 - 110		
Lead		0.500	0.520	mg/L	104	90 - 110		
Magnesium		10.0	10.1	mg/L	101	90 - 110		
Manganese		0.500	0.520	mg/L	104	90 - 110		
Nickel		0.500	0.514	mg/L	103	90 - 110		
Potassium		50.0	48.9	mg/L	97.7	90 - 110		
Silver		0.400	0.412	mg/L	103	90 - 110		
Sodium		50.0	49.7	mg/L	99.5	90 - 110		
Vanadium		1.00	1.02	mg/L	102	90 - 110		
Zinc		1.00	1.03	mg/L	103	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
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Report generated 04/15/2011 15:26

Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361588-15
Instrument ID: PE-ICP2 Run Time: 13:24 Method: 6010B
File ID: P2.041211.132457 Analyst: KHR QC Key: DOD4
Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 12-APR-11
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.0	mg/L	100	90 - 110		
Arsenic		0.400	0.414	mg/L	103	90 - 110		
Barium		1.00	1.01	mg/L	101	90 - 110		
Beryllium		0.0500	0.0528	mg/L	106	90 - 110		
Cadmium		0.0500	0.0484	mg/L	96.9	90 - 110		
Calcium		10.0	10.5	mg/L	105	90 - 110		
Chromium		0.500	0.501	mg/L	100	90 - 110		
Cobalt		0.200	0.204	mg/L	102	90 - 110		
Copper		0.500	0.512	mg/L	102	90 - 110		
Iron		4.00	3.91	mg/L	97.8	90 - 110		
Lead		0.500	0.511	mg/L	102	90 - 110		
Magnesium		10.0	9.91	mg/L	99.1	90 - 110		
Manganese		0.500	0.511	mg/L	102	90 - 110		
Nickel		0.500	0.506	mg/L	101	90 - 110		
Potassium		50.0	48.4	mg/L	96.9	90 - 110		
Silver		0.400	0.404	mg/L	101	90 - 110		
Sodium		50.0	48.5	mg/L	97.0	90 - 110		
Vanadium		1.00	1.00	mg/L	100	90 - 110		
Zinc		1.00	1.02	mg/L	102	90 - 110		

* Exceeds LIMITS Criteria

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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361588-19
Instrument ID: PE-ICP2 Run Time: 14:32 Method: 6010B
File ID: P2.041211.143237 Analyst: KHR QC Key: DOD4
Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 12-APR-11
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.5	mg/L	105	90 - 110		
Arsenic		0.400	0.411	mg/L	103	90 - 110		
Barium		1.00	1.03	mg/L	103	90 - 110		
Beryllium		0.0500	0.0532	mg/L	106	90 - 110		
Cadmium		0.0500	0.0492	mg/L	98.5	90 - 110		
Calcium		10.0	11.0	mg/L	110	90 - 110		
Chromium		0.500	0.508	mg/L	102	90 - 110		
Cobalt		0.200	0.206	mg/L	103	90 - 110		
Copper		0.500	0.528	mg/L	106	90 - 110		
Iron		4.00	3.99	mg/L	99.7	90 - 110		
Lead		0.500	0.513	mg/L	103	90 - 110		
Magnesium		10.0	10.0	mg/L	100	90 - 110		
Manganese		0.500	0.520	mg/L	104	90 - 110		
Nickel		0.500	0.514	mg/L	103	90 - 110		
Potassium		50.0	49.9	mg/L	99.9	90 - 110		
Silver		0.400	0.413	mg/L	103	90 - 110		
Sodium		50.0	50.4	mg/L	101	90 - 110		
Vanadium		1.00	1.03	mg/L	103	90 - 110		
Zinc		1.00	1.01	mg/L	101	90 - 110		

* Exceeds LIMITS Criteria

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CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361588-29
Instrument ID: PE-ICP2 Run Time: 19:45 Method: 6010B
File ID: P2.041211.194559 Analyst: KHR QC Key: DOD4
Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 12-APR-11
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.6	mg/L	106	90 - 110		
Arsenic		0.400	0.417	mg/L	104	90 - 110		
Barium		1.00	1.03	mg/L	103	90 - 110		
Beryllium		0.0500	0.0542	mg/L	108	90 - 110		
Cadmium		0.0500	0.0485	mg/L	97.0	90 - 110		
Calcium		10.0	10.7	mg/L	107	90 - 110		
Chromium		0.500	0.506	mg/L	101	90 - 110		
Cobalt		0.200	0.205	mg/L	102	90 - 110		
Copper		0.500	0.530	mg/L	106	90 - 110		
Iron		4.00	3.91	mg/L	97.6	90 - 110		
Lead		0.500	0.513	mg/L	103	90 - 110		
Magnesium		10.0	9.80	mg/L	98.0	90 - 110		
Manganese		0.500	0.519	mg/L	104	90 - 110		
Nickel		0.500	0.508	mg/L	102	90 - 110		
Potassium		50.0	49.0	mg/L	97.9	90 - 110		
Silver		0.400	0.414	mg/L	104	90 - 110		
Sodium		50.0	49.7	mg/L	99.5	90 - 110		
Vanadium		1.00	1.02	mg/L	102	90 - 110		
Zinc		1.00	1.01	mg/L	101	90 - 110		

* Exceeds LIMITS Criteria

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CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361588-31
Instrument ID: PE-ICP2 Run Time: 21:05 Method: 6010B
File ID: P2.041211.210556 Analyst: KHR QC Key: DOD4
Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 12-APR-11
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.7	mg/L	107	90 - 110		
Arsenic		0.400	0.426	mg/L	107	90 - 110		
Barium		1.00	1.05	mg/L	105	90 - 110		
Beryllium		0.0500	0.0553	mg/L	111	90 - 110		*
Cadmium		0.0500	0.0491	mg/L	98.2	90 - 110		
Calcium		10.0	10.9	mg/L	109	90 - 110		
Chromium		0.500	0.520	mg/L	104	90 - 110		
Cobalt		0.200	0.210	mg/L	105	90 - 110		
Copper		0.500	0.539	mg/L	108	90 - 110		
Iron		4.00	4.00	mg/L	100	90 - 110		
Lead		0.500	0.525	mg/L	105	90 - 110		
Magnesium		10.0	10.0	mg/L	100	90 - 110		
Manganese		0.500	0.534	mg/L	107	90 - 110		
Nickel		0.500	0.523	mg/L	105	90 - 110		
Potassium		50.0	49.5	mg/L	99.1	90 - 110		
Silver		0.400	0.421	mg/L	105	90 - 110		
Sodium		50.0	50.3	mg/L	101	90 - 110		
Vanadium		1.00	1.05	mg/L	105	90 - 110		
Zinc		1.00	1.04	mg/L	104	90 - 110		

* Exceeds LIMITS Criteria

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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/15/2011 Sample ID: WG362037-12
Instrument ID: PE-ICP2 Run Time: 12:04 Method: 6010B
File ID: P2.041511.120436 Analyst: KHR QC Key: DOD4
Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 15-APR-11
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	10.1	mg/L	101	90 - 110		
Arsenic		0.400	0.406	mg/L	101	90 - 110		
Barium		1.00	1.00	mg/L	100	90 - 110		
Beryllium		0.0500	0.0502	mg/L	100	90 - 110		
Cadmium		0.0500	0.0500	mg/L	100	90 - 110		
Calcium		10.0	10.3	mg/L	103	90 - 110		
Chromium		0.500	0.494	mg/L	98.8	90 - 110		
Cobalt		0.200	0.198	mg/L	99.0	90 - 110		
Copper		0.500	0.493	mg/L	98.6	90 - 110		
Iron		4.00	4.09	mg/L	102	90 - 110		
Lead		0.500	0.505	mg/L	101	90 - 110		
Magnesium		10.0	10.3	mg/L	103	90 - 110		
Manganese		0.500	0.508	mg/L	102	90 - 110		
Nickel		0.500	0.503	mg/L	101	90 - 110		
Potassium		50.0	50.6	mg/L	101	90 - 110		
Silver		0.400	0.399	mg/L	99.8	90 - 110		
Sodium		50.0	50.3	mg/L	101	90 - 110		
Vanadium		1.00	0.992	mg/L	99.2	90 - 110		
Zinc		1.00	1.01	mg/L	101	90 - 110		

* Exceeds LIMITS Criteria

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CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/15/2011 Sample ID: WG362037-14

Instrument ID: PE-ICP2 Run Time: 12:57 Method: 6010B

File ID: P2.041511.125746 Analyst: KHR QC Key: DOD4

Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 15-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.67	mg/L	96.7	90 - 110		
Arsenic		0.400	0.418	mg/L	105	90 - 110		
Barium		1.00	0.969	mg/L	96.9	90 - 110		
Beryllium		0.0500	0.0481	mg/L	96.2	90 - 110		
Cadmium		0.0500	0.0484	mg/L	96.8	90 - 110		
Calcium		10.0	10.1	mg/L	101	90 - 110		
Chromium		0.500	0.480	mg/L	96.0	90 - 110		
Cobalt		0.200	0.193	mg/L	96.5	90 - 110		
Copper		0.500	0.478	mg/L	95.6	90 - 110		
Iron		4.00	3.87	mg/L	96.8	90 - 110		
Lead		0.500	0.490	mg/L	98.0	90 - 110		
Magnesium		10.0	9.69	mg/L	96.9	90 - 110		
Manganese		0.500	0.492	mg/L	98.4	90 - 110		
Nickel		0.500	0.491	mg/L	98.2	90 - 110		
Potassium		50.0	48.7	mg/L	97.4	90 - 110		
Silver		0.400	0.386	mg/L	96.5	90 - 110		
Sodium		50.0	47.2	mg/L	94.5	90 - 110		
Vanadium		1.00	0.964	mg/L	96.4	90 - 110		
Zinc		1.00	0.970	mg/L	97.0	90 - 110		

* Exceeds LIMITS Criteria

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Microbac Laboratories Inc.
CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/15/2011 Sample ID: WG362037-17
Instrument ID: PE-ICP2 Run Time: 14:24 Method: 6010B
File ID: P2.041511.142411 Analyst: KHR QC Key: DOD4
Workgroup (AAB#): WG361560 Cal ID: PE-ICP - 15-APR-11
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Aluminum		10.0	9.79	mg/L	97.9	90 - 110		
Arsenic		0.400	0.433	mg/L	108	90 - 110		
Barium		1.00	0.962	mg/L	96.2	90 - 110		
Beryllium		0.0500	0.0473	mg/L	94.6	90 - 110		
Cadmium		0.0500	0.0484	mg/L	96.9	90 - 110		
Calcium		10.0	10.2	mg/L	102	90 - 110		
Chromium		0.500	0.477	mg/L	95.4	90 - 110		
Cobalt		0.200	0.192	mg/L	96.1	90 - 110		
Copper		0.500	0.472	mg/L	94.5	90 - 110		
Iron		4.00	3.92	mg/L	98.1	90 - 110		
Lead		0.500	0.487	mg/L	97.4	90 - 110		
Magnesium		10.0	9.79	mg/L	97.9	90 - 110		
Manganese		0.500	0.488	mg/L	97.6	90 - 110		
Nickel		0.500	0.485	mg/L	96.9	90 - 110		
Potassium		50.0	49.2	mg/L	98.4	90 - 110		
Silver		0.400	0.382	mg/L	95.5	90 - 110		
Sodium		50.0	48.6	mg/L	97.2	90 - 110		
Vanadium		1.00	0.960	mg/L	96.0	90 - 110		
Zinc		1.00	0.959	mg/L	95.9	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008
PDF File ID: 1974563
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Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11040306 **Workgroup (AAB#):** WG361560
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG361588-10 **File ID:** P2.041211.115139 **Units:** mg/L
Sol. AB : WG361588-12 **File ID:** P2.041211.120307 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	257	103	250	258	103	
Arsenic	NS	0.00255	NS	0.250	0.257	103	
Barium	NS	-0.000200	NS	0.250	0.249	99.6	
Beryllium	NS	0.000490	NS	0.250	0.268	107	
Cadmium	NS	-0.000210	NS	0.500	0.466	93.2	
Calcium	250	297	119	250	293	117	
Chromium	NS	-0.00128	NS	0.250	0.247	98.8	
Cobalt	NS	-0.00115	NS	0.250	0.236	94.4	
Copper	NS	0.00170	NS	0.250	0.261	104	
Iron	100	98.1	98.1	100	97.9	97.9	
Lead	NS	0.000300	NS	0.500	0.489	97.8	
Magnesium	250	253	101	250	250	100	
Manganese	NS	0.00218	NS	0.250	0.252	101	
Nickel	NS	-0.00250	NS	0.500	0.465	93.0	
Potassium	NS	0.0856	NS	5.00	4.88	97.6	
Silver	NS	0.000380	NS	0.500	0.520	104	
Sodium	NS	0.0617	NS	5.00	4.81	96.2	
Vanadium	NS	0.00609	NS	0.250	0.253	101	
Zinc	NS	-0.00149	NS	0.500	0.472	94.4	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

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Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11040306 **Workgroup (AAB#):** WG361560
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG361588-17 **File ID:** P2.041211.142118 **Units:** mg/L
Sol. AB : WG361588-18 **File ID:** P2.041211.142659 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	255	102	250	263	105	
Arsenic	NS	-0.00117	NS	0.250	0.257	103	
Barium	NS	0.0000200	NS	0.250	0.248	99.2	
Beryllium	NS	0.000540	NS	0.250	0.268	107	
Cadmium	NS	-0.000220	NS	0.500	0.470	94.0	
Calcium	250	300	120	250	299	120	
Chromium	NS	-0.00115	NS	0.250	0.246	98.4	
Cobalt	NS	-0.00101	NS	0.250	0.236	94.4	
Copper	NS	-0.000160	NS	0.250	0.265	106	
Iron	100	99.2	99.2	100	97.7	97.7	
Lead	NS	0.00268	NS	0.500	0.485	97.0	
Magnesium	250	254	102	250	249	99.6	
Manganese	NS	0.000100	NS	0.250	0.251	100	
Nickel	NS	-0.00251	NS	0.500	0.464	92.8	
Potassium	NS	0.0135	NS	5.00	4.81	96.2	
Silver	NS	-0.000480	NS	0.500	0.523	105	
Sodium	NS	0.0750	NS	5.00	4.83	96.6	
Vanadium	NS	0.00375	NS	0.250	0.255	102	
Zinc	NS	-0.00195	NS	0.500	0.462	92.4	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11040306 **Workgroup (AAB#):** WG361560
Instrument ID: PE-ICP2 **Method:** 6010B
Sol. A : WG362037-10 **File ID:** P2.041511.115317 **Units:** mg/L
Sol. AB : WG362037-11 **File ID:** P2.041511.115858 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Aluminum	250	248	99.2	250	246	98.4	
Arsenic	NS	0.00442	NS	0.250	0.220	88.0	
Barium	NS	-0.0000800	NS	0.250	0.245	98.0	
Beryllium	NS	-0.000830	NS	0.250	0.251	100	
Cadmium	NS	0.0000100	NS	0.500	0.464	92.8	
Calcium	250	274	110	250	283	113	
Chromium	NS	-0.00121	NS	0.250	0.243	97.2	
Cobalt	NS	-0.00143	NS	0.250	0.229	91.6	
Copper	NS	0.00121	NS	0.250	0.250	100	
Iron	100	101	101	100	101	101	
Lead	NS	0.000560	NS	0.500	0.479	95.8	
Magnesium	250	257	103	250	257	103	
Manganese	NS	0.000330	NS	0.250	0.248	99.2	
Nickel	NS	-0.00216	NS	0.500	0.461	92.2	
Potassium	NS	0.0749	NS	5.00	5.12	102	
Silver	NS	-0.00194	NS	0.500	0.512	102	
Sodium	NS	0.0551	NS	5.00	5.05	101	
Vanadium	NS	0.00210	NS	0.250	0.248	99.2	
Zinc	NS	-0.000780	NS	0.500	0.464	92.8	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11040306 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	AG	AL	AS	B	BA
ALUMINUM	396.15	0	0	0.206	0	0
ANTIMONY	206.84	0	0	-0.740	0	0
ARSENIC	188.98	0	0.0893	0	0	0
BARIUM	233.53	0	0.00932	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	1.12	0	0	0
CADMIUM	228.80	0	0	6.68	0	0
CALCIUM	227.55	0	0.195	10.0	0	0
CHROMIUM	267.72	0	0.0250	0	0	0
COBALT	228.62	0	0	0	0	0.337
COPPER	327.39	0	0	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	0	-0.0210	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-0.185	0	-0.231	-0.0949	-0.230
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0.111	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0.200	0	0.0400
ZINC	206.20	0	0	0	0	0

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11040306 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	BE	CA	CD	CO	CR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	0	6.33
ARSENIC	188.98	0	0.0200	-0.0875	0	-5.90
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	-0.0733
BORON	249.68	0	0	24.1	5.90	1.50
CADMIUM	228.80	0	0	0	-10.7	0
CALCIUM	227.55	0	0	0	300	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	-0.244
COPPER	327.39	0	0	0	0.380	-0.0400
IRON	239.56	0	0	0	1.91	0
LEAD	220.35	0	-0.0480	0	0.116	-0.0700
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0	0	0	0
MANGANESE	257.61	-1.04	0	-0.755	-0.0418	-0.110
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	0	0	0	-0.566	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.250	0	-1.52	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0.0900	0	3.48	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	-0.0100	0	0	0.297
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	0	0	0	0	-3.64

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11040306 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	CU	FE	K	LI	MG
ALUMINUM	396.15	0	-0.0800	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	-0.139	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0.195	0	0	0
BORON	249.68	0	-4.66	0	0	0
CADMIUM	228.80	0	0.00130	0	0	0
CALCIUM	227.55	-2.00	-5.00	0	0	0.104
CHROMIUM	267.72	0	-0.000800	0	0	0
COBALT	228.62	0	0.0262	0	0	0
COPPER	327.39	0	-0.115	0	0.154	0
IRON	239.56	0	0	0	0	0.0276
LEAD	220.35	0.740	0.0440	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	0.540	0	0	0
MANGANESE	257.61	-0.0457	-0.0453	-0.0181	-0.794	0.0147
MOLYBDENUM	202.03	0	-0.0494	0	0	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	-0.369	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0.0717	0.0498	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0.120	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.134	0	0	0
ZINC	206.20	-0.200	0.0230	0	0	0

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11040306 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	MN	MO	NA	NI	PB
ALUMINUM	396.15	0	13.5	0	0	0
ANTIMONY	206.84	0	-7.69	0	0	0
ARSENIC	188.98	0	6.00	0	0	0
BARIUM	233.53	0	-0.548	0	0	0
BERYLLIUM	234.86	-0.131	-1.50	0	-0.00974	0
BORON	249.68	0	-2.20	0	0	0
CADMIUM	228.80	0	-0.00900	0	-0.398	0
CALCIUM	227.55	0	-8.00	0	-900	0
CHROMIUM	267.72	0.434	-0.00100	0	0	0
COBALT	228.62	0	-0.125	0	0.129	0
COPPER	327.39	0	-0.0774	0	0.150	0.257
IRON	239.56	0.480	0	0	0	0.407
LEAD	220.35	0.100	-5.00	0	0.100	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-5.00	0	0	0.0252
MANGANESE	257.61	0	-0.0482	-0.00916	-0.0340	-0.0413
MOLYBDENUM	202.03	-0.209	0	0	0.120	0
NICKEL	231.60	0	0	0	0	0
POTASSIUM	766.49	0	0	1.00	0	0
SELENIUM	196.03	0.451	0.300	0	0.0940	0
SILICON	251.61	0	15.0	0	0	0
SILVER	328.07	0.130	0.100	0	0	0
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	-1.50	1.20	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0.578	0	0	0
ZINC	206.20	0	0.180	0	-0.200	-0.100

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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11040306 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	SB	SE	SI	SN	SR
ALUMINUM	396.15	0	0	0	0	0
ANTIMONY	206.84	0	0	0	0	0
ARSENIC	188.98	0	0	0	0	0
BARIUM	233.53	0	0	0	0	0
BERYLLIUM	234.86	0	0	0	0	0
BORON	249.68	0	0	0	0	0
CADMIUM	228.80	0	0	0	0	0
CALCIUM	227.55	0	0	2.79	0	0
CHROMIUM	267.72	0	0	0	0	0
COBALT	228.62	0	0	0	0	0
COPPER	327.39	0	0.148	0	0	0
IRON	239.56	0	0	0	0	0
LEAD	220.35	-0.0100	0	0	0	0
LITHIUM	670.78	0	0	0	0	0
MAGNESIUM	279.08	0	-0.0924	0	0	0
MANGANESE	257.61	-0.0505	-0.0281	-0.185	-0.0445	-0.625
MOLYBDENUM	202.03	0	0	0	0	0
NICKEL	231.60	-0.0500	-0.0100	0	0	0
POTASSIUM	766.49	0	0	0	0	0
SELENIUM	196.03	0	0	0	0	0
SILICON	251.61	0	0	0	0	0
SILVER	328.07	0	0	0	0	0.200
SODIUM	589.59	0	0	0	0	0
STRONTIUM	407.77	0	0	0	0	0
THALLIUM	190.80	0	0	0	0	0
TIN	189.93	0	0	0	0	0
TITANIUM	334.94	0	0	0	0	0
VANADIUM	290.88	0	0	0	0	0
ZINC	206.20	-0.300	0	0	0	0

CORR_FACTORS - Modified 03/05/2008
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Microbac Laboratories Inc.
INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Login Number: L11040306 **Date:** 02/14/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Wave Length	TI	TL	V	ZN
ALUMINUM	396.15	0	0	0	0
ANTIMONY	206.84	0	0	0.000100	0
ARSENIC	188.98	0	0	0.0930	0
BARIUM	233.53	0	0	-2.29	0
BERYLLIUM	234.86	0	0	0	0
BORON	249.68	0	0	0	0
CADMIUM	228.80	0	0	0.0800	0
CALCIUM	227.55	0	0	60.0	0
CHROMIUM	267.72	0	0	-0.567	-0.0400
COBALT	228.62	2.21	0	0	0
COPPER	327.39	-1.05	0	-0.700	-0.0613
IRON	239.56	0	0	0	0
LEAD	220.35	0	0	0.0560	0
LITHIUM	670.78	0	0	0	0
MAGNESIUM	279.08	0	0	0	0
MANGANESE	257.61	-0.00931	-0.0414	-0.0601	-0.0552
MOLYBDENUM	202.03	0	0	-0.288	0
NICKEL	231.60	0	0.617	0	0
POTASSIUM	766.49	0	0	0	0
SELENIUM	196.03	-0.220	0	-0.126	0
SILICON	251.61	0	0	0	0
SILVER	328.07	0	0	-1.67	0
SODIUM	589.59	0	0	0	0
STRONTIUM	407.77	0	0	0	0
THALLIUM	190.80	-12.0	0.617	-1.41	0
TIN	189.93	0	0	0	0
TITANIUM	334.94	0	0	0	0
VANADIUM	290.88	0	0	0	0
ZINC	206.20	0	0	-0.100	0

CORR_FACTORS - Modified 03/05/2008
PDF File ID: 1974558
Report generated: 04/15/2011 15:25

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L11040306 **Date:** 03/30/2011
Insturment ID: PE-ICP2 **Method:** 6010B

Analyte	Integration Time (Sec.)	Concentration (mg/L)
Aluminum	10.00	450.0
Antimony	10.00	45.0
Arsenic	10.00	9.0
Barium	10.00	9.0
Beryllium	10.00	4.5
Boron	10.00	45.0
Cadmium	10.00	9.0
Calcium	10.00	450.0
Chromium	10.00	45.0
Cobalt	10.00	45.0
Copper	10.00	45.0
Iron	10.00	450.0
Lead	10.00	90.0
Lithium	10.00	0.9
Magnesium	10.00	450.0
Manganese	10.00	27.0
Molybdenum	10.00	45.0
Nickel	10.00	45.0
Potassium	10.00	72.0
Selenium	10.00	45.0
Silicon	10.00	36.0
Silver	10.00	9.0
Sodium	10.00	180.0
Strontium	10.00	4.5
Thallium	10.00	45.0
Tin	10.00	45.0
Titanium	10.00	45.0
Vanadium	10.00	45.0
Zinc	10.00	45.0

Comments:
All analytes passed acceptance criteria at the specified concentration.

LINEAR_RANGE - Modified 03/06/2008
PDF File ID: 1974557
Report generated: 04/15/2011 15:25

2.1.1.3 Raw Data

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Analysis Begun

Start Time: 4/12/2011 10:51:49 AM **Plasma On Time: 4/12/2011 7:48:47 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\TUESDAY1.sif
Batch ID:
Results Data Set: 041211H2
Results Library: C:\pe\peicp2\Results\Results.mdb

==========

Sequence No.: 1 **Autosampler Location: 1**
Sample ID: S0 **Date Collected: 4/12/2011 10:51:51 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S0

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4960031.7	32433.41	0.65%		
YRADIAL	295425.9	6671.25	2.26%		
Ga 417.206	1296247.6	10022.99	0.77%		
GaRADIAL	64463.7	1439.05	2.23%		
Ag 328.068†	-1254.2	145.99	11.64%	[0.00]	mg/L
Al 396.153†	-119.1	43.95	36.90%	[0.00]	mg/L
As 188.979†	2.1	3.00	141.72%	[0.00]	mg/L
Ba 233.527†	-33.9	6.36	18.76%	[0.00]	mg/L
Be 234.861†	-520.4	4.47	0.86%	[0.00]	mg/L
B 249.677†	516.1	5.57	1.08%	[0.00]	mg/L
Ca 227.546†	-41.8	2.67	6.40%	[0.00]	mg/L
Cd 228.802†	17.8	1.99	11.16%	[0.00]	mg/L
Co 228.616†	-18.1	3.15	17.45%	[0.00]	mg/L
Cr 267.716†	-31.5	6.75	21.46%	[0.00]	mg/L
Cu 327.393†	-1498.1	89.64	5.98%	[0.00]	mg/L
Fe 239.562†	2.1	1.61	78.09%	[0.00]	mg/L
Mg 279.077†	-2.9	6.57	228.19%	[0.00]	mg/L
Mn 257.610†	162.3	15.53	9.57%	[0.00]	mg/L
Mo 202.031†	-20.6	0.51	2.46%	[0.00]	mg/L
Ni 231.604†	1.7	6.78	403.98%	[0.00]	mg/L
Pb 220.353†	38.4	0.96	2.51%	[0.00]	mg/L
Sb 206.836†	13.1	0.43	3.28%	[0.00]	mg/L
Se 196.026†	1.9	4.40	230.18%	[0.00]	mg/L
Si 251.611†	971.9	12.35	1.27%	[0.00]	mg/L
Sn 189.927†	30.1	3.31	11.00%	[0.00]	mg/L
Ti 334.940†	-574.9	205.54	35.75%	[0.00]	mg/L
Tl 190.801†	-29.5	3.68	12.46%	[0.00]	mg/L
V 290.880†	4072.9	69.62	1.71%	[0.00]	mg/L
Zn 206.200†	52.5	1.76	3.36%	[0.00]	mg/L
K 766.490†	300.5	40.09	13.34%	[0.00]	mg/L
Na 589.592†	672.7	140.09	20.83%	[0.00]	mg/L
Sr 407.771†	-696.3	93.98	13.50%	[0.00]	mg/L
Li 670.784†	461.8	74.58	16.15%	[0.00]	mg/L

==========

Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S1 **Date Collected: 4/12/2011 10:58:26 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S1

Analyte	Back Pressure	Flow

Approved: April 13, 2011

All	198.0 kPa	0.50 L/min

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	5008812.3	58150.06	1.16%		
YRADIAL	296712.9	6044.13	2.04%		
Ga 417.206	1301708.0	19018.62	1.46%		
GaRADIAL	64695.7	2113.64	3.27%		
Ag 328.068†	765.2	87.61	11.45%	[0.0040]	mg/L
Al 396.153†	471.4	15.84	3.36%	[0.10]	mg/L
Ba 233.527†	524.6	5.78	1.10%	[0.010]	mg/L
Be 234.861†	258.9	13.01	5.03%	[0.0005]	mg/L
Cd 228.802†	8.2	3.79	46.47%	[0.00050]	mg/L
Co 228.616†	34.6	5.71	16.52%	[0.0020]	mg/L
Cr 267.716†	556.4	9.75	1.75%	[0.0050]	mg/L
Cu 327.393†	845.6	28.56	3.38%	[0.0050]	mg/L
Fe 239.562†	10.3	1.87	18.09%	[0.040]	mg/L
Mg 279.077†	71.1	8.89	12.50%	[0.10]	mg/L
Mn 257.610†	2313.1	23.00	0.99%	[0.0050]	mg/L
Mo 202.031†	112.1	2.50	2.23%	[0.010]	mg/L
Ni 231.604†	143.7	14.87	10.34%	[0.0050]	mg/L
Pb 220.353†	19.8	3.16	16.00%	[0.0050]	mg/L
Sb 206.836†	19.6	2.25	11.48%	[0.012]	mg/L
Si 251.611†	1632.2	46.09	2.82%	[0.050]	mg/L
Sn 189.927†	48.7	7.65	15.70%	[0.010]	mg/L
Ti 334.940†	7141.6	164.62	2.31%	[0.010]	mg/L
V 290.880†	1357.5	50.83	3.74%	[0.010]	mg/L
Zn 206.200†	285.5	6.52	2.28%	[0.010]	mg/L
K 766.490†	1232.4	110.30	8.95%	[0.50]	mg/L
Na 589.592†	6689.6	25.48	0.38%	[0.50]	mg/L
Sr 407.771†	10427.6	745.89	7.15%	[0.010]	mg/L
Li 670.784†	660.3	25.33	3.84%	[0.010]	mg/L

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S2 **Date Collected: 4/12/2011 11:05:03 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S2

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4928890.2	27900.81	0.57%		
YRADIAL	293357.7	5572.73	1.90%		
Ga 417.206	1284852.3	18195.45	1.42%		
GaRADIAL	63941.7	664.55	1.04%		
Ag 328.068†	1698.1	122.69	7.23%	[0.0080]	mg/L
Al 396.153†	1019.8	50.90	4.99%	[0.20]	mg/L
As 188.979†	5.6	1.92	34.20%	[0.0080]	mg/L
Ba 233.527†	1093.2	9.74	0.89%	[0.020]	mg/L
Be 234.861†	507.2	8.61	1.70%	[0.0010]	mg/L
B 249.677†	429.4	17.75	4.13%	[0.010]	mg/L
Ca 227.546†	19.9	4.71	23.66%	[0.20]	mg/L
Cd 228.802†	15.8	2.62	16.60%	[0.0010]	mg/L
Co 228.616†	65.5	6.22	9.49%	[0.0040]	mg/L
Cr 267.716†	1163.7	6.71	0.58%	[0.010]	mg/L
Cu 327.393†	1535.1	96.59	6.29%	[0.010]	mg/L
Fe 239.562†	23.9	2.85	11.92%	[0.080]	mg/L
Mg 279.077†	148.6	5.55	3.73%	[0.20]	mg/L
Mn 257.610†	4748.2	73.18	1.54%	[0.010]	mg/L
Mo 202.031†	236.9	5.59	2.36%	[0.020]	mg/L
Ni 231.604†	303.3	9.54	3.15%	[0.010]	mg/L
Pb 220.353†	48.6	7.93	16.32%	[0.010]	mg/L
Sb 206.836†	37.1	4.66	12.55%	[0.024]	mg/L

Approved: April 13, 2011

Se 196.026†	12.2	6.76	55.40%	[0.0080]	mg/L
Si 251.611†	3271.2	52.94	1.62%	[0.10]	mg/L
Sn 189.927†	103.1	0.06	0.06%	[0.020]	mg/L
Ti 334.940†	14688.3	457.83	3.12%	[0.020]	mg/L
Tl 190.801†	13.4	3.92	29.31%	[0.010]	mg/L
V 290.880†	2852.4	75.09	2.63%	[0.020]	mg/L
Zn 206.200†	588.3	2.17	0.37%	[0.020]	mg/L
K 766.490†	2487.5	36.73	1.48%	[1.00]	mg/L
Na 589.592†	13177.7	150.64	1.14%	[1.00]	mg/L
Sr 407.771†	21204.7	1485.68	7.01%	[0.020]	mg/L
Li 670.784†	1497.9	73.17	4.88%	[0.020]	mg/L

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Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S3 **Date Collected: 4/12/2011 11:11:40 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S3

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4677866.5	39510.74	0.84%		
YRADIAL	279372.3	5910.82	2.12%		
Ga 417.206	1241692.2	11771.32	0.95%		
GaRADIAL	62087.1	1167.14	1.88%		
Ag 328.068†	82295.6	1564.67	1.90%	[0.40]	mg/L
Al 396.153†	51383.6	86.55	0.17%	[10.00]	mg/L
As 188.979†	388.3	8.58	2.21%	[0.40]	mg/L
Ba 233.527†	54321.1	1072.90	1.98%	[1.00]	mg/L
Be 234.861†	25897.0	457.61	1.77%	[0.05]	mg/L
B 249.677†	26302.7	518.03	1.97%	[0.50]	mg/L
Ca 227.546†	947.6	5.49	0.58%	[10.00]	mg/L
Cd 228.802†	767.3	9.49	1.24%	[0.05]	mg/L
Co 228.616†	3498.0	26.48	0.76%	[0.20]	mg/L
Cr 267.716†	57450.6	998.87	1.74%	[0.50]	mg/L
Cu 327.393†	74458.3	1704.64	2.29%	[0.50]	mg/L
Fe 239.562†	1223.8	22.49	1.84%	[4.00]	mg/L
Mg 279.077†	7503.4	127.12	1.69%	[10.00]	mg/L
Mn 257.610†	233961.8	4571.17	1.95%	[0.50]	mg/L
Mo 202.031†	12354.2	99.60	0.81%	[1.00]	mg/L
Ni 231.604†	15567.2	247.78	1.59%	[0.50]	mg/L
Pb 220.353†	2578.3	14.68	0.57%	[0.50]	mg/L
Sb 206.836†	1656.5	21.38	1.29%	[1.20]	mg/L
Se 196.026†	498.2	10.80	2.17%	[0.40]	mg/L
Si 251.611†	168416.0	3531.04	2.10%	[5.00]	mg/L
Sn 189.927†	5362.6	37.38	0.70%	[1.00]	mg/L
Ti 334.940†	736944.6	5393.21	0.73%	[1.00]	mg/L
Tl 190.801†	768.1	5.89	0.77%	[0.50]	mg/L
V 290.880†	150495.6	2955.06	1.96%	[1.00]	mg/L
Zn 206.200†	30024.6	407.63	1.36%	[1.00]	mg/L
K 766.490†	133020.4	449.70	0.34%	[50.00]	mg/L
Na 589.592†	648969.0	7407.85	1.14%	[50.00]	mg/L
Sr 407.771†	1090402.8	106060.09	9.73%	[1.00]	mg/L
Li 670.784†	80916.1	727.53	0.90%	[1.00]	mg/L

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Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S4 **Date Collected: 4/12/2011 11:18:23 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S4

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Approved: April 13, 2011

Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4882369.2	42652.49	0.87%		
YRADIAL	289458.4	9475.32	3.27%		
Ga 417.206	1300613.6	10589.31	0.81%		
GaRADIAL	65179.3	1006.43	1.54%		
Ag 328.068†	153227.5	1705.14	1.11%	[0.80]	mg/L
Al 396.153†	94839.7	217.95	0.23%	[20.00]	mg/L
As 188.979†	716.2	7.40	1.03%	[0.80]	mg/L
Ba 233.527†	100433.2	1346.76	1.34%	[2.00]	mg/L
Be 234.861†	48258.0	333.20	0.69%	[0.10]	mg/L
B 249.677†	49531.8	614.23	1.24%	[1.00]	mg/L
Ca 227.546†	1761.1	16.37	0.93%	[20.00]	mg/L
Cd 228.802†	1411.6	15.71	1.11%	[0.10]	mg/L
Co 228.616†	6387.5	73.39	1.15%	[0.40]	mg/L
Cr 267.716†	106879.8	1312.53	1.23%	[1.00]	mg/L
Cu 327.393†	138339.3	1886.08	1.36%	[1.00]	mg/L
Fe 239.562†	2304.5	56.70	2.46%	[8.00]	mg/L
Mg 279.077†	14100.7	387.88	2.75%	[20.00]	mg/L
Mn 257.610†	427750.3	1206.07	0.28%	[1.00]	mg/L
Mo 202.031†	22592.5	263.46	1.17%	[2.00]	mg/L
Ni 231.604†	28858.3	294.07	1.02%	[1.00]	mg/L
Pb 220.353†	4720.2	65.04	1.38%	[1.00]	mg/L
Sb 206.836†	3038.8	36.04	1.19%	[2.40]	mg/L
Se 196.026†	913.6	2.60	0.28%	[0.80]	mg/L
Si 251.611†	313696.0	3882.68	1.24%	[10.00]	mg/L
Sn 189.927†	9809.5	114.70	1.17%	[2.00]	mg/L
Ti 334.940†	1372989.0	4272.93	0.31%	[2.00]	mg/L
Tl 190.801†	1402.2	19.75	1.41%	[1.00]	mg/L
V 290.880†	281350.1	3734.83	1.33%	[2.00]	mg/L
Zn 206.200†	55964.5	464.67	0.83%	[2.00]	mg/L
K 766.490†	248390.3	1678.00	0.68%	[100.00]	mg/L
Na 589.592†	1203298.0	6532.92	0.54%	[100.00]	mg/L
Sr 407.771†	2045545.8	158835.32	7.76%	[2.00]	mg/L
Li 670.784†	149284.1	2971.40	1.99%	[2.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Wt. Lin	-17.0	201800	0.00000	0.998199	
Al 396.153	4	Wt. Lin	-17.8	4991	0.00000	0.998774	
As 188.979	3	Wt. Lin	-1.9	936.4	0.00000	0.999108	
Ba 233.527	4	Wt. Lin	6.2	52680	0.00000	0.998983	
Be 234.861	4	Wt. Lin	8.7	499800	0.00000	0.999423	
B 249.677	3	Wt. Lin	-82.3	51180	0.00000	0.999510	
Ca 227.546	3	Wt. Lin	1.7	91.27	0.00000	0.999322	
Cd 228.802	4	Wt. Lin	0.8	14770	0.00000	0.999157	
Co 228.616	4	Wt. Lin	0.9	16610	0.00000	0.998798	
Cr 267.716	4	Wt. Lin	6.9	111800	0.00000	0.999033	
Cu 327.393	4	Wt. Lin	126.1	142900	0.00000	0.999320	
Fe 239.562	4	Wt. Lin	-1.4	301.1	0.00000	0.998764	
Mg 279.077	4	Wt. Lin	-1.2	732.1	0.00000	0.999379	
Mn 257.610	4	Wt. Lin	92.9	451200	0.00000	0.998772	
Mo 202.031	4	Wt. Lin	-5.6	11890	0.00000	0.998956	
Ni 231.604	4	Wt. Lin	-5.4	30180	0.00000	0.999173	
Pb 220.353	4	Wt. Lin	-4.6	5019	0.00000	0.998008	
Sb 206.836	4	Wt. Lin	3.9	1334	0.00000	0.998705	
Se 196.026	3	Wt. Lin	2.7	1188	0.00000	0.999086	
Si 251.611	4	Wt. Lin	7.5	32550	0.00000	0.999414	
Sn 189.927	4	Wt. Lin	-2.4	5163	0.00000	0.998944	
Ti 334.940	4	Wt. Lin	65.0	715500	0.00000	0.999276	
Tl 190.801	3	Wt. Lin	-1.3	1471	0.00000	0.998911	
V 290.880	4	Wt. Lin	-95.3	146000	0.00000	0.999444	
Zn 206.200	4	Wt. Lin	-3.3	29120	0.00000	0.999350	
K 766.490	4	Non Lin, Calc Int	-177.8	2842	-3.56250	1.000000	
Na 589.592	4	Non Lin, Calc Int	-333.5	13940	-18.98806	1.000000	
Sr 407.771	4	Wt. Lin	-117.9	1059000	0.00000	0.999511	
Li 670.784	4	Wt. Lin	-112.9	78400	0.00000	0.999011	

Approved: April 13, 2011

Sequence No.: 6 **Autosampler Location: 9**
Sample ID: ICV 2nd Vendor **Date Collected: 4/12/2011 11:25:07 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICV 2nd Vendor

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: ICV 2nd Vendor

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4803168.1						42429.63	0.88%
YRADIAL	288977.4						6346.24	2.20%
Ga 417.206	1283443.3						4558.77	0.36%
GaRADIAL	64131.7						676.49	1.05%
Ag 328.068†	79643.1	0.396	mg/L	0.0038	0.396	mg/L	0.0038	0.96%
QC value within limits for Ag 328.068 Recovery = 98.94%								
Al 396.153†	50692.2	10.1	mg/L	0.01	10.1	mg/L	0.01	0.14%
QC value within limits for Al 396.153 Recovery = 101.48%								
As 188.979†	381.2	0.406	mg/L	0.0050	0.406	mg/L	0.0050	1.23%
QC value within limits for As 188.979 Recovery = 101.49%								
Ba 233.527†	52945.9	1.01	mg/L	0.012	1.01	mg/L	0.012	1.15%
QC value within limits for Ba 233.527 Recovery = 100.76%								
Be 234.861†	24894.8	0.0506	mg/L	0.00108	0.0506	mg/L	0.00108	2.13%
QC value within limits for Be 234.861 Recovery = 101.14%								
B 249.677†	25306.5	0.502	mg/L	0.0045	0.502	mg/L	0.0045	0.90%
QC value within limits for B 249.677 Recovery = 100.43%								
Ca 227.546†	927.3	10.5	mg/L	0.08	10.5	mg/L	0.08	0.75%
QC value within limits for Ca 227.546 Recovery = 104.78%								
Cd 228.802†	753.4	0.0482	mg/L	0.00015	0.0482	mg/L	0.00015	0.30%
QC value within limits for Cd 228.802 Recovery = 96.32%								
Co 228.616†	3438.7	0.204	mg/L	0.0014	0.204	mg/L	0.0014	0.67%
QC value within limits for Co 228.616 Recovery = 102.23%								
Cr 267.716†	55745.5	0.499	mg/L	0.0036	0.499	mg/L	0.0036	0.73%
QC value within limits for Cr 267.716 Recovery = 99.70%								
Cu 327.393†	71604.3	0.502	mg/L	0.0058	0.502	mg/L	0.0058	1.16%
QC value within limits for Cu 327.393 Recovery = 100.40%								
Fe 239.562†	1194.2	3.97	mg/L	0.050	3.97	mg/L	0.050	1.26%
QC value within limits for Fe 239.562 Recovery = 99.24%								
Mg 279.077†	7343.0	10.0	mg/L	0.11	10.0	mg/L	0.11	1.12%
QC value within limits for Mg 279.077 Recovery = 100.35%								
Mn 257.610†	228230.3	0.510	mg/L	0.0046	0.510	mg/L	0.0046	0.91%
QC value within limits for Mn 257.610 Recovery = 102.05%								
Mo 202.031†	11746.9	0.989	mg/L	0.0061	0.989	mg/L	0.0061	0.61%
QC value within limits for Mo 202.031 Recovery = 98.92%								
Ni 231.604†	15138.4	0.502	mg/L	0.0051	0.502	mg/L	0.0051	1.02%
QC value within limits for Ni 231.604 Recovery = 100.34%								
Pb 220.353†	2528.7	0.510	mg/L	0.0032	0.510	mg/L	0.0032	0.62%
QC value within limits for Pb 220.353 Recovery = 101.96%								
Sb 206.836†	1649.6	1.24	mg/L	0.008	1.24	mg/L	0.008	0.64%
QC value within limits for Sb 206.836 Recovery = 103.23%								
Se 196.026†	487.3	0.411	mg/L	0.0046	0.411	mg/L	0.0046	1.12%
QC value within limits for Se 196.026 Recovery = 102.70%								
Si 251.611†	164189.3	5.03	mg/L	0.065	5.03	mg/L	0.065	1.30%
QC value within limits for Si 251.611 Recovery = 100.60%								
Sn 189.927†	5312.1	1.03	mg/L	0.008	1.03	mg/L	0.008	0.76%
QC value within limits for Sn 189.927 Recovery = 102.94%								
Ti 334.940†	734292.3	1.03	mg/L	0.003	1.03	mg/L	0.003	0.28%
QC value within limits for Ti 334.940 Recovery = 102.61%								
Tl 190.801†	760.9	0.530	mg/L	0.0072	0.530	mg/L	0.0072	1.36%
QC value greater than the upper limit for Tl 190.801 Recovery = 105.96%								
V 290.880†	142501.2	0.976	mg/L	0.0095	0.976	mg/L	0.0095	0.97%
QC value within limits for V 290.880 Recovery = 97.63%								
Zn 206.200†	29157.0	1.00	mg/L	0.011	1.00	mg/L	0.011	1.09%
QC value within limits for Zn 206.200 Recovery = 100.36%								
K 766.490†	132108.3	49.6	mg/L	0.21	49.6	mg/L	0.21	0.42%
QC value within limits for K 766.490 Recovery = 99.18%								
Na 589.592†	620120.9	47.6	mg/L	2.39	47.6	mg/L	2.39	5.02%

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QC value within limits for Na 589.592 Recovery = 95.24%
Sr 407.771† 1052206.5 0.994 mg/L 0.0750 0.994 mg/L 0.0750 7.55%
QC value within limits for Sr 407.771 Recovery = 99.37%
Li 670.784† 79526.3 1.02 mg/L 0.011 1.02 mg/L 0.011 1.08%
QC value within limits for Li 670.784 Recovery = 101.59%
QC Failed. Continue with analysis.

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Sequence No.: 7 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 4/12/2011 11:31:49 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	5053170.7						21893.76	0.43%
YRADIAL	298545.7						2311.09	0.77%
Ga 417.206	1311693.9						4841.02	0.37%
GaRADIAL	65185.7						1484.06	2.28%
Ag 328.068†	27.4	0.00022	mg/L	0.000236	0.00022	mg/L	0.000236	107.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-1.0	0.00336	mg/L	0.011502	0.00336	mg/L	0.011502	342.40%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.8	0.00111	mg/L	0.001815	0.00111	mg/L	0.001815	164.10%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-3.6	-0.00019	mg/L	0.000093	-0.00019	mg/L	0.000093	50.39%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	3.0	-0.00001	mg/L	0.000008	-0.00001	mg/L	0.000008	63.93%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	199.4	0.00552	mg/L	0.000080	0.00552	mg/L	0.000080	1.46%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-1.2	-0.0319	mg/L	0.08636	-0.0319	mg/L	0.08636	270.90%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	1.5	0.00004	mg/L	0.000110	0.00004	mg/L	0.000110	308.90%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	2.9	0.00012	mg/L	0.000086	0.00012	mg/L	0.000086	71.68%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-17.8	-0.00022	mg/L	0.000100	-0.00022	mg/L	0.000100	45.17%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	23.1	-0.00072	mg/L	0.000367	-0.00072	mg/L	0.000367	50.91%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-0.1	0.00414	mg/L	0.009043	0.00414	mg/L	0.009043	218.43%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-2.7	-0.00202	mg/L	0.003793	-0.00202	mg/L	0.003793	187.90%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-17.6	-0.00024	mg/L	0.000013	-0.00024	mg/L	0.000013	5.33%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-1.0	0.00038	mg/L	0.000061	0.00038	mg/L	0.000061	15.85%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-8.1	-0.00009	mg/L	0.000153	-0.00009	mg/L	0.000153	166.54%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-3.5	0.00022	mg/L	0.000538	0.00022	mg/L	0.000538	242.95%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.5	-0.00251	mg/L	0.002344	-0.00251	mg/L	0.002344	93.50%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.8	0.00006	mg/L	0.004787	0.00006	mg/L	0.004787	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	15.0	0.00023	mg/L	0.000440	0.00023	mg/L	0.000440	194.48%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-1.2	0.00023	mg/L	0.000802	0.00023	mg/L	0.000802	352.21%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	12.2	-0.00007	mg/L	0.000123	-0.00007	mg/L	0.000123	165.95%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	2.1	0.00230	mg/L	0.001257	0.00230	mg/L	0.001257	54.66%
QC value within limits for Tl 190.801 Recovery = Not calculated								

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V 290.880† -63.0 0.00022 mg/L 0.000185 0.00022 mg/L 0.000185 83.89%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† -6.3 -0.00010 mg/L 0.000137 -0.00010 mg/L 0.000137 133.49%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 126.3 0.107 mg/L 0.0331 0.107 mg/L 0.0331 30.94%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 154.4 0.0350 mg/L 0.00630 0.0350 mg/L 0.00630 17.99%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† 4.2 0.00011 mg/L 0.000043 0.00011 mg/L 0.000043 37.38%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† -177.7 -0.00083 mg/L 0.000998 -0.00083 mg/L 0.000998 120.70%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 38**
Sample ID: LLICV **Date Collected: 4/12/2011 11:38:26 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLICV

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4916360.8						34327.81	0.70%
YRADIAL	303968.9						8571.03	2.82%
Ga 417.206	1279060.6						13949.35	1.09%
GaRADIAL	65718.3						1103.36	1.68%
Ag 328.068†	814.0	0.00413	mg/L	0.000347	0.00413	mg/L	0.000347	8.40%
Al 396.153†	462.6	0.0961	mg/L	0.00232	0.0961	mg/L	0.00232	2.42%
As 188.979†	4.6	0.00689	mg/L	0.001272	0.00689	mg/L	0.001272	18.46%
Ba 233.527†	539.5	0.0102	mg/L	0.00008	0.0102	mg/L	0.00008	0.78%
Be 234.861†	236.5	0.00046	mg/L	0.000011	0.00046	mg/L	0.000011	2.30%
B 249.677†	351.7	0.00856	mg/L	0.000125	0.00856	mg/L	0.000125	1.47%
Ca 227.546†	7.4	0.0662	mg/L	0.03015	0.0662	mg/L	0.03015	45.57%
Cd 228.802†	8.9	0.00050	mg/L	0.000209	0.00050	mg/L	0.000209	41.97%
Co 228.616†	33.3	0.00193	mg/L	0.000220	0.00193	mg/L	0.000220	11.40%
Cr 267.716†	581.4	0.00514	mg/L	0.000121	0.00514	mg/L	0.000121	2.36%
Cu 327.393†	744.4	0.00435	mg/L	0.001149	0.00435	mg/L	0.001149	26.44%
Fe 239.562†	11.5	0.0429	mg/L	0.00819	0.0429	mg/L	0.00819	19.09%
Mg 279.077†	70.7	0.0982	mg/L	0.00411	0.0982	mg/L	0.00411	4.18%
Mn 257.610†	2387.5	0.00513	mg/L	0.000041	0.00513	mg/L	0.000041	0.80%
Mo 202.031†	111.5	0.00986	mg/L	0.000069	0.00986	mg/L	0.000069	0.70%
Ni 231.604†	147.1	0.00505	mg/L	0.000109	0.00505	mg/L	0.000109	2.16%
Pb 220.353†	19.0	0.00475	mg/L	0.001187	0.00475	mg/L	0.001187	24.96%
Sb 206.836†	17.0	0.00984	mg/L	0.002727	0.00984	mg/L	0.002727	27.70%
Se 196.026†	10.7	0.00672	mg/L	0.002464	0.00672	mg/L	0.002464	36.66%
Si 251.611†	1727.7	0.0527	mg/L	0.00057	0.0527	mg/L	0.00057	1.08%
Sn 189.927†	52.7	0.0107	mg/L	0.00105	0.0107	mg/L	0.00105	9.85%
Ti 334.940†	7292.9	0.0101	mg/L	0.00007	0.0101	mg/L	0.00007	0.74%
Tl 190.801†	0.5	0.00138	mg/L	0.004040	0.00138	mg/L	0.004040	292.43%
V 290.880†	1506.5	0.0110	mg/L	0.00052	0.0110	mg/L	0.00052	4.77%
Zn 206.200†	376.2	0.0131	mg/L	0.00028	0.0131	mg/L	0.00028	2.14%
K 766.490†	1266.2	0.508	mg/L	0.0179	0.508	mg/L	0.0179	3.53%
Na 589.592†	6540.9	0.494	mg/L	0.0016	0.494	mg/L	0.0016	0.32%
Sr 407.771†	10241.2	0.00978	mg/L	0.000760	0.00978	mg/L	0.000760	7.77%
Li 670.784†	600.0	0.00909	mg/L	0.000879	0.00909	mg/L	0.000879	9.67%

Sequence No.: 9 **Autosampler Location: 39**
Sample ID: LLICV **Date Collected: 4/12/2011 11:45:02 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLICV

Approved: April 13, 2011

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4983097.8						25437.16	0.51%
YRADIAL	293289.7						3539.53	1.21%
Ga 417.206	1290330.6						15426.44	1.20%
GaRADIAL	63874.9						617.05	0.97%
Ag 328.068†	1762.8	0.00884	mg/L	0.000475	0.00884	mg/L	0.000475	5.37%
Al 396.153†	970.4	0.198	mg/L	0.0065	0.198	mg/L	0.0065	3.28%
As 188.979†	6.6	0.00900	mg/L	0.003624	0.00900	mg/L	0.003624	40.26%
Ba 233.527†	1079.3	0.0204	mg/L	0.00007	0.0204	mg/L	0.00007	0.33%
Be 234.861†	502.9	0.00100	mg/L	0.000014	0.00100	mg/L	0.000014	1.35%
B 249.677†	551.8	0.0126	mg/L	0.00015	0.0126	mg/L	0.00015	1.17%
Ca 227.546†	15.5	0.159	mg/L	0.0642	0.159	mg/L	0.0642	40.45%
Cd 228.802†	16.4	0.00099	mg/L	0.000018	0.00099	mg/L	0.000018	1.81%
Co 228.616†	68.9	0.00405	mg/L	0.000374	0.00405	mg/L	0.000374	9.24%
Cr 267.716†	1164.9	0.0104	mg/L	0.00004	0.0104	mg/L	0.00004	0.42%
Cu 327.393†	1596.0	0.0103	mg/L	0.00079	0.0103	mg/L	0.00079	7.64%
Fe 239.562†	24.8	0.0870	mg/L	0.00917	0.0870	mg/L	0.00917	10.54%
Mg 279.077†	147.7	0.203	mg/L	0.0034	0.203	mg/L	0.0034	1.65%
Mn 257.610†	4820.9	0.0106	mg/L	0.00030	0.0106	mg/L	0.00030	2.81%
Mo 202.031†	236.3	0.0204	mg/L	0.00050	0.0204	mg/L	0.00050	2.43%
Ni 231.604†	299.0	0.0101	mg/L	0.00011	0.0101	mg/L	0.00011	1.08%
Pb 220.353†	49.5	0.0109	mg/L	0.00036	0.0109	mg/L	0.00036	3.30%
Sb 206.836†	33.9	0.0226	mg/L	0.00059	0.0226	mg/L	0.00059	2.62%
Se 196.026†	12.0	0.00789	mg/L	0.002806	0.00789	mg/L	0.002806	35.58%
Si 251.611†	3327.9	0.102	mg/L	0.0027	0.102	mg/L	0.0027	2.68%
Sn 189.927†	102.1	0.0202	mg/L	0.00115	0.0202	mg/L	0.00115	5.69%
Ti 334.940†	14652.6	0.0204	mg/L	0.00029	0.0204	mg/L	0.00029	1.41%
Tl 190.801†	12.6	0.00971	mg/L	0.003999	0.00971	mg/L	0.003999	41.16%
V 290.880†	2855.7	0.0202	mg/L	0.00068	0.0202	mg/L	0.00068	3.37%
Zn 206.200†	692.1	0.0239	mg/L	0.00017	0.0239	mg/L	0.00017	0.72%
K 766.490†	2644.3	0.993	mg/L	0.0566	0.993	mg/L	0.0566	5.70%
Na 589.592†	13123.1	0.967	mg/L	0.0126	0.967	mg/L	0.0126	1.31%
Sr 407.771†	20838.8	0.0198	mg/L	0.00103	0.0198	mg/L	0.00103	5.23%
Li 670.784†	1494.9	0.0205	mg/L	0.00077	0.0205	mg/L	0.00077	3.76%

Sequence No.: 10 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 4/12/2011 11:51:39 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4361390.0						29581.58	0.68%
YRADIAL	276522.2						6441.90	2.33%
Ga 417.206	1186516.9						16714.71	1.41%
GaRADIAL	61397.8						910.21	1.48%
Ag 328.068†	1046.4	0.00038	mg/L	0.002770	0.00038	mg/L	0.002770	731.54%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1284870.3	257	mg/L	5.4	257	mg/L	5.4	2.08%
QC value within limits for Al 396.153 Recovery = 102.99%								
As 188.979†	10.2	0.00255	mg/L	0.001256	0.00255	mg/L	0.001256	49.20%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	122.4	-0.00020	mg/L	0.000042	-0.00020	mg/L	0.000042	21.31%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	10358.3	0.00049	mg/L	0.000366	0.00049	mg/L	0.000366	74.39%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	-9410.1	-0.0136	mg/L	0.00573	-0.0136	mg/L	0.00573	42.17%
QC value within limits for B 249.677 Recovery = Not calculated								

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Ca 227.546†	27044.0	297 mg/L	7.6	297 mg/L	7.6	2.56%			
QC value within limits for Ca 227.546 Recovery = 118.69%									
Cd 228.802†	-1.3	-0.00021 mg/L	0.000204	-0.00021 mg/L	0.000204	98.18%			
QC value within limits for Cd 228.802 Recovery = Not calculated									
Co 228.616†	24.4	-0.00115 mg/L	0.000524	-0.00115 mg/L	0.000524	45.60%			
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†	575.1	-0.00128 mg/L	0.000321	-0.00128 mg/L	0.000321	25.12%			
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 327.393†	-1242.1	0.00170 mg/L	0.006535	0.00170 mg/L	0.006535	383.53%			
QC value within limits for Cu 327.393 Recovery = Not calculated									
Fe 239.562†	29528.7	98.1 mg/L	1.25	98.1 mg/L	1.25	1.27%			
QC value within limits for Fe 239.562 Recovery = 98.07%									
Mg 279.077†	185179.6	253 mg/L	2.8	253 mg/L	2.8	1.11%			
QC value within limits for Mg 279.077 Recovery = 101.16%									
Mn 257.610†	724.2	0.00218 mg/L	0.003686	0.00218 mg/L	0.003686	169.05%			
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†	-10.1	0.00447 mg/L	0.000381	0.00447 mg/L	0.000381	8.52%			
QC value within limits for Mo 202.031 Recovery = Not calculated									
Ni 231.604†	-79.0	-0.00250 mg/L	0.000248	-0.00250 mg/L	0.000248	9.91%			
QC value within limits for Ni 231.604 Recovery = Not calculated									
Pb 220.353†	-95.6	0.00030 mg/L	0.002097	0.00030 mg/L	0.002097	701.81%			
QC value within limits for Pb 220.353 Recovery = Not calculated									
Sb 206.836†	19.7	0.0118 mg/L	0.00437	0.0118 mg/L	0.00437	37.10%			
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†	-102.8	-0.00507 mg/L	0.012729	-0.00507 mg/L	0.012729	251.07%			
QC value within limits for Se 196.026 Recovery = Not calculated									
Si 251.611†	6037.5	0.185 mg/L	0.0037	0.185 mg/L	0.0037	1.98%			
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†	-43.4	-0.00795 mg/L	0.000836	-0.00795 mg/L	0.000836	10.52%			
QC value within limits for Sn 189.927 Recovery = Not calculated									
Ti 334.940†	-1906.0	0.00021 mg/L	0.000788	0.00021 mg/L	0.000788	380.71%			
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†	148.9	0.0755 mg/L	0.00126	0.0755 mg/L	0.00126	1.67%			
QC value within limits for Tl 190.801 Recovery = Not calculated									
V 290.880†	-305.2	0.00609 mg/L	0.005228	0.00609 mg/L	0.005228	85.83%			
QC value within limits for V 290.880 Recovery = Not calculated									
Zn 206.200†	18.3	-0.00149 mg/L	0.000306	-0.00149 mg/L	0.000306	20.46%			
QC value within limits for Zn 206.200 Recovery = Not calculated									
K 766.490†	65.6	0.0856 mg/L	0.03291	0.0856 mg/L	0.03291	38.46%			
QC value within limits for K 766.490 Recovery = Not calculated									
Na 589.592†	526.0	0.0617 mg/L	0.00062	0.0617 mg/L	0.00062	1.01%			
QC value within limits for Na 589.592 Recovery = Not calculated									
Sr 407.771†	13640.4	0.00123 mg/L	0.000282	0.00123 mg/L	0.000282	22.98%			
QC value within limits for Sr 407.771 Recovery = Not calculated									
Li 670.784†	2.9	0.00148 mg/L	0.000791	0.00148 mg/L	0.000791	53.53%			
QC value within limits for Li 670.784 Recovery = Not calculated									

All analyte(s) passed QC.

Sequence No.: 11 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 4/12/2011 11:57:19 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4385498.1						53865.91	1.23%
YRADIAL	278093.7						4594.94	1.65%
Ga 417.206	1188818.7						22577.96	1.90%
GaRADIAL	61880.3						1305.64	2.11%
Ag 328.068†	107692.0	0.529	mg/L	0.0067	0.529	mg/L	0.0067	1.27%
QC value within limits for Ag 328.068 Recovery = 105.82%								
Al 396.153†	1294878.8	259	mg/L	10.9	259	mg/L	10.9	4.20%
QC value within limits for Al 396.153 Recovery = 103.79%								
As 188.979†	249.7	0.260	mg/L	0.0067	0.260	mg/L	0.0067	2.58%

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   QC value within limits for As 188.979  Recovery = 104.00%
Ba 233.527†           13560.2       0.255 mg/L        0.0040       0.255 mg/L        0.0040   1.58%
   QC value within limits for Ba 233.527  Recovery = 102.18%
Be 234.861†          146214.1       0.272 mg/L        0.0056       0.272 mg/L        0.0056   2.07%
   QC value within limits for Be 234.861  Recovery = 108.88%
B 249.677†           -10304.7     -0.0423 mg/L       0.00818     -0.0423 mg/L       0.00818  19.36%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†           27355.3         300 mg/L           3.8         300 mg/L           3.8   1.28%
   QC value greater than the upper limit for Ca 227.546  Recovery = 120.19%
Cd 228.802†            7094.6       0.479 mg/L        0.0056       0.479 mg/L        0.0056   1.17%
   QC value within limits for Cd 228.802  Recovery = 95.74%
Co 228.616†            4064.7       0.242 mg/L        0.0036       0.242 mg/L        0.0036   1.47%
   QC value within limits for Co 228.616  Recovery = 96.80%
Cr 267.716†           29100.8       0.254 mg/L        0.0032       0.254 mg/L        0.0032   1.26%
   QC value within limits for Cr 267.716  Recovery = 101.51%
Cu 327.393†           36396.4       0.265 mg/L        0.0035       0.265 mg/L        0.0035   1.32%
   QC value within limits for Cu 327.393  Recovery = 106.02%
Fe 239.562†           29816.1        99.0 mg/L          0.34        99.0 mg/L          0.34   0.35%
   QC value within limits for Fe 239.562  Recovery = 99.02%
Mg 279.077†          185873.3         254 mg/L           0.6         254 mg/L           0.6   0.26%
   QC value within limits for Mg 279.077  Recovery = 101.54%
Mn 257.610†          114523.7       0.256 mg/L        0.0014       0.256 mg/L        0.0014   0.56%
   QC value within limits for Mn 257.610  Recovery = 102.22%
Mo 202.031†              -6.7     0.00486 mg/L      0.000923     0.00486 mg/L      0.000923  18.99%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†           14411.0       0.478 mg/L        0.0067       0.478 mg/L        0.0067   1.40%
   QC value within limits for Ni 231.604  Recovery = 95.51%
Pb 220.353†            2430.5       0.503 mg/L        0.0104       0.503 mg/L        0.0104   2.07%
   QC value within limits for Pb 220.353  Recovery = 100.70%
Sb 206.836†             714.1       0.531 mg/L        0.0122       0.531 mg/L        0.0122   2.31%
   QC value within limits for Sb 206.836  Recovery = 106.20%
Se 196.026†             209.2       0.259 mg/L        0.0086       0.259 mg/L        0.0086   3.31%
   QC value within limits for Se 196.026  Recovery = 103.49%
Si 251.611†             -17.0    -0.00075 mg/L      0.001691    -0.00075 mg/L      0.001691 225.47%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†             -42.1    -0.00770 mg/L      0.002083    -0.00770 mg/L      0.002083  27.05%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†           -2520.4    -0.00069 mg/L      0.000105    -0.00069 mg/L      0.000105  15.08%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             885.9       0.576 mg/L        0.0056       0.576 mg/L        0.0056   0.98%
   QC value within limits for Tl 190.801  Recovery = 115.21%
V 290.880†            36170.1       0.256 mg/L        0.0011       0.256 mg/L        0.0011   0.43%
   QC value within limits for V 290.880  Recovery = 102.38%
Zn 206.200†           14140.2       0.485 mg/L        0.0086       0.485 mg/L        0.0086   1.78%
   QC value within limits for Zn 206.200  Recovery = 96.95%
K 766.490†            13673.7        4.90 mg/L         0.021        4.90 mg/L         0.021   0.43%
   QC value within limits for K 766.490  Recovery = 97.98%
Na 589.592†           66807.9        4.85 mg/L         0.010        4.85 mg/L         0.010   0.21%
   QC value within limits for Na 589.592  Recovery = 97.00%
Sr 407.771†           28402.5      0.0151 mg/L       0.00071      0.0151 mg/L       0.00071   4.71%
   QC value greater than the upper limit for Sr 407.771  Recovery = Not calculated
Li 670.784†              -5.8     0.00137 mg/L      0.001720     0.00137 mg/L      0.001720 125.92%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.
User canceled analysis.
```

Approved: April 13, 2011

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Analysis Begun

Start Time: 4/12/2011 12:03:05 PM **Plasma On Time: 4/12/2011 7:48:47 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\TUESDAY1.sif
Batch ID:
Results Data Set: 041211H2
Results Library: C:\pe\peicp2\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 4/12/2011 12:03:07 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4450054.8						25771.65	0.58%
YRADIAL	279530.4						4497.29	1.61%
Ga 417.206	1206828.1						11547.90	0.96%
GaRADIAL	61870.6						852.28	1.38%
Ag 328.068†	105923.1	0.520	mg/L	0.0087	0.520	mg/L	0.0087	1.68%
QC value within limits for Ag 328.068 Recovery = 104.08%								
Al 396.153†	1286016.6	258	mg/L	6.8	258	mg/L	6.8	2.66%
QC value within limits for Al 396.153 Recovery = 103.08%								
As 188.979†	247.0	0.257	mg/L	0.0040	0.257	mg/L	0.0040	1.55%
QC value within limits for As 188.979 Recovery = 102.86%								
Ba 233.527†	13227.4	0.249	mg/L	0.0017	0.249	mg/L	0.0017	0.66%
QC value within limits for Ba 233.527 Recovery = 99.65%								
Be 234.861†	143790.1	0.268	mg/L	0.0071	0.268	mg/L	0.0071	2.64%
QC value within limits for Be 234.861 Recovery = 107.03%								
B 249.677†	-10117.0	-0.0413	mg/L	0.01435	-0.0413	mg/L	0.01435	34.73%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	26707.7	293	mg/L	2.1	293	mg/L	2.1	0.70%
QC value within limits for Ca 227.546 Recovery = 117.35%								
Cd 228.802†	6913.1	0.466	mg/L	0.0077	0.466	mg/L	0.0077	1.65%
QC value within limits for Cd 228.802 Recovery = 93.28%								
Co 228.616†	3964.1	0.236	mg/L	0.0023	0.236	mg/L	0.0023	0.97%
QC value within limits for Co 228.616 Recovery = 94.39%								
Cr 267.716†	28378.0	0.247	mg/L	0.0013	0.247	mg/L	0.0013	0.51%
QC value within limits for Cr 267.716 Recovery = 98.95%								
Cu 327.393†	35878.5	0.261	mg/L	0.0035	0.261	mg/L	0.0035	1.34%
QC value within limits for Cu 327.393 Recovery = 104.52%								
Fe 239.562†	29488.9	97.9	mg/L	0.34	97.9	mg/L	0.34	0.35%
QC value within limits for Fe 239.562 Recovery = 97.93%								
Mg 279.077†	183276.1	250	mg/L	1.1	250	mg/L	1.1	0.45%
QC value within limits for Mg 279.077 Recovery = 100.12%								
Mn 257.610†	113087.8	0.252	mg/L	0.0026	0.252	mg/L	0.0026	1.04%
QC value within limits for Mn 257.610 Recovery = 100.94%								
Mo 202.031†	-3.2	0.00511	mg/L	0.000352	0.00511	mg/L	0.000352	6.90%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	14038.4	0.465	mg/L	0.0027	0.465	mg/L	0.0027	0.59%
QC value within limits for Ni 231.604 Recovery = 93.04%								
Pb 220.353†	2358.7	0.489	mg/L	0.0012	0.489	mg/L	0.0012	0.24%
QC value within limits for Pb 220.353 Recovery = 97.77%								
Sb 206.836†	694.5	0.516	mg/L	0.0075	0.516	mg/L	0.0075	1.45%
QC value within limits for Sb 206.836 Recovery = 103.28%								
Se 196.026†	206.1	0.254	mg/L	0.0099	0.254	mg/L	0.0099	3.89%
QC value within limits for Se 196.026 Recovery = 101.63%								
Si 251.611†	-59.1	-0.00205	mg/L	0.001547	-0.00205	mg/L	0.001547	75.49%
QC value within limits for Si 251.611 Recovery = Not calculated								

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Sn 189.927†             -35.7    -0.00645 mg/L      0.002054    -0.00645 mg/L      0.002054  31.86%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†            -2407.7    -0.00060 mg/L      0.000385    -0.00060 mg/L      0.000385  63.68%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             874.1       0.569 mg/L        0.0064       0.569 mg/L        0.0064   1.13%
   QC value within limits for Tl 190.801  Recovery = 113.73%
V 290.880†            35733.0       0.253 mg/L        0.0013       0.253 mg/L        0.0013   0.50%
   QC value within limits for V 290.880  Recovery = 101.15%
Zn 206.200†           13759.1       0.472 mg/L        0.0025       0.472 mg/L        0.0025   0.52%
   QC value within limits for Zn 206.200  Recovery = 94.33%
K 766.490†            13622.4        4.88 mg/L         0.035        4.88 mg/L         0.035   0.71%
   QC value within limits for K 766.490  Recovery = 97.62%
Na 589.592†           66212.5        4.81 mg/L         0.009        4.81 mg/L         0.009   0.18%
   QC value within limits for Na 589.592  Recovery = 96.14%
Sr 407.771†           28103.8      0.0149 mg/L       0.00057      0.0149 mg/L       0.00057   3.80%
   QC value greater than the upper limit for Sr 407.771  Recovery = Not calculated
Li 670.784†             -39.7     0.00093 mg/L      0.001386     0.00093 mg/L      0.001386 148.47%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.
```

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Sequence No.: 2 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/12/2011 12:08:45 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4707444.5						58480.15	1.24%
YRADIAL	288110.8						2361.55	0.82%
Ga 417.206	1241578.6						14277.35	1.15%
GaRADIAL	63682.8						774.60	1.22%
Ag 328.068†	82936.0	0.412	mg/L	0.0110	0.412	mg/L	0.0110	2.66%
QC value within limits for Ag 328.068 Recovery = 103.03%								
Al 396.153†	50665.3	10.1	mg/L	0.22	10.1	mg/L	0.22	2.12%
QC value within limits for Al 396.153 Recovery = 101.42%								
As 188.979†	391.3	0.417	mg/L	0.0076	0.417	mg/L	0.0076	1.81%
QC value within limits for As 188.979 Recovery = 104.14%								
Ba 233.527†	54131.4	1.03	mg/L	0.025	1.03	mg/L	0.025	2.38%
QC value within limits for Ba 233.527 Recovery = 103.03%								
Be 234.861†	26289.9	0.0534	mg/L	0.00129	0.0534	mg/L	0.00129	2.42%
QC value within limits for Be 234.861 Recovery = 106.88%								
B 249.677†	26411.5	0.524	mg/L	0.0147	0.524	mg/L	0.0147	2.81%
QC value within limits for B 249.677 Recovery = 104.76%								
Ca 227.546†	956.2	10.8	mg/L	0.16	10.8	mg/L	0.16	1.49%
QC value within limits for Ca 227.546 Recovery = 108.02%								
Cd 228.802†	780.1	0.0499	mg/L	0.00045	0.0499	mg/L	0.00045	0.90%
QC value within limits for Cd 228.802 Recovery = 99.78%								
Co 228.616†	3509.0	0.209	mg/L	0.0023	0.209	mg/L	0.0023	1.09%
QC value within limits for Co 228.616 Recovery = 104.34%								
Cr 267.716†	57080.1	0.510	mg/L	0.0136	0.510	mg/L	0.0136	2.67%
QC value within limits for Cr 267.716 Recovery = 102.09%								
Cu 327.393†	74456.0	0.522	mg/L	0.0167	0.522	mg/L	0.0167	3.19%
QC value within limits for Cu 327.393 Recovery = 104.40%								
Fe 239.562†	1196.6	3.98	mg/L	0.045	3.98	mg/L	0.045	1.14%
QC value within limits for Fe 239.562 Recovery = 99.44%								
Mg 279.077†	7382.7	10.1	mg/L	0.05	10.1	mg/L	0.05	0.49%
QC value within limits for Mg 279.077 Recovery = 100.89%								
Mn 257.610†	232568.5	0.520	mg/L	0.0124	0.520	mg/L	0.0124	2.38%
QC value within limits for Mn 257.610 Recovery = 103.99%								
Mo 202.031†	12396.6	1.04	mg/L	0.011	1.04	mg/L	0.011	1.03%
QC value within limits for Mo 202.031 Recovery = 104.38%								
Ni 231.604†	15523.5	0.514	mg/L	0.0108	0.514	mg/L	0.0108	2.09%
QC value within limits for Ni 231.604 Recovery = 102.89%								
Pb 220.353†	2579.4	0.520	mg/L	0.0071	0.520	mg/L	0.0071	1.37%

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QC value within limits for Pb 220.353 Recovery = 104.03%
Sb 206.836† 1679.9 1.26 mg/L 0.012 1.26 mg/L 0.012 0.92%
QC value within limits for Sb 206.836 Recovery = 105.15%
Se 196.026† 508.4 0.429 mg/L 0.0034 0.429 mg/L 0.0034 0.79%
QC value within limits for Se 196.026 Recovery = 107.15%
Si 251.611† 167130.0 5.12 mg/L 0.130 5.12 mg/L 0.130 2.54%
QC value within limits for Si 251.611 Recovery = 102.39%
Sn 189.927† 5364.9 1.04 mg/L 0.012 1.04 mg/L 0.012 1.18%
QC value within limits for Sn 189.927 Recovery = 103.97%
Ti 334.940† 735942.3 1.03 mg/L 0.005 1.03 mg/L 0.005 0.47%
QC value within limits for Ti 334.940 Recovery = 102.84%
Tl 190.801† 781.9 0.544 mg/L 0.0048 0.544 mg/L 0.0048 0.88%
QC value within limits for Tl 190.801 Recovery = 108.82%
V 290.880† 149488.4 1.02 mg/L 0.024 1.02 mg/L 0.024 2.36%
QC value within limits for V 290.880 Recovery = 102.42%
Zn 206.200† 30035.9 1.03 mg/L 0.019 1.03 mg/L 0.019 1.83%
QC value within limits for Zn 206.200 Recovery = 103.39%
K 766.490† 130285.9 48.9 mg/L 1.18 48.9 mg/L 1.18 2.41%
QC value within limits for K 766.490 Recovery = 97.71%
Na 589.592† 645739.1 49.7 mg/L 1.39 49.7 mg/L 1.39 2.80%
QC value within limits for Na 589.592 Recovery = 99.47%
Sr 407.771† 1069994.6 1.01 mg/L 0.053 1.01 mg/L 0.053 5.27%
QC value within limits for Sr 407.771 Recovery = 101.05%
Li 670.784† 79213.5 1.01 mg/L 0.021 1.01 mg/L 0.021 2.08%
QC value within limits for Li 670.784 Recovery = 101.19%
All analyte(s) passed QC.

==========

Sequence No.: 3 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/12/2011 12:15:26 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4997976.0						23927.76	0.48%
YRADIAL	296414.0						3265.45	1.10%
Ga 417.206	1306493.4						15990.17	1.22%
GaRADIAL	64384.0						1846.14	2.87%
Ag 328.068†	142.0	0.00079	mg/L	0.000107	0.00079	mg/L	0.000107	13.57%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	45.5	0.0127	mg/L	0.00522	0.0127	mg/L	0.00522	41.13%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.7	0.00275	mg/L	0.001288	0.00275	mg/L	0.001288	46.89%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.6	-0.00013	mg/L	0.000048	-0.00013	mg/L	0.000048	36.65%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-5.8	-0.00003	mg/L	0.000035	-0.00003	mg/L	0.000035	114.56%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	3.2	0.00169	mg/L	0.000205	0.00169	mg/L	0.000205	12.14%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-3.1	-0.0529	mg/L	0.04377	-0.0529	mg/L	0.04377	82.81%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-0.6	-0.00012	mg/L	0.000088	-0.00012	mg/L	0.000088	75.61%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	3.5	0.00015	mg/L	0.000267	0.00015	mg/L	0.000267	173.09%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-31.4	-0.00034	mg/L	0.000125	-0.00034	mg/L	0.000125	36.66%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	119.4	-0.00005	mg/L	0.000463	-0.00005	mg/L	0.000463	980.84%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.6	0.00665	mg/L	0.004476	0.00665	mg/L	0.004476	67.29%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	4.5	0.00788	mg/L	0.011191	0.00788	mg/L	0.011191	142.00%
QC value within limits for Mg 279.077 Recovery = Not calculated								

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Mn 257.610†	-9.7	-0.00022 mg/L	0.000020	-0.00022 mg/L	0.000020	8.88%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-3.6	0.00016 mg/L	0.000526	0.00016 mg/L	0.000526	322.86%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	-8.3	-0.00010 mg/L	0.000148	-0.00010 mg/L	0.000148	153.65%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-0.0	0.00091 mg/L	0.001049	0.00091 mg/L	0.001049	115.33%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	1.8	-0.00159 mg/L	0.001819	-0.00159 mg/L	0.001819	114.69%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	6.8	0.00348 mg/L	0.005193	0.00348 mg/L	0.005193	149.24%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-27.9	-0.00109 mg/L	0.000643	-0.00109 mg/L	0.000643	59.07%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-0.7	0.00032 mg/L	0.000679	0.00032 mg/L	0.000679	214.13%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-52.1	-0.00016 mg/L	0.000109	-0.00016 mg/L	0.000109	66.63%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-1.5	-0.00014 mg/L	0.004256	-0.00014 mg/L	0.004256	>999.9%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	-127.2	-0.00022 mg/L	0.000584	-0.00022 mg/L	0.000584	266.18%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	-1.9	0.00005 mg/L	0.000111	0.00005 mg/L	0.000111	236.53%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	105.6	0.0997 mg/L	0.02534	0.0997 mg/L	0.02534	25.42%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	22.7	0.0256 mg/L	0.00491	0.0256 mg/L	0.00491	19.21%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	-51.9	0.00006 mg/L	0.000077	0.00006 mg/L	0.000077	125.70%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	-150.6	-0.00048 mg/L	0.000604	-0.00048 mg/L	0.000604	125.67%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 4 **Autosampler Location: 40**
Sample ID: PBW E3 WG361174-02 **Date Collected: 4/12/2011 12:22:02 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW E3 WG361174-02

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: PBW E3 WG361174-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4917440.0						29806.92	0.61%
YRADIAL	304744.5						8558.00	2.81%
Ga 417.206	1306816.4						18440.04	1.41%
GaRADIAL	66731.0						697.73	1.05%
Ag 328.068†	130.4	0.00073	mg/L	0.000492	0.00073	mg/L	0.000492	67.24%
Al 396.153†	34.4	0.0104	mg/L	0.00286	0.0104	mg/L	0.00286	27.39%
As 188.979†	0.3	0.00231	mg/L	0.003007	0.00231	mg/L	0.003007	130.22%
Ba 233.527†	6.1	0.00000	mg/L	0.000113	0.00000	mg/L	0.000113	>999.9%
Be 234.861†	-9.2	-0.00004	mg/L	0.000043	-0.00004	mg/L	0.000043	120.09%
B 249.677†	-70.3	0.00023	mg/L	0.000077	0.00023	mg/L	0.000077	32.87%
Ca 227.546†	2.7	0.0112	mg/L	0.08708	0.0112	mg/L	0.08708	776.70%
Cd 228.802†	2.8	0.00011	mg/L	0.000066	0.00011	mg/L	0.000066	58.03%
Co 228.616†	-1.0	-0.00011	mg/L	0.000441	-0.00011	mg/L	0.000441	387.00%
Cr 267.716†	-23.5	-0.00027	mg/L	0.000114	-0.00027	mg/L	0.000114	41.99%
Cu 327.393†	125.8	0.00000	mg/L	0.000415	0.00000	mg/L	0.000415	>999.9%
Fe 239.562†	-0.6	0.00274	mg/L	0.002119	0.00274	mg/L	0.002119	77.26%
Mg 279.077†	-1.0	0.00028	mg/L	0.006236	0.00028	mg/L	0.006236	>999.9%
Mn 257.610†	-31.5	-0.00026	mg/L	0.000022	-0.00026	mg/L	0.000022	8.18%
Mo 202.031†	2.5	0.00068	mg/L	0.000326	0.00068	mg/L	0.000326	48.20%
Ni 231.604†	-15.0	-0.00032	mg/L	0.000431	-0.00032	mg/L	0.000431	135.30%
Pb 220.353†	-0.1	0.00089	mg/L	0.000783	0.00089	mg/L	0.000783	87.81%
Sb 206.836†	1.4	-0.00189	mg/L	0.002150	-0.00189	mg/L	0.002150	113.85%
Se 196.026†	2.4	-0.00028	mg/L	0.005008	-0.00028	mg/L	0.005008	>999.9%

Approved: April 13, 2011

Si 251.611†	168.2	0.00493	mg/L	0.000345	0.00493	mg/L	0.000345 7.01%
Sn 189.927†	-4.4	-0.00040	mg/L	0.000431	-0.00040	mg/L	0.000431 107.14%
Ti 334.940†	86.9	0.00003	mg/L	0.000130	0.00003	mg/L	0.000130 422.39%
Tl 190.801†	-2.3	-0.00063	mg/L	0.002223	-0.00063	mg/L	0.002223 350.43%
V 290.880†	31.6	0.00087	mg/L	0.000404	0.00087	mg/L	0.000404 46.56%
Zn 206.200†	63.9	0.00231	mg/L	0.000060	0.00231	mg/L	0.000060 2.62%
K 766.490†	1599.9	0.626	mg/L	0.0256	0.626	mg/L	0.0256 4.09%
Na 589.592†	-210.5	0.00883	mg/L	0.005443	0.00883	mg/L	0.005443 61.67%
Sr 407.771†	-50.9	0.00006	mg/L	0.000042	0.00006	mg/L	0.000042 66.48%
Li 670.784†	-192.4	-0.00101	mg/L	0.000440	-0.00101	mg/L	0.000440 43.41%

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Sequence No.: 5 **Autosampler Location: 41**
Sample ID: LCSW E3 WG361174-03 **Date Collected: 4/12/2011 12:28:39 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW E3 WG361174-03

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: LCSW E3 WG361174-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4872555.7						61306.95	1.26%
YRADIAL	299900.7						3454.69	1.15%
Ga 417.206	1299245.2						14923.72	1.15%
GaRADIAL	64563.8						1637.50	2.54%
Ag 328.068†	40481.3	0.201	mg/L	0.0023	0.201	mg/L	0.0023	1.12%
Al 396.153†	25471.2	5.10	mg/L	0.017	5.10	mg/L	0.017	0.33%
As 188.979†	189.8	0.203	mg/L	0.0021	0.203	mg/L	0.0021	1.02%
Ba 233.527†	26436.3	0.503	mg/L	0.0059	0.503	mg/L	0.0059	1.17%
Be 234.861†	12709.9	0.0258	mg/L	0.00023	0.0258	mg/L	0.00023	0.88%
B 249.677†	51326.6	1.01	mg/L	0.013	1.01	mg/L	0.013	1.25%
Ca 227.546†	461.1	5.20	mg/L	0.052	5.20	mg/L	0.052	1.00%
Cd 228.802†	374.7	0.0239	mg/L	0.00027	0.0239	mg/L	0.00027	1.14%
Co 228.616†	1709.4	0.102	mg/L	0.0010	0.102	mg/L	0.0010	0.98%
Cr 267.716†	27804.6	0.249	mg/L	0.0032	0.249	mg/L	0.0032	1.27%
Cu 327.393†	35931.8	0.251	mg/L	0.0027	0.251	mg/L	0.0027	1.08%
Fe 239.562†	580.4	1.93	mg/L	0.048	1.93	mg/L	0.048	2.50%
Mg 279.077†	3627.6	4.96	mg/L	0.095	4.96	mg/L	0.095	1.91%
Mn 257.610†	114910.2	0.257	mg/L	0.0032	0.257	mg/L	0.0032	1.23%
Mo 202.031†	6002.5	0.506	mg/L	0.0052	0.506	mg/L	0.0052	1.03%
Ni 231.604†	7681.1	0.255	mg/L	0.0046	0.255	mg/L	0.0046	1.80%
Pb 220.353†	1249.0	0.252	mg/L	0.0030	0.252	mg/L	0.0030	1.19%
Sb 206.836†	804.4	0.603	mg/L	0.0046	0.603	mg/L	0.0046	0.77%
Se 196.026†	248.8	0.209	mg/L	0.0051	0.209	mg/L	0.0051	2.45%
Si 251.611†	83634.1	2.56	mg/L	0.035	2.56	mg/L	0.035	1.37%
Sn 189.927†	2583.2	0.501	mg/L	0.0044	0.501	mg/L	0.0044	0.88%
Ti 334.940†	362097.9	0.506	mg/L	0.0028	0.506	mg/L	0.0028	0.54%
Tl 190.801†	380.5	0.265	mg/L	0.0038	0.265	mg/L	0.0038	1.44%
V 290.880†	72450.0	0.497	mg/L	0.0070	0.497	mg/L	0.0070	1.42%
Zn 206.200†	14650.1	0.504	mg/L	0.0064	0.504	mg/L	0.0064	1.27%
K 766.490†	65387.3	23.8	mg/L	0.08	23.8	mg/L	0.08	0.36%
Na 589.592†	323293.7	24.0	mg/L	0.19	24.0	mg/L	0.19	0.80%
Sr 407.771†	513036.6	0.485	mg/L	0.0343	0.485	mg/L	0.0343	7.07%
Li 670.784†	40207.6	0.514	mg/L	0.0029	0.514	mg/L	0.0029	0.56%

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Sequence No.: 6 **Autosampler Location: 42**
Sample ID: L1104024101 **Date Collected: 4/12/2011 12:35:21 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104024101

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min



Approved: April 13, 2011

Mean Data: L1104024101

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4668164.4						16453.94	0.35%
YRADIAL	292243.2						12113.07	4.14%
Ga 417.206	1284952.4						5714.11	0.44%
GaRADIAL	65408.7						1440.38	2.20%
Ag 328.068†	876.8	0.00376	mg/L	0.000827	0.00376	mg/L	0.000827	22.01%
Al 396.153†	122.4	0.0286	mg/L	0.00419	0.0286	mg/L	0.00419	14.66%
As 188.979†	8.5	0.00771	mg/L	0.004073	0.00771	mg/L	0.004073	52.81%
Ba 233.527†	6588.3	0.125	mg/L	0.0004	0.125	mg/L	0.0004	0.34%
Be 234.861†	677.6	0.00006	mg/L	0.000146	0.00006	mg/L	0.000146	237.45%
B 249.677†	7903.2	0.185	mg/L	0.0044	0.185	mg/L	0.0044	2.35%
Ca 227.546†	19366.2	212	mg/L	4.5	212	mg/L	4.5	2.10%
Cd 228.802†	-0.1	-0.00014	mg/L	0.000094	-0.00014	mg/L	0.000094	65.99%
Co 228.616†	17.0	0.00077	mg/L	0.000018	0.00077	mg/L	0.000018	2.32%
Cr 267.716†	91.2	0.00068	mg/L	0.000074	0.00068	mg/L	0.000074	10.81%
Cu 327.393†	-860.6	-0.00619	mg/L	0.000678	-0.00619	mg/L	0.000678	10.96%
Fe 239.562†	1896.3	6.30	mg/L	0.197	6.30	mg/L	0.197	3.12%
Mg 279.077†	26008.9	35.5	mg/L	1.14	35.5	mg/L	1.14	3.22%
Mn 257.610†	80621.7	0.184	mg/L	0.0028	0.184	mg/L	0.0028	1.51%
Mo 202.031†	-12.5	-0.00023	mg/L	0.000447	-0.00023	mg/L	0.000447	190.76%
Ni 231.604†	11.4	0.00050	mg/L	0.000184	0.00050	mg/L	0.000184	36.92%
Pb 220.353†	-29.4	0.00495	mg/L	0.001593	0.00495	mg/L	0.001593	32.16%
Sb 206.836†	14.2	0.00776	mg/L	0.002456	0.00776	mg/L	0.002456	31.67%
Se 196.026†	-45.4	0.0148	mg/L	0.00359	0.0148	mg/L	0.00359	24.23%
Si 251.611†	163394.7	5.02	mg/L	0.094	5.02	mg/L	0.094	1.88%
Sn 189.927†	-2.0	0.00007	mg/L	0.000827	0.00007	mg/L	0.000827	>999.9%
Ti 334.940†	-1761.3	-0.00043	mg/L	0.000295	-0.00043	mg/L	0.000295	68.54%
Tl 190.801†	140.9	0.0778	mg/L	0.00175	0.0778	mg/L	0.00175	2.24%
V 290.880†	-688.4	-0.00359	mg/L	0.000218	-0.00359	mg/L	0.000218	6.08%
Zn 206.200†	609.9	0.0209	mg/L	0.00013	0.0209	mg/L	0.00013	0.62%
K 766.490†	14559.5	4.85	mg/L	0.062	4.85	mg/L	0.062	1.28%
Na 589.592†	2932113.6	367	mg/L	0.0	367	mg/L	0.0	0.00%
Sr 407.771†	1742750.2	1.65	mg/L	0.200	1.65	mg/L	0.200	12.15%
Li 670.784†	3784.2	0.0497	mg/L	0.00044	0.0497	mg/L	0.00044	0.89%

Sequence No.: 7 **Autosampler Location: 43**
Sample ID: L1104024102 **Date Collected: 4/12/2011 12:42:03 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104024102

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104024102

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4756701.7						61252.74	1.29%
YRADIAL	298818.7						5100.92	1.71%
Ga 417.206	1304698.4						19615.37	1.50%
GaRADIAL	64944.6						787.91	1.21%
Ag 328.068†	798.0	0.00327	mg/L	0.000193	0.00327	mg/L	0.000193	5.91%
Al 396.153†	163.4	0.0373	mg/L	0.01279	0.0373	mg/L	0.01279	34.27%
As 188.979†	5.9	0.00742	mg/L	0.002061	0.00742	mg/L	0.002061	27.77%
Ba 233.527†	6818.5	0.129	mg/L	0.0013	0.129	mg/L	0.0013	1.01%
Be 234.861†	1319.3	-0.00002	mg/L	0.000235	-0.00002	mg/L	0.000235	>999.9%
B 249.677†	3237.3	0.125	mg/L	0.0020	0.125	mg/L	0.0020	1.62%
Ca 227.546†	12266.0	134	mg/L	1.9	134	mg/L	1.9	1.44%
Cd 228.802†	8.7	0.00048	mg/L	0.000103	0.00048	mg/L	0.000103	21.72%
Co 228.616†	3.0	-0.00025	mg/L	0.000111	-0.00025	mg/L	0.000111	44.09%
Cr 267.716†	63.9	0.00045	mg/L	0.000078	0.00045	mg/L	0.000078	17.35%
Cu 327.393†	-157.0	-0.00050	mg/L	0.000123	-0.00050	mg/L	0.000123	24.70%
Fe 239.562†	3889.0	12.9	mg/L	0.25	12.9	mg/L	0.25	1.94%
Mg 279.077†	16043.2	21.9	mg/L	0.41	21.9	mg/L	0.41	1.89%
Mn 257.610†	74856.7	0.168	mg/L	0.0009	0.168	mg/L	0.0009	0.54%
Mo 202.031†	-2.4	0.00094	mg/L	0.000659	0.00094	mg/L	0.000659	69.98%

Approved: April 13, 2011

Ni 231.604†	-4.9	-0.00004	mg/L	0.000169	-0.00004	mg/L	0.000169 421.57%
Pb 220.353†	-26.7	0.00145	mg/L	0.002318	0.00145	mg/L	0.002318 159.49%
Sb 206.836†	12.4	0.00636	mg/L	0.000852	0.00636	mg/L	0.000852 13.38%
Se 196.026†	-39.4	0.00285	mg/L	0.006319	0.00285	mg/L	0.006319 221.74%
Si 251.611†	166531.4	5.12	mg/L	0.014	5.12	mg/L	0.014 0.27%
Sn 189.927†	-3.9	-0.00029	mg/L	0.000464	-0.00029	mg/L	0.000464 158.79%
Ti 334.940†	-638.7	0.00036	mg/L	0.000309	0.00036	mg/L	0.000309 85.76%
Tl 190.801†	129.7	0.0772	mg/L	0.00297	0.0772	mg/L	0.00297 3.85%
V 290.880†	-617.7	-0.00259	mg/L	0.000981	-0.00259	mg/L	0.000981 37.82%
Zn 206.200†	741.3	0.0253	mg/L	0.00018	0.0253	mg/L	0.00018 0.71%
K 766.490†	10159.0	3.58	mg/L	0.056	3.58	mg/L	0.056 1.56%
Na 589.592†	901956.1	71.8	mg/L	0.43	71.8	mg/L	0.43 0.60%
Sr 407.771†	516656.0	0.487	mg/L	0.0016	0.487	mg/L	0.0016 0.33%
Li 670.784†	2087.3	0.0281	mg/L	0.00220	0.0281	mg/L	0.00220 7.83%

Sequence No.: 8 **Autosampler Location: 44**
Sample ID: L1104024103 WG361174-01 **Date Collected: 4/12/2011 12:47:44 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104024103 WG361174-01

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104024103 WG361174-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4716477.1						18669.81	0.40%
YRADIAL	294170.1						1300.09	0.44%
Ga 417.206	1299884.6						18196.06	1.40%
GaRADIAL	64139.8						340.95	0.53%
Ag 328.068†	1079.2	0.00415	mg/L	0.000645	0.00415	mg/L	0.000645	15.53%
Al 396.153†	2.9	0.00586	mg/L	0.005256	0.00586	mg/L	0.005256	89.74%
As 188.979†	10.0	0.0119	mg/L	0.00199	0.0119	mg/L	0.00199	16.73%
Ba 233.527†	12847.8	0.244	mg/L	0.0037	0.244	mg/L	0.0037	1.51%
Be 234.861†	2194.7	0.00001	mg/L	0.000233	0.00001	mg/L	0.000233	>999.9%
B 249.677†	2857.1	0.158	mg/L	0.0044	0.158	mg/L	0.0044	2.81%
Ca 227.546†	16969.1	186	mg/L	3.9	186	mg/L	3.9	2.11%
Cd 228.802†	0.9	-0.00008	mg/L	0.000169	-0.00008	mg/L	0.000169	208.19%
Co 228.616†	9.9	-0.00010	mg/L	0.000114	-0.00010	mg/L	0.000114	115.18%
Cr 267.716†	90.6	0.00051	mg/L	0.000134	0.00051	mg/L	0.000134	26.32%
Cu 327.393†	-693.6	-0.00327	mg/L	0.000898	-0.00327	mg/L	0.000898	27.49%
Fe 239.562†	6479.2	21.5	mg/L	0.41	21.5	mg/L	0.41	1.89%
Mg 279.077†	20514.4	28.0	mg/L	0.55	28.0	mg/L	0.55	1.95%
Mn 257.610†	263712.2	0.587	mg/L	0.0056	0.587	mg/L	0.0056	0.96%
Mo 202.031†	2.1	0.00183	mg/L	0.000611	0.00183	mg/L	0.000611	33.35%
Ni 231.604†	-21.1	-0.00058	mg/L	0.000304	-0.00058	mg/L	0.000304	52.27%
Pb 220.353†	-31.0	0.00266	mg/L	0.003423	0.00266	mg/L	0.003423	128.67%
Sb 206.836†	11.6	0.00579	mg/L	0.001918	0.00579	mg/L	0.001918	33.11%
Se 196.026†	-52.1	0.00803	mg/L	0.000867	0.00803	mg/L	0.000867	10.79%
Si 251.611†	255904.3	7.86	mg/L	0.136	7.86	mg/L	0.136	1.73%
Sn 189.927†	-10.4	-0.00156	mg/L	0.001060	-0.00156	mg/L	0.001060	67.98%
Ti 334.940†	-1441.7	-0.00025	mg/L	0.000084	-0.00025	mg/L	0.000084	33.97%
Tl 190.801†	146.3	0.0845	mg/L	0.00372	0.0845	mg/L	0.00372	4.40%
V 290.880†	-767.9	-0.00297	mg/L	0.000819	-0.00297	mg/L	0.000819	27.61%
Zn 206.200†	367.0	0.0122	mg/L	0.00012	0.0122	mg/L	0.00012	0.95%
K 766.490†	11691.7	4.13	mg/L	0.062	4.13	mg/L	0.062	1.51%
Na 589.592†	917213.7	73.1	mg/L	0.45	73.1	mg/L	0.45	0.62%
Sr 407.771†	661417.9	0.622	mg/L	0.0185	0.622	mg/L	0.0185	2.97%
Li 670.784†	2469.9	0.0329	mg/L	0.00034	0.0329	mg/L	0.00034	1.04%

Sequence No.: 9 **Autosampler Location: 45**
Sample ID: L1104024104S WG361174-04 **Date Collected: 4/12/2011 12:53:25 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 13, 2011

Nebulizer Parameters: L1104024104S WG361174-04

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104024104S WG361174-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4580217.5						49465.67	1.08%
YRADIAL	297269.4						6473.90	2.18%
Ga 417.206	1259967.7						34854.17	2.77%
GaRADIAL	64701.8						944.63	1.46%
Ag 328.068†	41915.7	0.207	mg/L	0.0065	0.207	mg/L	0.0065	3.16%
Al 396.153†	24936.0	4.99	mg/L	0.133	4.99	mg/L	0.133	2.66%
As 188.979†	206.5	0.220	mg/L	0.0036	0.220	mg/L	0.0036	1.65%
Ba 233.527†	39088.2	0.743	mg/L	0.0112	0.743	mg/L	0.0112	1.50%
Be 234.861†	15469.0	0.0270	mg/L	0.00107	0.0270	mg/L	0.00107	3.96%
B 249.677†	55154.9	1.18	mg/L	0.017	1.18	mg/L	0.017	1.44%
Ca 227.546†	17417.9	191	mg/L	3.2	191	mg/L	3.2	1.67%
Cd 228.802†	364.8	0.0231	mg/L	0.00036	0.0231	mg/L	0.00036	1.54%
Co 228.616†	1691.5	0.0999	mg/L	0.00111	0.0999	mg/L	0.00111	1.11%
Cr 267.716†	28201.0	0.252	mg/L	0.0028	0.252	mg/L	0.0028	1.12%
Cu 327.393†	35527.5	0.251	mg/L	0.0063	0.251	mg/L	0.0063	2.51%
Fe 239.562†	7090.6	23.6	mg/L	0.58	23.6	mg/L	0.58	2.45%
Mg 279.077†	23738.8	32.4	mg/L	1.02	32.4	mg/L	1.02	3.15%
Mn 257.610†	381797.5	0.852	mg/L	0.0114	0.852	mg/L	0.0114	1.34%
Mo 202.031†	6120.6	0.517	mg/L	0.0059	0.517	mg/L	0.0059	1.14%
Ni 231.604†	7528.5	0.250	mg/L	0.0015	0.250	mg/L	0.0015	0.62%
Pb 220.353†	1226.1	0.256	mg/L	0.0028	0.256	mg/L	0.0028	1.11%
Sb 206.836†	833.7	0.625	mg/L	0.0100	0.625	mg/L	0.0100	1.60%
Se 196.026†	190.6	0.214	mg/L	0.0070	0.214	mg/L	0.0070	3.26%
Si 251.611†	342220.2	10.5	mg/L	0.26	10.5	mg/L	0.26	2.49%
Sn 189.927†	2615.6	0.507	mg/L	0.0014	0.507	mg/L	0.0014	0.27%
Ti 334.940†	373107.7	0.523	mg/L	0.0055	0.523	mg/L	0.0055	1.05%
Tl 190.801†	509.1	0.337	mg/L	0.0120	0.337	mg/L	0.0120	3.56%
V 290.880†	74340.5	0.511	mg/L	0.0052	0.511	mg/L	0.0052	1.02%
Zn 206.200†	14880.4	0.512	mg/L	0.0079	0.512	mg/L	0.0079	1.54%
K 766.490†	77317.8	28.2	mg/L	0.08	28.2	mg/L	0.08	0.28%
Na 589.592†	1216506.0	101	mg/L	0.6	101	mg/L	0.6	0.60%
Sr 407.771†	1120528.5	1.06	mg/L	0.016	1.06	mg/L	0.016	1.55%
Li 670.784†	42980.9	0.550	mg/L	0.0050	0.550	mg/L	0.0050	0.90%

Sequence No.: 10 **Autosampler Location: 46**
Sample ID: L1104024105SD WG361174-05 **Date Collected: 4/12/2011 12:59:08 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104024105SD WG361174-05

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104024105SD WG361174-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4581024.7						46075.87	1.01%
YRADIAL	292115.6						699.38	0.24%
Ga 417.206	1257720.0						11913.56	0.95%
GaRADIAL	63572.0						296.77	0.47%
Ag 328.068†	42207.4	0.208	mg/L	0.0036	0.208	mg/L	0.0036	1.74%
Al 396.153†	25283.6	5.06	mg/L	0.061	5.06	mg/L	0.061	1.21%
As 188.979†	200.2	0.213	mg/L	0.0010	0.213	mg/L	0.0010	0.45%
Ba 233.527†	39957.4	0.760	mg/L	0.0122	0.760	mg/L	0.0122	1.61%
Be 234.861†	15780.4	0.0275	mg/L	0.00081	0.0275	mg/L	0.00081	2.94%
B 249.677†	56441.7	1.21	mg/L	0.017	1.21	mg/L	0.017	1.42%
Ca 227.546†	18085.2	198	mg/L	3.6	198	mg/L	3.6	1.83%
Cd 228.802†	364.5	0.0231	mg/L	0.00031	0.0231	mg/L	0.00031	1.35%
Co 228.616†	1699.6	0.100	mg/L	0.0013	0.100	mg/L	0.0013	1.25%
Cr 267.716†	28576.2	0.255	mg/L	0.0046	0.255	mg/L	0.0046	1.82%
Cu 327.393†	36015.7	0.255	mg/L	0.0052	0.255	mg/L	0.0052	2.05%

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Fe 239.562†	7239.4	24.0	mg/L	0.26	24.0 mg/L	0.26	1.10%
Mg 279.077†	24593.9	33.6	mg/L	0.51	33.6 mg/L	0.51	1.52%
Mn 257.610†	393059.5	0.877	mg/L	0.0147	0.877 mg/L	0.0147	1.67%
Mo 202.031†	6135.6	0.518	mg/L	0.0041	0.518 mg/L	0.0041	0.79%
Ni 231.604†	7535.8	0.250	mg/L	0.0025	0.250 mg/L	0.0025	0.99%
Pb 220.353†	1227.8	0.256	mg/L	0.0027	0.256 mg/L	0.0027	1.04%
Sb 206.836†	838.4	0.628	mg/L	0.0093	0.628 mg/L	0.0093	1.48%
Se 196.026†	192.3	0.217	mg/L	0.0091	0.217 mg/L	0.0091	4.18%
Si 251.611†	352941.7	10.8	mg/L	0.23	10.8 mg/L	0.23	2.14%
Sn 189.927†	2603.5	0.505	mg/L	0.0061	0.505 mg/L	0.0061	1.21%
Ti 334.940†	378547.6	0.531	mg/L	0.0039	0.531 mg/L	0.0039	0.73%
Tl 190.801†	522.0	0.345	mg/L	0.0017	0.345 mg/L	0.0017	0.49%
V 290.880†	75379.4	0.518	mg/L	0.0097	0.518 mg/L	0.0097	1.87%
Zn 206.200†	14681.2	0.505	mg/L	0.0078	0.505 mg/L	0.0078	1.55%
K 766.490†	78114.8	28.5	mg/L	0.10	28.5 mg/L	0.10	0.34%
Na 589.592†	1248181.3	104	mg/L	0.5	104 mg/L	0.5	0.43%
Sr 407.771†	1165775.4	1.10	mg/L	0.029	1.10 mg/L	0.029	2.64%
Li 670.784†	43441.6	0.556	mg/L	0.0022	0.556 mg/L	0.0022	0.39%

Sequence No.: 11 **Autosampler Location: 47**
Sample ID: L1104018201 **Date Collected: 4/12/2011 1:04:50 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104018201

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104018201

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4802918.3						20518.23	0.43%
YRADIAL	298613.2						5727.67	1.92%
Ga 417.206	1314547.7						4442.99	0.34%
GaRADIAL	65436.0						633.52	0.97%
Ag 328.068†	476.0	0.00232	mg/L	0.000846	0.00232	mg/L	0.000846	36.45%
Al 396.153†	737.9	0.151	mg/L	0.0092	0.151	mg/L	0.0092	6.04%
As 188.979†	6.5	0.00767	mg/L	0.003047	0.00767	mg/L	0.003047	39.73%
Ba 233.527†	1130.9	0.0213	mg/L	0.00017	0.0213	mg/L	0.00017	0.81%
Be 234.861†	112.8	0.00000	mg/L	0.000018	0.00000	mg/L	0.000018	>999.9%
B 249.677†	1299.7	0.0321	mg/L	0.00143	0.0321	mg/L	0.00143	4.44%
Ca 227.546†	6239.2	68.3	mg/L	0.36	68.3	mg/L	0.36	0.52%
Cd 228.802†	0.9	-0.00006	mg/L	0.000133	-0.00006	mg/L	0.000133	227.04%
Co 228.616†	2.7	0.00007	mg/L	0.000057	0.00007	mg/L	0.000057	87.52%
Cr 267.716†	196.1	0.00161	mg/L	0.000087	0.00161	mg/L	0.000087	5.44%
Cu 327.393†	-65.5	-0.00120	mg/L	0.000558	-0.00120	mg/L	0.000558	46.57%
Fe 239.562†	341.2	1.14	mg/L	0.003	1.14	mg/L	0.003	0.28%
Mg 279.077†	8618.9	11.8	mg/L	0.29	11.8	mg/L	0.29	2.42%
Mn 257.610†	87516.2	0.195	mg/L	0.0029	0.195	mg/L	0.0029	1.49%
Mo 202.031†	7.1	0.00117	mg/L	0.000229	0.00117	mg/L	0.000229	19.67%
Ni 231.604†	9.0	0.00044	mg/L	0.000121	0.00044	mg/L	0.000121	27.73%
Pb 220.353†	-22.2	-0.00029	mg/L	0.000655	-0.00029	mg/L	0.000655	222.83%
Sb 206.836†	10.5	0.00495	mg/L	0.002585	0.00495	mg/L	0.002585	52.18%
Se 196.026†	-32.7	-0.0124	mg/L	0.00689	-0.0124	mg/L	0.00689	55.53%
Si 251.611†	124322.7	3.82	mg/L	0.057	3.82	mg/L	0.057	1.48%
Sn 189.927†	-3.4	-0.00019	mg/L	0.001236	-0.00019	mg/L	0.001236	648.72%
Ti 334.940†	2865.1	0.00460	mg/L	0.001400	0.00460	mg/L	0.001400	30.46%
Tl 190.801†	98.3	0.0619	mg/L	0.00187	0.0619	mg/L	0.00187	3.01%
V 290.880†	-228.6	-0.00083	mg/L	0.000998	-0.00083	mg/L	0.000998	120.31%
Zn 206.200†	1331.5	0.0458	mg/L	0.00033	0.0458	mg/L	0.00033	0.73%
K 766.490†	5628.4	1.96	mg/L	0.120	1.96	mg/L	0.120	6.13%
Na 589.592†	1069260.8	87.1	mg/L	1.54	87.1	mg/L	1.54	1.76%
Sr 407.771†	208861.7	0.197	mg/L	0.0160	0.197	mg/L	0.0160	8.13%
Li 670.784†	122.8	0.00301	mg/L	0.000901	0.00301	mg/L	0.000901	29.99%

Sequence No.: 12 **Autosampler Location: 48**
Sample ID: L1104018201PS WG361500-01 **Date Collected: 4/12/2011 1:11:32 PM**
Analyst: KHR **Data Type: Original**

Approved: April 13, 2011

Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104018201PS WG361500-01

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104018201PS WG361500-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4741843.6						26472.21	0.56%
YRADIAL	297209.0						5722.48	1.93%
Ga 417.206	1291992.4						4737.07	0.37%
GaRADIAL	65526.3						1281.04	1.96%
Ag 328.068†	40189.7	0.200	mg/L	0.0030	0.200	mg/L	0.0030	1.48%
Al 396.153†	25731.7	5.15	mg/L	0.033	5.15	mg/L	0.033	0.65%
As 188.979†	191.8	0.204	mg/L	0.0010	0.204	mg/L	0.0010	0.48%
Ba 233.527†	26818.7	0.510	mg/L	0.0049	0.510	mg/L	0.0049	0.96%
Be 234.861†	12803.5	0.0258	mg/L	0.00040	0.0258	mg/L	0.00040	1.54%
B 249.677†	52968.1	1.04	mg/L	0.016	1.04	mg/L	0.016	1.52%
Ca 227.546†	6106.7	67.1	mg/L	0.26	67.1	mg/L	0.26	0.38%
Cd 228.802†	364.4	0.0232	mg/L	0.00009	0.0232	mg/L	0.00009	0.39%
Co 228.616†	1686.2	0.100	mg/L	0.0010	0.100	mg/L	0.0010	1.02%
Cr 267.716†	27735.8	0.248	mg/L	0.0019	0.248	mg/L	0.0019	0.76%
Cu 327.393†	35560.0	0.249	mg/L	0.0024	0.249	mg/L	0.0024	0.98%
Fe 239.562†	876.1	2.91	mg/L	0.053	2.91	mg/L	0.053	1.82%
Mg 279.077†	11260.1	15.4	mg/L	0.29	15.4	mg/L	0.29	1.87%
Mn 257.610†	193097.3	0.432	mg/L	0.0051	0.432	mg/L	0.0051	1.19%
Mo 202.031†	5983.2	0.504	mg/L	0.0028	0.504	mg/L	0.0028	0.55%
Ni 231.604†	7470.1	0.248	mg/L	0.0016	0.248	mg/L	0.0016	0.65%
Pb 220.353†	1216.2	0.249	mg/L	0.0013	0.249	mg/L	0.0013	0.52%
Sb 206.836†	809.7	0.607	mg/L	0.0048	0.607	mg/L	0.0048	0.80%
Se 196.026†	219.5	0.200	mg/L	0.0074	0.200	mg/L	0.0074	3.73%
Si 251.611†	197220.8	6.05	mg/L	0.097	6.05	mg/L	0.097	1.60%
Sn 189.927†	-13.6	-0.00219	mg/L	0.001645	-0.00219	mg/L	0.001645	75.27%
Ti 334.940†	366880.7	0.513	mg/L	0.0027	0.513	mg/L	0.0027	0.53%
Tl 190.801†	450.6	0.308	mg/L	0.0045	0.308	mg/L	0.0045	1.47%
V 290.880†	72978.0	0.500	mg/L	0.0040	0.500	mg/L	0.0040	0.79%
Zn 206.200†	17186.1	0.591	mg/L	0.0091	0.591	mg/L	0.0091	1.54%
K 766.490†	69595.6	25.3	mg/L	0.06	25.3	mg/L	0.06	0.22%
Na 589.592†	1260546.6	106	mg/L	3.9	106	mg/L	3.9	3.68%
Sr 407.771†	679990.3	0.642	mg/L	0.0478	0.642	mg/L	0.0478	7.44%
Li 670.784†	39507.3	0.505	mg/L	0.0014	0.505	mg/L	0.0014	0.28%

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Sequence No.: 13 **Autosampler Location: 49**
Sample ID: L1104018201DL WG361500-02 **Date Collected: 4/12/2011 1:18:15 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104018201DL WG361500-02

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104018201DL WG361500-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4815585.0						1495.05	0.03%
YRADIAL	296498.9						2573.60	0.87%
Ga 417.206	1296090.4						14638.32	1.13%
GaRADIAL	65509.2						1148.49	1.75%
Ag 328.068†	65.4	0.00038	mg/L	0.000297	0.00038	mg/L	0.000297	77.64%
Al 396.153†	114.9	0.0266	mg/L	0.00933	0.0266	mg/L	0.00933	35.09%
As 188.979†	2.6	0.00454	mg/L	0.002710	0.00454	mg/L	0.002710	59.66%
Ba 233.527†	229.3	0.00424	mg/L	0.000028	0.00424	mg/L	0.000028	0.67%
Be 234.861†	10.0	-0.00004	mg/L	0.000026	-0.00004	mg/L	0.000026	64.35%
B 249.677†	523.0	0.0129	mg/L	0.00105	0.0129	mg/L	0.00105	8.15%
Ca 227.546†	1240.4	13.6	mg/L	0.13	13.6	mg/L	0.13	0.97%

Approved: April 13, 2011

Cd 228.802†	0.8	-0.00004	mg/L	0.000119	-0.00004	mg/L	0.000119 317.60%
Co 228.616†	-1.6	-0.00016	mg/L	0.000258	-0.00016	mg/L	0.000258 163.88%
Cr 267.716†	11.3	0.00002	mg/L	0.000104	0.00002	mg/L	0.000104 478.42%
Cu 327.393†	141.0	0.00013	mg/L	0.000950	0.00013	mg/L	0.000950 706.60%
Fe 239.562†	70.4	0.238	mg/L	0.0060	0.238	mg/L	0.0060 2.53%
Mg 279.077†	1785.7	2.44	mg/L	0.029	2.44	mg/L	0.029 1.18%
Mn 257.610†	18427.5	0.0409	mg/L	0.00048	0.0409	mg/L	0.00048 1.18%
Mo 202.031†	4.7	0.00089	mg/L	0.000402	0.00089	mg/L	0.000402 45.38%
Ni 231.604†	10.9	0.00053	mg/L	0.000273	0.00053	mg/L	0.000273 51.68%
Pb 220.353†	-13.5	-0.00113	mg/L	0.000447	-0.00113	mg/L	0.000447 39.42%
Sb 206.836†	3.0	-0.00067	mg/L	0.002396	-0.00067	mg/L	0.002396 357.99%
Se 196.026†	-6.4	-0.00417	mg/L	0.000839	-0.00417	mg/L	0.000839 20.10%
Si 251.611†	25666.8	0.788	mg/L	0.0182	0.788	mg/L	0.0182 2.31%
Sn 189.927†	-3.7	-0.00025	mg/L	0.000452	-0.00025	mg/L	0.000452 179.02%
Ti 334.940†	496.0	0.00074	mg/L	0.000105	0.00074	mg/L	0.000105 14.20%
Tl 190.801†	29.2	0.0196	mg/L	0.00122	0.0196	mg/L	0.00122 6.24%
V 290.880†	-94.0	0.00003	mg/L	0.000561	0.00003	mg/L	0.000561 >999.9%
Zn 206.200†	376.8	0.0130	mg/L	0.00035	0.0130	mg/L	0.00035 2.68%
K 766.490†	1095.4	0.432	mg/L	0.0209	0.432	mg/L	0.0209 4.83%
Na 589.592†	218906.3	16.1	mg/L	0.22	16.1	mg/L	0.22 1.36%
Sr 407.771†	43040.3	0.0407	mg/L	0.00295	0.0407	mg/L	0.00295 7.25%
Li 670.784†	42.1	0.00198	mg/L	0.001611	0.00198	mg/L	0.001611 81.52%

Sequence No.: 14 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/12/2011 1:24:57 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4819793.9						92161.70	1.91%
YRADIAL	292989.4						3759.93	1.28%
Ga 417.206	1272944.7						30442.71	2.39%
GaRADIAL	64437.7						1739.06	2.70%
Ag 328.068†	81266.6	0.404	mg/L	0.0121	0.404	mg/L	0.0121	2.99%
QC value within limits for Ag 328.068 Recovery = 100.96%								
Al 396.153†	50202.3	10.0	mg/L	0.06	10.0	mg/L	0.06	0.62%
QC value within limits for Al 396.153 Recovery = 100.49%								
As 188.979†	388.7	0.414	mg/L	0.0104	0.414	mg/L	0.0104	2.51%
QC value within limits for As 188.979 Recovery = 103.47%								
Ba 233.527†	53192.2	1.01	mg/L	0.023	1.01	mg/L	0.023	2.27%
QC value within limits for Ba 233.527 Recovery = 101.24%								
Be 234.861†	25972.2	0.0528	mg/L	0.00167	0.0528	mg/L	0.00167	3.16%
QC value within limits for Be 234.861 Recovery = 105.56%								
B 249.677†	26185.3	0.519	mg/L	0.0155	0.519	mg/L	0.0155	2.98%
QC value within limits for B 249.677 Recovery = 103.84%								
Ca 227.546†	933.2	10.5	mg/L	0.28	10.5	mg/L	0.28	2.67%
QC value within limits for Ca 227.546 Recovery = 105.45%								
Cd 228.802†	758.5	0.0484	mg/L	0.00085	0.0484	mg/L	0.00085	1.76%
QC value within limits for Cd 228.802 Recovery = 96.89%								
Co 228.616†	3428.0	0.204	mg/L	0.0041	0.204	mg/L	0.0041	2.00%
QC value within limits for Co 228.616 Recovery = 101.91%								
Cr 267.716†	56059.4	0.501	mg/L	0.0116	0.501	mg/L	0.0116	2.31%
QC value within limits for Cr 267.716 Recovery = 100.27%								
Cu 327.393†	73052.2	0.512	mg/L	0.0163	0.512	mg/L	0.0163	3.18%
QC value within limits for Cu 327.393 Recovery = 102.43%								
Fe 239.562†	1176.3	3.91	mg/L	0.080	3.91	mg/L	0.080	2.04%
QC value within limits for Fe 239.562 Recovery = 97.75%								
Mg 279.077†	7250.2	9.91	mg/L	0.189	9.91	mg/L	0.189	1.91%
QC value within limits for Mg 279.077 Recovery = 99.08%								
Mn 257.610†	228755.4	0.511	mg/L	0.0128	0.511	mg/L	0.0128	2.49%
QC value within limits for Mn 257.610 Recovery = 102.28%								
Mo 202.031†	12109.3	1.02	mg/L	0.019	1.02	mg/L	0.019	1.84%
QC value within limits for Mo 202.031 Recovery = 101.96%								

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Ni 231.604†	15275.8	0.506 mg/L	0.0130	0.506 mg/L	0.0130	2.57%
QC value within limits for Ni 231.604 Recovery = 101.25%						
Pb 220.353†	2532.5	0.511 mg/L	0.0106	0.511 mg/L	0.0106	2.07%
QC value within limits for Pb 220.353 Recovery = 102.14%						
Sb 206.836†	1637.1	1.23 mg/L	0.033	1.23 mg/L	0.033	2.71%
QC value within limits for Sb 206.836 Recovery = 102.46%						
Se 196.026†	496.7	0.419 mg/L	0.0081	0.419 mg/L	0.0081	1.93%
QC value within limits for Se 196.026 Recovery = 104.66%						
Si 251.611†	163985.0	5.02 mg/L	0.149	5.02 mg/L	0.149	2.97%
QC value within limits for Si 251.611 Recovery = 100.46%						
Sn 189.927†	5233.2	1.01 mg/L	0.022	1.01 mg/L	0.022	2.16%
QC value within limits for Sn 189.927 Recovery = 101.42%						
Ti 334.940†	730319.2	1.02 mg/L	0.012	1.02 mg/L	0.012	1.16%
QC value within limits for Ti 334.940 Recovery = 102.05%						
Tl 190.801†	764.8	0.532 mg/L	0.0104	0.532 mg/L	0.0104	1.95%
QC value within limits for Tl 190.801 Recovery = 106.48%						
V 290.880†	146478.3	1.00 mg/L	0.025	1.00 mg/L	0.025	2.50%
QC value within limits for V 290.880 Recovery = 100.36%						
Zn 206.200†	29600.1	1.02 mg/L	0.021	1.02 mg/L	0.021	2.08%
QC value within limits for Zn 206.200 Recovery = 101.89%						
K 766.490†	129272.5	48.4 mg/L	0.47	48.4 mg/L	0.47	0.97%
QC value within limits for K 766.490 Recovery = 96.90%						
Na 589.592†	630604.5	48.5 mg/L	1.38	48.5 mg/L	1.38	2.85%
QC value within limits for Na 589.592 Recovery = 96.96%						
Sr 407.771†	1008193.3	0.952 mg/L	0.0581	0.952 mg/L	0.0581	6.10%
QC value within limits for Sr 407.771 Recovery = 95.21%						
Li 670.784†	78183.9	0.999 mg/L	0.0041	0.999 mg/L	0.0041	0.41%
QC value within limits for Li 670.784 Recovery = 99.87%						

All analyte(s) passed QC.

Sequence No.: 15 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/12/2011 1:31:37 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4988310.2						14865.70	0.30%
YRADIAL	295442.4						4240.58	1.44%
Ga 417.206	1288811.8						9821.62	0.76%
GaRADIAL	64171.1						1438.24	2.24%
Ag 328.068†	48.7	0.00033	mg/L	0.000173	0.00033	mg/L	0.000173	52.90%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	26.0	0.00876	mg/L	0.011492	0.00876	mg/L	0.011492	131.17%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.2	0.00179	mg/L	0.000576	0.00179	mg/L	0.000576	32.15%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-4.1	-0.00019	mg/L	0.000076	-0.00019	mg/L	0.000076	38.98%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-28.9	-0.00008	mg/L	0.000008	-0.00008	mg/L	0.000008	10.23%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	231.9	0.00615	mg/L	0.000202	0.00615	mg/L	0.000202	3.28%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-3.0	-0.0513	mg/L	0.04745	-0.0513	mg/L	0.04745	92.43%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	0.5	-0.00003	mg/L	0.000168	-0.00003	mg/L	0.000168	495.84%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	2.7	0.00011	mg/L	0.000078	0.00011	mg/L	0.000078	73.57%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-17.4	-0.00022	mg/L	0.000079	-0.00022	mg/L	0.000079	36.26%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	17.3	-0.00076	mg/L	0.000618	-0.00076	mg/L	0.000618	81.19%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.2	0.00529	mg/L	0.003069	0.00529	mg/L	0.003069	57.98%

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QC value within limits for Fe 239.562 Recovery = Not calculated

Mg 279.077†	0.2	0.00189 mg/L	0.000937	0.00189 mg/L	0.000937	49.48%	
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	-20.7	-0.00025 mg/L	0.000014	-0.00025 mg/L	0.000014	5.42%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-1.7	0.00033 mg/L	0.000633	0.00033 mg/L	0.000633	192.85%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	-9.2	-0.00012 mg/L	0.000361	-0.00012 mg/L	0.000361	289.04%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	-4.2	0.00008 mg/L	0.001516	0.00008 mg/L	0.001516	>999.9%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	2.2	-0.00126 mg/L	0.000705	-0.00126 mg/L	0.000705	56.02%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	2.6	-0.00010 mg/L	0.003057	-0.00010 mg/L	0.003057	>999.9%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	32.5	0.00076 mg/L	0.000251	0.00076 mg/L	0.000251	32.86%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-0.3	0.00040 mg/L	0.001023	0.00040 mg/L	0.001023	253.60%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-61.3	-0.00018 mg/L	0.000106	-0.00018 mg/L	0.000106	59.86%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-2.6	-0.00090 mg/L	0.003022	-0.00090 mg/L	0.003022	337.16%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	-12.9	0.00056 mg/L	0.000181	0.00056 mg/L	0.000181	32.18%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-3.9	-0.00002 mg/L	0.000066	-0.00002 mg/L	0.000066	307.87%	
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	-46.4	0.0462 mg/L	0.01310	0.0462 mg/L	0.01310	28.37%	
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	259.4	0.0425 mg/L	0.00610	0.0425 mg/L	0.00610	14.33%	
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	-53.2	0.00006 mg/L	0.000010	0.00006 mg/L	0.000010	16.98%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	-199.7	-0.00111 mg/L	0.000713	-0.00111 mg/L	0.000713	64.38%	
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

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Sequence No.: 16 **Autosampler Location: 50**
Sample ID: L1104024106 **Date Collected: 4/12/2011 1:38:13 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104024106

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104024106

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4641696.7						16597.00	0.36%
YRADIAL	297904.8						1195.21	0.40%
Ga 417.206	1293371.5						3879.88	0.30%
GaRADIAL	66112.6						723.26	1.09%
Ag 328.068†	1405.2	0.00396	mg/L	0.000535	0.00396	mg/L	0.000535	13.51%
Al 396.153†	1010.4	0.210	mg/L	0.0160	0.210	mg/L	0.0160	7.61%
As 188.979†	7.8	0.0109	mg/L	0.00103	0.0109	mg/L	0.00103	9.45%
Ba 233.527†	5807.7	0.110	mg/L	0.0004	0.110	mg/L	0.0004	0.33%
Be 234.861†	5488.9	-0.00011	mg/L	0.000265	-0.00011	mg/L	0.000265	240.20%
B 249.677†	13776.6	0.523	mg/L	0.0042	0.523	mg/L	0.0042	0.80%
Ca 227.546†	32242.5	354	mg/L	3.4	354	mg/L	3.4	0.97%
Cd 228.802†	3.4	0.00012	mg/L	0.000104	0.00012	mg/L	0.000104	89.71%
Co 228.616†	77.0	0.00312	mg/L	0.000284	0.00312	mg/L	0.000284	9.08%
Cr 267.716†	704.3	0.00596	mg/L	0.000211	0.00596	mg/L	0.000211	3.55%
Cu 327.393†	-852.3	-0.00062	mg/L	0.001523	-0.00062	mg/L	0.001523	246.96%
Fe 239.562†	16320.4	54.2	mg/L	0.17	54.2	mg/L	0.17	0.31%
Mg 279.077†	40979.1	55.9	mg/L	0.19	55.9	mg/L	0.19	0.33%
Mn 257.610†	339042.8	0.756	mg/L	0.0004	0.756	mg/L	0.0004	0.06%
Mo 202.031†	-6.7	0.00274	mg/L	0.000577	0.00274	mg/L	0.000577	21.07%
Ni 231.604†	205.1	0.00691	mg/L	0.000294	0.00691	mg/L	0.000294	4.25%

Approved: April 13, 2011

Pb 220.353†	98.4	0.0350 mg/L	0.00106	0.0350 mg/L	0.00106	3.03%
Sb 206.836†	17.9	0.0105 mg/L	0.00136	0.0105 mg/L	0.00136	12.96%
Se 196.026†	-67.8	0.0486 mg/L	0.00125	0.0486 mg/L	0.00125	2.58%
Si 251.611†	313491.6	9.63 mg/L	0.059	9.63 mg/L	0.059	0.62%
Sn 189.927†	-14.8	-0.00241 mg/L	0.000480	-0.00241 mg/L	0.000480	19.92%
Ti 334.940†	856.2	0.00464 mg/L	0.000142	0.00464 mg/L	0.000142	3.07%
Tl 190.801†	161.7	0.0802 mg/L	0.00262	0.0802 mg/L	0.00262	3.27%
V 290.880†	-558.7	0.00098 mg/L	0.000353	0.00098 mg/L	0.000353	35.96%
Zn 206.200†	8382.0	0.287 mg/L	0.0011	0.287 mg/L	0.0011	0.38%
K 766.490†	28143.6	10.0 mg/L	0.06	10.0 mg/L	0.06	0.56%
Na 589.592†	758980.4	59.3 mg/L	0.66	59.3 mg/L	0.66	1.12%
Sr 407.771†	1516639.5	1.43 mg/L	0.074	1.43 mg/L	0.074	5.22%
Li 670.784†	6820.2	0.0884 mg/L	0.00135	0.0884 mg/L	0.00135	1.53%

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Sequence No.: 17 **Autosampler Location: 51**
Sample ID: L1104024107 **Date Collected: 4/12/2011 1:43:56 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104024107

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: L1104024107

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4750528.3						39332.83	0.83%
YRADIAL	296921.7						2834.63	0.95%
Ga 417.206	1323222.9						6259.63	0.47%
GaRADIAL	66058.4						1227.92	1.86%
Ag 328.068†	653.9	0.00295	mg/L	0.000495	0.00295	mg/L	0.000495	16.77%
Al 396.153†	-37.9	-0.00389	mg/L	0.009505	-0.00389	mg/L	0.009505	244.39%
As 188.979†	10.9	0.0104	mg/L	0.00138	0.0104	mg/L	0.00138	13.25%
Ba 233.527†	7300.7	0.138	mg/L	0.0016	0.138	mg/L	0.0016	1.18%
Be 234.861†	209.7	0.00009	mg/L	0.000052	0.00009	mg/L	0.000052	61.43%
B 249.677†	5105.2	0.111	mg/L	0.0018	0.111	mg/L	0.0018	1.66%
Ca 227.546†	16239.4	178	mg/L	1.6	178	mg/L	1.6	0.88%
Cd 228.802†	-1.8	-0.00028	mg/L	0.000128	-0.00028	mg/L	0.000128	46.15%
Co 228.616†	9.9	0.00045	mg/L	0.000115	0.00045	mg/L	0.000115	25.74%
Cr 267.716†	164.1	0.00101	mg/L	0.000065	0.00101	mg/L	0.000065	6.49%
Cu 327.393†	-773.9	-0.00606	mg/L	0.000123	-0.00606	mg/L	0.000123	2.04%
Fe 239.562†	638.1	2.12	mg/L	0.034	2.12	mg/L	0.034	1.60%
Mg 279.077†	36760.3	50.2	mg/L	0.36	50.2	mg/L	0.36	0.72%
Mn 257.610†	413137.4	0.918	mg/L	0.0017	0.918	mg/L	0.0017	0.19%
Mo 202.031†	4.2	0.00111	mg/L	0.000628	0.00111	mg/L	0.000628	56.38%
Ni 231.604†	13.8	0.00058	mg/L	0.000513	0.00058	mg/L	0.000513	88.35%
Pb 220.353†	-32.3	0.00284	mg/L	0.001177	0.00284	mg/L	0.001177	41.42%
Sb 206.836†	13.5	0.00722	mg/L	0.001631	0.00722	mg/L	0.001631	22.60%
Se 196.026†	-42.1	0.00717	mg/L	0.006105	0.00717	mg/L	0.006105	85.18%
Si 251.611†	356029.3	10.9	mg/L	0.07	10.9	mg/L	0.07	0.61%
Sn 189.927†	-5.8	-0.00067	mg/L	0.001228	-0.00067	mg/L	0.001228	181.99%
Ti 334.940†	-1439.3	-0.00032	mg/L	0.000154	-0.00032	mg/L	0.000154	47.48%
Tl 190.801†	136.6	0.0791	mg/L	0.00324	0.0791	mg/L	0.00324	4.10%
V 290.880†	-1037.4	-0.00630	mg/L	0.000541	-0.00630	mg/L	0.000541	8.59%
Zn 206.200†	154.7	0.00538	mg/L	0.000270	0.00538	mg/L	0.000270	5.02%
K 766.490†	2759.4	0.920	mg/L	0.0305	0.920	mg/L	0.0305	3.32%
Na 589.592†	1350873.4	115	mg/L	3.8	115	mg/L	3.8	3.28%
Sr 407.771†	725858.5	0.686	mg/L	0.0412	0.686	mg/L	0.0412	6.01%
Li 670.784†	1029.4	0.0146	mg/L	0.00103	0.0146	mg/L	0.00103	7.10%

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Sequence No.: 18 **Autosampler Location: 52**
Sample ID: L1104024108 **Date Collected: 4/12/2011 1:50:37 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104024108

Approved: April 13, 2011

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: L1104024108

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4790973.0						39604.71	0.83%
YRADIAL	309342.3						2663.46	0.86%
Ga 417.206	1344476.3						25527.40	1.90%
GaRADIAL	67940.4						896.10	1.32%
Ag 328.068†	502.3	0.00248	mg/L	0.000313	0.00248	mg/L	0.000313	12.61%
Al 396.153†	750.6	0.154	mg/L	0.0079	0.154	mg/L	0.0079	5.12%
As 188.979†	5.7	0.00594	mg/L	0.001769	0.00594	mg/L	0.001769	29.79%
Ba 233.527†	2184.5	0.0413	mg/L	0.00023	0.0413	mg/L	0.00023	0.54%
Be 234.861†	44.3	0.00004	mg/L	0.000045	0.00004	mg/L	0.000045	106.10%
B 249.677†	2707.5	0.0551	mg/L	0.00117	0.0551	mg/L	0.00117	2.13%
Ca 227.546†	9892.8	108	mg/L	2.3	108	mg/L	2.3	2.15%
Cd 228.802†	4.7	0.00020	mg/L	0.000057	0.00020	mg/L	0.000057	28.17%
Co 228.616†	5.0	0.00023	mg/L	0.000022	0.00023	mg/L	0.000022	9.70%
Cr 267.716†	180.0	0.00154	mg/L	0.000116	0.00154	mg/L	0.000116	7.54%
Cu 327.393†	-310.9	-0.00304	mg/L	0.000044	-0.00304	mg/L	0.000044	1.46%
Fe 239.562†	46.4	0.158	mg/L	0.0105	0.158	mg/L	0.0105	6.62%
Mg 279.077†	9901.0	13.5	mg/L	0.32	13.5	mg/L	0.32	2.33%
Mn 257.610†	6750.7	0.0160	mg/L	0.00015	0.0160	mg/L	0.00015	0.92%
Mo 202.031†	8.5	0.00120	mg/L	0.000579	0.00120	mg/L	0.000579	48.38%
Ni 231.604†	-6.5	-0.00009	mg/L	0.000118	-0.00009	mg/L	0.000118	138.25%
Pb 220.353†	-21.9	0.00177	mg/L	0.000504	0.00177	mg/L	0.000504	28.55%
Sb 206.836†	12.6	0.00650	mg/L	0.002932	0.00650	mg/L	0.002932	45.11%
Se 196.026†	-13.1	0.0138	mg/L	0.00427	0.0138	mg/L	0.00427	30.86%
Si 251.611†	170036.4	5.22	mg/L	0.155	5.22	mg/L	0.155	2.97%
Sn 189.927†	-8.5	-0.00119	mg/L	0.001265	-0.00119	mg/L	0.001265	106.37%
Ti 334.940†	926.2	0.00229	mg/L	0.000296	0.00229	mg/L	0.000296	12.96%
Tl 190.801†	119.6	0.0725	mg/L	0.00154	0.0725	mg/L	0.00154	2.12%
V 290.880†	-412.6	-0.00217	mg/L	0.000755	-0.00217	mg/L	0.000755	34.88%
Zn 206.200†	134.2	0.00473	mg/L	0.000159	0.00473	mg/L	0.000159	3.36%
K 766.490†	13689.4	4.90	mg/L	0.111	4.90	mg/L	0.111	2.26%
Na 589.592†	179376.6	13.1	mg/L	0.15	13.1	mg/L	0.15	1.12%
Sr 407.771†	410706.7	0.388	mg/L	0.0298	0.388	mg/L	0.0298	7.67%
Li 670.784†	114.9	0.00291	mg/L	0.000722	0.00291	mg/L	0.000722	24.86%

Sequence No.: 19 **Autosampler Location: 53**
Sample ID: L1104024109 **Date Collected: 4/12/2011 1:57:19 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104024109

Analyte	Back Pressure	Flow
All	201.0 kPa	0.50 L/min

Mean Data: L1104024109

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4702211.6						36644.90	0.78%
YRADIAL	306623.1						1002.54	0.33%
Ga 417.206	1288168.5						16986.38	1.32%
GaRADIAL	66213.8						352.23	0.53%
Ag 328.068†	821.6	0.00342	mg/L	0.001245	0.00342	mg/L	0.001245	36.42%
Al 396.153†	67.7	0.0181	mg/L	0.00703	0.0181	mg/L	0.00703	38.87%
As 188.979†	10.2	0.0118	mg/L	0.00381	0.0118	mg/L	0.00381	32.29%
Ba 233.527†	7057.1	0.134	mg/L	0.0006	0.134	mg/L	0.0006	0.48%
Be 234.861†	1299.0	0.00009	mg/L	0.000224	0.00009	mg/L	0.000224	259.27%
B 249.677†	3464.4	0.126	mg/L	0.0007	0.126	mg/L	0.0007	0.54%
Ca 227.546†	12799.9	140	mg/L	2.5	140	mg/L	2.5	1.77%
Cd 228.802†	4.3	0.00015	mg/L	0.000118	0.00015	mg/L	0.000118	80.50%
Co 228.616†	4.7	-0.00013	mg/L	0.000392	-0.00013	mg/L	0.000392	300.28%
Cr 267.716†	63.8	0.00044	mg/L	0.000131	0.00044	mg/L	0.000131	29.69%
Cu 327.393†	-427.3	-0.00247	mg/L	0.000390	-0.00247	mg/L	0.000390	15.79%
Fe 239.562†	3678.5	12.2	mg/L	0.10	12.2	mg/L	0.10	0.80%

Approved: April 13, 2011

Mg 279.077†	16335.4	22.3	mg/L	0.11	22.3	mg/L	0.11 0.50%
Mn 257.610†	80290.9	0.180	mg/L	0.0011	0.180	mg/L	0.0011 0.61%
Mo 202.031†	-0.4	0.00108	mg/L	0.000690	0.00108	mg/L	0.000690 64.14%
Ni 231.604†	-2.4	0.00004	mg/L	0.000258	0.00004	mg/L	0.000258 664.36%
Pb 220.353†	-31.2	0.00088	mg/L	0.002913	0.00088	mg/L	0.002913 331.55%
Sb 206.836†	14.0	0.00762	mg/L	0.000569	0.00762	mg/L	0.000569 7.46%
Se 196.026†	-42.2	0.00171	mg/L	0.003874	0.00171	mg/L	0.003874 227.13%
Si 251.611†	170357.2	5.23	mg/L	0.055	5.23	mg/L	0.055 1.04%
Sn 189.927†	-9.6	-0.00141	mg/L	0.000831	-0.00141	mg/L	0.000831 59.08%
Ti 334.940†	-922.5	0.00002	mg/L	0.000089	0.00002	mg/L	0.000089 400.15%
Tl 190.801†	139.5	0.0833	mg/L	0.00337	0.0833	mg/L	0.00337 4.04%
V 290.880†	-517.4	-0.00196	mg/L	0.001490	-0.00196	mg/L	0.001490 76.00%
Zn 206.200†	532.2	0.0181	mg/L	0.00027	0.0181	mg/L	0.00027 1.46%
K 766.490†	10466.2	3.69	mg/L	0.028	3.69	mg/L	0.028 0.75%
Na 589.592†	915385.1	73.0	mg/L	0.20	73.0	mg/L	0.20 0.28%
Sr 407.771†	536115.8	0.505	mg/L	0.0098	0.505	mg/L	0.0098 1.94%
Li 670.784†	2061.9	0.0277	mg/L	0.00117	0.0277	mg/L	0.00117 4.21%

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Sequence No.: 20 **Autosampler Location: 54**
Sample ID: L1104024110 **Date Collected: 4/12/2011 2:03:00 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104024110

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: L1104024110

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4628168.7						45186.22	0.98%
YRADIAL	303594.7						5715.60	1.88%
Ga 417.206	1283278.0						27705.28	2.16%
GaRADIAL	67114.2						1079.70	1.61%
Ag 328.068†	1341.1	0.00354	mg/L	0.001333	0.00354	mg/L	0.001333	37.67%
Al 396.153†	1185.6	0.246	mg/L	0.0054	0.246	mg/L	0.0054	2.19%
As 188.979†	8.0	0.0111	mg/L	0.00434	0.0111	mg/L	0.00434	39.17%
Ba 233.527†	5921.0	0.112	mg/L	0.0015	0.112	mg/L	0.0015	1.35%
Be 234.861†	5778.8	0.00008	mg/L	0.000333	0.00008	mg/L	0.000333	398.22%
B 249.677†	13886.4	0.534	mg/L	0.0053	0.534	mg/L	0.0053	0.99%
Ca 227.546†	33151.3	363	mg/L	0.9	363	mg/L	0.9	0.24%
Cd 228.802†	1.3	-0.00002	mg/L	0.000086	-0.00002	mg/L	0.000086	357.36%
Co 228.616†	80.0	0.00325	mg/L	0.000617	0.00325	mg/L	0.000617	18.98%
Cr 267.716†	786.8	0.00669	mg/L	0.000041	0.00669	mg/L	0.000041	0.61%
Cu 327.393†	-674.9	0.00084	mg/L	0.000969	0.00084	mg/L	0.000969	114.94%
Fe 239.562†	16887.0	56.1	mg/L	0.11	56.1	mg/L	0.11	0.19%
Mg 279.077†	41655.9	56.9	mg/L	0.16	56.9	mg/L	0.16	0.28%
Mn 257.610†	345760.3	0.771	mg/L	0.0049	0.771	mg/L	0.0049	0.63%
Mo 202.031†	-8.6	0.00268	mg/L	0.000643	0.00268	mg/L	0.000643	24.04%
Ni 231.604†	214.4	0.00722	mg/L	0.000515	0.00722	mg/L	0.000515	7.13%
Pb 220.353†	123.1	0.0403	mg/L	0.00107	0.0403	mg/L	0.00107	2.64%
Sb 206.836†	23.2	0.0145	mg/L	0.00379	0.0145	mg/L	0.00379	26.17%
Se 196.026†	-75.6	0.0453	mg/L	0.00250	0.0453	mg/L	0.00250	5.52%
Si 251.611†	321336.2	9.87	mg/L	0.165	9.87	mg/L	0.165	1.67%
Sn 189.927†	-19.7	-0.00336	mg/L	0.001489	-0.00336	mg/L	0.001489	44.32%
Ti 334.940†	2119.2	0.00650	mg/L	0.000717	0.00650	mg/L	0.000717	11.03%
Tl 190.801†	150.3	0.0716	mg/L	0.00771	0.0716	mg/L	0.00771	10.78%
V 290.880†	-648.7	0.00051	mg/L	0.001003	0.00051	mg/L	0.001003	196.41%
Zn 206.200†	9137.4	0.313	mg/L	0.0045	0.313	mg/L	0.0045	1.45%
K 766.490†	28622.9	10.2	mg/L	0.09	10.2	mg/L	0.09	0.89%
Na 589.592†	768470.0	60.1	mg/L	1.37	60.1	mg/L	1.37	2.29%
Sr 407.771†	1547608.3	1.46	mg/L	0.058	1.46	mg/L	0.058	4.01%
Li 670.784†	7117.8	0.0922	mg/L	0.00057	0.0922	mg/L	0.00057	0.62%

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Sequence No.: 21 **Autosampler Location: 55**
Sample ID: L1104021629 **Date Collected: 4/12/2011 2:08:42 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**

Approved: April 13, 2011

Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104021629

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: L1104021629

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5005615.8						61956.15	1.24%
YRADIAL	316784.8						3521.96	1.11%
Ga 417.206	1336358.6						24813.77	1.86%
GaRADIAL	68824.6						751.79	1.09%
Ag 328.068†	-125.2	-0.00053	mg/L	0.000332	-0.00053	mg/L	0.000332	62.17%
Al 396.153†	-19.9	-0.00043	mg/L	0.015647	-0.00043	mg/L	0.015647	>999.9%
As 188.979†	-1.2	0.00073	mg/L	0.002100	0.00073	mg/L	0.002100	288.94%
Ba 233.527†	-1.9	-0.00015	mg/L	0.000002	-0.00015	mg/L	0.000002	1.54%
Be 234.861†	7.8	0.00000	mg/L	0.000053	0.00000	mg/L	0.000053	>999.9%
B 249.677†	81.3	0.00323	mg/L	0.000411	0.00323	mg/L	0.000411	12.74%
Ca 227.546†	-1.2	-0.0318	mg/L	0.01983	-0.0318	mg/L	0.01983	62.39%
Cd 228.802†	-0.0	-0.00006	mg/L	0.000145	-0.00006	mg/L	0.000145	234.27%
Co 228.616†	-2.3	-0.00020	mg/L	0.000190	-0.00020	mg/L	0.000190	97.16%
Cr 267.716†	25.3	0.00017	mg/L	0.000134	0.00017	mg/L	0.000134	80.35%
Cu 327.393†	276.5	0.00106	mg/L	0.000052	0.00106	mg/L	0.000052	4.91%
Fe 239.562†	0.7	0.00693	mg/L	0.007693	0.00693	mg/L	0.007693	110.93%
Mg 279.077†	-0.2	0.00137	mg/L	0.006320	0.00137	mg/L	0.006320	462.51%
Mn 257.610†	16.1	-0.00017	mg/L	0.000011	-0.00017	mg/L	0.000011	6.50%
Mo 202.031†	-6.7	-0.00009	mg/L	0.000248	-0.00009	mg/L	0.000248	267.84%
Ni 231.604†	-3.9	0.00005	mg/L	0.000266	0.00005	mg/L	0.000266	558.32%
Pb 220.353†	-4.7	-0.00003	mg/L	0.001810	-0.00003	mg/L	0.001810	>999.9%
Sb 206.836†	-1.7	-0.00418	mg/L	0.002523	-0.00418	mg/L	0.002523	60.41%
Se 196.026†	5.4	0.00225	mg/L	0.002697	0.00225	mg/L	0.002697	119.67%
Si 251.611†	-135.0	-0.00438	mg/L	0.000629	-0.00438	mg/L	0.000629	14.37%
Sn 189.927†	-9.5	-0.00138	mg/L	0.000899	-0.00138	mg/L	0.000899	65.24%
Ti 334.940†	582.7	0.00072	mg/L	0.001274	0.00072	mg/L	0.001274	176.14%
Tl 190.801†	2.2	0.00243	mg/L	0.000920	0.00243	mg/L	0.000920	37.95%
V 290.880†	122.4	0.00149	mg/L	0.001037	0.00149	mg/L	0.001037	69.54%
Zn 206.200†	118.1	0.00417	mg/L	0.000140	0.00417	mg/L	0.000140	3.36%
K 766.490†	-110.1	0.0238	mg/L	0.00375	0.0238	mg/L	0.00375	15.79%
Na 589.592†	178.5	0.0367	mg/L	0.00691	0.0367	mg/L	0.00691	18.81%
Sr 407.771†	-31.8	0.00008	mg/L	0.000061	0.00008	mg/L	0.000061	76.05%
Li 670.784†	-229.0	-0.00148	mg/L	0.001290	-0.00148	mg/L	0.001290	87.13%

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Sequence No.: 22 **Autosampler Location: 56**
Sample ID: L1104021630 **Date Collected: 4/12/2011 2:15:20 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104021630

Analyte	Back Pressure	Flow
All	201.0 kPa	0.50 L/min

Mean Data: L1104021630

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5021727.9						32652.35	0.65%
YRADIAL	313842.8						3099.40	0.99%
Ga 417.206	1318266.6						7033.45	0.53%
GaRADIAL	67987.9						784.33	1.15%
Ag 328.068†	-5.2	0.00006	mg/L	0.000309	0.00006	mg/L	0.000309	530.03%
Al 396.153†	41.0	0.0118	mg/L	0.01309	0.0118	mg/L	0.01309	111.24%
As 188.979†	1.6	0.00376	mg/L	0.003052	0.00376	mg/L	0.003052	81.12%
Ba 233.527†	5.7	-0.00001	mg/L	0.000076	-0.00001	mg/L	0.000076	832.25%
Be 234.861†	9.5	0.00000	mg/L	0.000018	0.00000	mg/L	0.000018	>999.9%
B 249.677†	50.4	0.00265	mg/L	0.000265	0.00265	mg/L	0.000265	10.02%
Ca 227.546†	2.3	0.00722	mg/L	0.026485	0.00722	mg/L	0.026485	366.85%
Cd 228.802†	0.2	-0.00007	mg/L	0.000225	-0.00007	mg/L	0.000225	339.24%

Approved: April 13, 2011

Co 228.616†	-2.0	-0.00018 mg/L	0.000132	-0.00018 mg/L	0.000132	75.12%
Cr 267.716†	227.0	0.00197 mg/L	0.000047	0.00197 mg/L	0.000047	2.39%
Cu 327.393†	219.8	0.00066 mg/L	0.000214	0.00066 mg/L	0.000214	32.45%
Fe 239.562†	2.9	0.0141 mg/L	0.00281	0.0141 mg/L	0.00281	19.91%
Mg 279.077†	0.8	0.00273 mg/L	0.006568	0.00273 mg/L	0.006568	240.69%
Mn 257.610†	84.0	-0.00002 mg/L	0.000014	-0.00002 mg/L	0.000014	74.84%
Mo 202.031†	-0.8	0.00040 mg/L	0.000099	0.00040 mg/L	0.000099	24.77%
Ni 231.604†	18.5	0.00079 mg/L	0.000267	0.00079 mg/L	0.000267	33.72%
Pb 220.353†	-5.6	-0.00021 mg/L	0.001101	-0.00021 mg/L	0.001101	528.82%
Sb 206.836†	-1.1	-0.00373 mg/L	0.001175	-0.00373 mg/L	0.001175	31.49%
Se 196.026†	-3.5	-0.00518 mg/L	0.001503	-0.00518 mg/L	0.001503	29.03%
Si 251.611†	-11.3	-0.00058 mg/L	0.000151	-0.00058 mg/L	0.000151	25.86%
Sn 189.927†	-9.1	-0.00131 mg/L	0.000507	-0.00131 mg/L	0.000507	38.74%
Ti 334.940†	-15.9	-0.00011 mg/L	0.000097	-0.00011 mg/L	0.000097	85.09%
Tl 190.801†	0.3	0.00107 mg/L	0.000746	0.00107 mg/L	0.000746	69.74%
V 290.880†	-26.6	0.00047 mg/L	0.000513	0.00047 mg/L	0.000513	109.16%
Zn 206.200†	88.1	0.00315 mg/L	0.000105	0.00315 mg/L	0.000105	3.34%
K 766.490†	-121.6	0.0197 mg/L	0.02320	0.0197 mg/L	0.02320	117.66%
Na 589.592†	139.3	0.0339 mg/L	0.00036	0.0339 mg/L	0.00036	1.07%
Sr 407.771†	-21.6	0.00009 mg/L	0.000055	0.00009 mg/L	0.000055	62.00%
Li 670.784†	-214.5	-0.00130 mg/L	0.000690	-0.00130 mg/L	0.000690	53.24%

User canceled analysis.

Approved: April 13, 2011

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Analysis Begun

Start Time: 4/12/2011 2:21:16 PM **Plasma On Time: 4/12/2011 7:48:47 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\TUESDAY1.sif
Batch ID:
Results Data Set: 041211H2
Results Library: C:\pe\peicp2\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 4/12/2011 2:21:18 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4448023.0						44532.51	1.00%
YRADIAL	294853.4						4541.84	1.54%
Ga 417.206	1210812.3						23653.86	1.95%
GaRADIAL	64686.9						959.60	1.48%
Ag 328.068†	884.9	-0.00048	mg/L	0.001376	-0.00048	mg/L	0.001376	285.77%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1270279.5	255	mg/L	3.5	255	mg/L	3.5	1.37%
QC value within limits for Al 396.153 Recovery = 101.82%								
As 188.979†	6.4	-0.00117	mg/L	0.002451	-0.00117	mg/L	0.002451	209.55%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	132.8	0.00002	mg/L	0.000158	0.00002	mg/L	0.000158	749.64%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	10497.0	0.00054	mg/L	0.000191	0.00054	mg/L	0.000191	35.49%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	-9628.3	-0.00935	mg/L	0.004266	-0.00935	mg/L	0.004266	45.64%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	27344.3	300	mg/L	3.8	300	mg/L	3.8	1.27%
QC value greater than the upper limit for Ca 227.546 Recovery = 120.00%								
Cd 228.802†	-1.9	-0.00022	mg/L	0.000176	-0.00022	mg/L	0.000176	80.64%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	27.1	-0.00101	mg/L	0.000254	-0.00101	mg/L	0.000254	25.09%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	581.1	-0.00115	mg/L	0.000024	-0.00115	mg/L	0.000024	2.06%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1526.5	-0.00016	mg/L	0.000473	-0.00016	mg/L	0.000473	295.34%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	29866.6	99.2	mg/L	0.27	99.2	mg/L	0.27	0.27%
QC value within limits for Fe 239.562 Recovery = 99.19%								
Mg 279.077†	185953.7	254	mg/L	0.8	254	mg/L	0.8	0.32%
QC value within limits for Mg 279.077 Recovery = 101.58%								
Mn 257.610†	-228.6	0.00010	mg/L	0.000075	0.00010	mg/L	0.000075	74.06%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-5.8	0.00488	mg/L	0.000478	0.00488	mg/L	0.000478	9.81%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-79.2	-0.00251	mg/L	0.000303	-0.00251	mg/L	0.000303	12.10%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-83.7	0.00268	mg/L	0.001091	0.00268	mg/L	0.001091	40.66%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	15.2	0.00841	mg/L	0.003903	0.00841	mg/L	0.003903	46.41%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-101.8	-0.00270	mg/L	0.007010	-0.00270	mg/L	0.007010	259.78%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	6036.9	0.185	mg/L	0.0050	0.185	mg/L	0.0050	2.68%
QC value within limits for Si 251.611 Recovery = Not calculated								

Approved: April 13, 2011

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Sn 189.927†             -40.0    -0.00729 mg/L      0.000686    -0.00729 mg/L      0.000686   9.41%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†            -2155.1    -0.00011 mg/L      0.000294    -0.00011 mg/L      0.000294 271.89%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†             144.2      0.0719 mg/L       0.00890      0.0719 mg/L       0.00890  12.38%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†             -659.4     0.00375 mg/L      0.000799     0.00375 mg/L      0.000799  21.30%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†               5.9    -0.00195 mg/L      0.000420    -0.00195 mg/L      0.000420  21.56%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              -139.1      0.0135 mg/L       0.02991      0.0135 mg/L       0.02991 221.26%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             711.8      0.0750 mg/L       0.00939      0.0750 mg/L       0.00939  12.52%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†            13926.9     0.00137 mg/L      0.000177     0.00137 mg/L      0.000177  12.96%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†             -50.7     0.00079 mg/L      0.000313     0.00079 mg/L      0.000313  39.43%
   QC value within limits for Li 670.784  Recovery = Not calculated
QC Failed.  Continue with analysis.
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Sequence No.: 2 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 4/12/2011 2:26:59 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4426695.5						64515.98	1.46%
YRADIAL	290679.6						6224.81	2.14%
Ga 417.206	1196554.2						14192.06	1.19%
GaRADIAL	63660.6						1231.71	1.93%
Ag 328.068†	106397.4	0.523	mg/L	0.0091	0.523	mg/L	0.0091	1.73%
QC value within limits for Ag 328.068 Recovery = 104.55%								
Al 396.153†	1312969.0	263	mg/L	5.3	263	mg/L	5.3	2.03%
QC value within limits for Al 396.153 Recovery = 105.24%								
As 188.979†	247.5	0.257	mg/L	0.0064	0.257	mg/L	0.0064	2.51%
QC value within limits for As 188.979 Recovery = 102.87%								
Ba 233.527†	13191.6	0.248	mg/L	0.0031	0.248	mg/L	0.0031	1.26%
QC value within limits for Ba 233.527 Recovery = 99.36%								
Be 234.861†	143745.9	0.268	mg/L	0.0064	0.268	mg/L	0.0064	2.39%
QC value within limits for Be 234.861 Recovery = 107.01%								
B 249.677†	-10283.1	-0.0516	mg/L	0.00835	-0.0516	mg/L	0.00835	16.18%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	27255.1	299	mg/L	1.2	299	mg/L	1.2	0.39%
QC value within limits for Ca 227.546 Recovery = 119.74%								
Cd 228.802†	6969.6	0.470	mg/L	0.0107	0.470	mg/L	0.0107	2.27%
QC value within limits for Cd 228.802 Recovery = 94.05%								
Co 228.616†	3962.5	0.236	mg/L	0.0038	0.236	mg/L	0.0038	1.61%
QC value within limits for Co 228.616 Recovery = 94.35%								
Cr 267.716†	28275.4	0.246	mg/L	0.0043	0.246	mg/L	0.0043	1.74%
QC value within limits for Cr 267.716 Recovery = 98.53%								
Cu 327.393†	36351.8	0.265	mg/L	0.0041	0.265	mg/L	0.0041	1.54%
QC value within limits for Cu 327.393 Recovery = 105.84%								
Fe 239.562†	29432.6	97.7	mg/L	0.48	97.7	mg/L	0.48	0.49%
QC value within limits for Fe 239.562 Recovery = 97.75%								
Mg 279.077†	182170.2	249	mg/L	1.1	249	mg/L	1.1	0.46%
QC value within limits for Mg 279.077 Recovery = 99.51%								
Mn 257.610†	112320.7	0.251	mg/L	0.0013	0.251	mg/L	0.0013	0.51%
QC value within limits for Mn 257.610 Recovery = 100.26%								
Mo 202.031†	-11.5	0.00440	mg/L	0.000936	0.00440	mg/L	0.000936	21.30%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	13991.8	0.464	mg/L	0.0063	0.464	mg/L	0.0063	1.36%
QC value within limits for Ni 231.604 Recovery = 92.73%								
Pb 220.353†	2339.1	0.485	mg/L	0.0088	0.485	mg/L	0.0088	1.81%

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QC value within limits for Pb 220.353 Recovery = 97.08%
Sb 206.836† 705.9 0.525 mg/L 0.0035 0.525 mg/L 0.0035 0.67%
QC value within limits for Sb 206.836 Recovery = 105.00%
Se 196.026† 210.0 0.258 mg/L 0.0026 0.258 mg/L 0.0026 1.00%
QC value within limits for Se 196.026 Recovery = 103.28%
Si 251.611† -61.0 -0.00210 mg/L 0.000678 -0.00210 mg/L 0.000678 32.33%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -36.7 -0.00664 mg/L 0.000702 -0.00664 mg/L 0.000702 10.57%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -2513.0 -0.00069 mg/L 0.000102 -0.00069 mg/L 0.000102 14.74%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 864.3 0.562 mg/L 0.0069 0.562 mg/L 0.0069 1.22%
QC value within limits for Tl 190.801 Recovery = 112.30%
V 290.880† 35999.1 0.255 mg/L 0.0018 0.255 mg/L 0.0018 0.69%
QC value within limits for V 290.880 Recovery = 101.87%
Zn 206.200† 13475.2 0.462 mg/L 0.0068 0.462 mg/L 0.0068 1.48%
QC value within limits for Zn 206.200 Recovery = 92.38%
K 766.490† 13411.0 4.81 mg/L 0.026 4.81 mg/L 0.026 0.55%
QC value within limits for K 766.490 Recovery = 96.11%
Na 589.592† 66491.8 4.83 mg/L 0.015 4.83 mg/L 0.015 0.32%
QC value within limits for Na 589.592 Recovery = 96.54%
Sr 407.771† 26946.5 0.0138 mg/L 0.00063 0.0138 mg/L 0.00063 4.56%
QC value greater than the upper limit for Sr 407.771 Recovery = Not calculated
Li 670.784† -4.1 0.00139 mg/L 0.002588 0.00139 mg/L 0.002588 186.59%
QC value within limits for Li 670.784 Recovery = Not calculated
QC Failed. Continue with analysis.

Sequence No.: 3 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/12/2011 2:32:37 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4725208.1						25003.47	0.53%
YRADIAL	301982.1						7599.45	2.52%
Ga 417.206	1252911.4						1975.04	0.16%
GaRADIAL	65587.1						612.39	0.93%
Ag 328.068†	83013.8	0.413	mg/L	0.0032	0.413	mg/L	0.0032	0.78%
QC value within limits for Ag 328.068 Recovery = 103.13%								
Al 396.153†	52270.7	10.5	mg/L	0.05	10.5	mg/L	0.05	0.44%
QC value within limits for Al 396.153 Recovery = 104.64%								
As 188.979†	386.1	0.411	mg/L	0.0033	0.411	mg/L	0.0033	0.80%
QC value within limits for As 188.979 Recovery = 102.74%								
Ba 233.527†	54012.4	1.03	mg/L	0.016	1.03	mg/L	0.016	1.51%
QC value within limits for Ba 233.527 Recovery = 102.80%								
Be 234.861†	26193.7	0.0532	mg/L	0.00074	0.0532	mg/L	0.00074	1.38%
QC value within limits for Be 234.861 Recovery = 106.46%								
B 249.677†	26511.0	0.525	mg/L	0.0054	0.525	mg/L	0.0054	1.02%
QC value within limits for B 249.677 Recovery = 105.09%								
Ca 227.546†	972.5	11.0	mg/L	0.01	11.0	mg/L	0.01	0.05%
QC value within limits for Ca 227.546 Recovery = 109.80%								
Cd 228.802†	770.0	0.0492	mg/L	0.00020	0.0492	mg/L	0.00020	0.40%
QC value within limits for Cd 228.802 Recovery = 98.49%								
Co 228.616†	3467.3	0.206	mg/L	0.0025	0.206	mg/L	0.0025	1.24%
QC value within limits for Co 228.616 Recovery = 103.06%								
Cr 267.716†	56855.9	0.508	mg/L	0.0065	0.508	mg/L	0.0065	1.28%
QC value within limits for Cr 267.716 Recovery = 101.69%								
Cu 327.393†	75340.9	0.528	mg/L	0.0059	0.528	mg/L	0.0059	1.12%
QC value within limits for Cu 327.393 Recovery = 105.64%								
Fe 239.562†	1200.1	3.99	mg/L	0.041	3.99	mg/L	0.041	1.03%
QC value within limits for Fe 239.562 Recovery = 99.73%								
Mg 279.077†	7336.8	10.0	mg/L	0.11	10.0	mg/L	0.11	1.10%
QC value within limits for Mg 279.077 Recovery = 100.27%								

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Mn 257.610†	232701.5	0.520 mg/L	0.0074	0.520 mg/L	0.0074	1.43%
QC value within limits for Mn 257.610 Recovery = 104.06%						
Mo 202.031†	12254.0	1.03 mg/L	0.011	1.03 mg/L	0.011	1.09%
QC value within limits for Mo 202.031 Recovery = 103.18%						
Ni 231.604†	15502.0	0.514 mg/L	0.0070	0.514 mg/L	0.0070	1.36%
QC value within limits for Ni 231.604 Recovery = 102.75%						
Pb 220.353†	2543.9	0.513 mg/L	0.0054	0.513 mg/L	0.0054	1.05%
QC value within limits for Pb 220.353 Recovery = 102.61%						
Sb 206.836†	1670.5	1.25 mg/L	0.009	1.25 mg/L	0.009	0.73%
QC value within limits for Sb 206.836 Recovery = 104.55%						
Se 196.026†	506.7	0.427 mg/L	0.0107	0.427 mg/L	0.0107	2.51%
QC value within limits for Se 196.026 Recovery = 106.80%						
Si 251.611†	167158.2	5.12 mg/L	0.058	5.12 mg/L	0.058	1.13%
QC value within limits for Si 251.611 Recovery = 102.41%						
Sn 189.927†	5265.8	1.02 mg/L	0.009	1.02 mg/L	0.009	0.87%
QC value within limits for Sn 189.927 Recovery = 102.05%						
Ti 334.940†	747991.1	1.05 mg/L	0.005	1.05 mg/L	0.005	0.51%
QC value within limits for Ti 334.940 Recovery = 104.52%						
Tl 190.801†	770.6	0.537 mg/L	0.0072	0.537 mg/L	0.0072	1.35%
QC value within limits for Tl 190.801 Recovery = 107.34%						
V 290.880†	149832.8	1.03 mg/L	0.014	1.03 mg/L	0.014	1.38%
QC value within limits for V 290.880 Recovery = 102.65%						
Zn 206.200†	29420.3	1.01 mg/L	0.016	1.01 mg/L	0.016	1.54%
QC value within limits for Zn 206.200 Recovery = 101.27%						
K 766.490†	132974.8	49.9 mg/L	0.35	49.9 mg/L	0.35	0.70%
QC value within limits for K 766.490 Recovery = 99.87%						
Na 589.592†	654248.1	50.4 mg/L	0.99	50.4 mg/L	0.99	1.96%
QC value within limits for Na 589.592 Recovery = 100.88%						
Sr 407.771†	1032591.1	0.975 mg/L	0.0911	0.975 mg/L	0.0911	9.34%
QC value within limits for Sr 407.771 Recovery = 97.51%						
Li 670.784†	82866.6	1.06 mg/L	0.003	1.06 mg/L	0.003	0.33%
QC value within limits for Li 670.784 Recovery = 105.85%						

All analyte(s) passed QC.

Sequence No.: 4 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/12/2011 2:39:17 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5193119.7						40863.34	0.79%
YRADIAL	326279.3						7193.51	2.20%
Ga 417.206	1348129.5						5890.05	0.44%
GaRADIAL	69904.3						1246.02	1.78%
Ag 328.068†	-54.9	-0.00019	mg/L	0.000410	-0.00019	mg/L	0.000410	217.68%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-19.3	-0.00032	mg/L	0.010283	-0.00032	mg/L	0.010283	>999.9%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.0	0.00308	mg/L	0.002336	0.00308	mg/L	0.002336	75.84%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.2	-0.00006	mg/L	0.000094	-0.00006	mg/L	0.000094	160.84%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	11.8	0.00001	mg/L	0.000020	0.00001	mg/L	0.000020	341.01%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	-7.3	0.00149	mg/L	0.000323	0.00149	mg/L	0.000323	21.63%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-1.5	-0.0350	mg/L	0.02752	-0.0350	mg/L	0.02752	78.54%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-2.2	-0.00023	mg/L	0.000102	-0.00023	mg/L	0.000102	45.18%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-3.4	-0.00026	mg/L	0.000100	-0.00026	mg/L	0.000100	38.68%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-6.1	-0.00012	mg/L	0.000072	-0.00012	mg/L	0.000072	62.13%

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   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†              27.2    -0.00069 mg/L      0.000512    -0.00069 mg/L      0.000512  73.99%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†              -0.0     0.00451 mg/L      0.000718     0.00451 mg/L      0.000718  15.93%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†               1.9     0.00432 mg/L      0.005252     0.00432 mg/L      0.005252 121.44%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†             -21.4    -0.00025 mg/L      0.000019    -0.00025 mg/L      0.000019   7.53%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -0.5     0.00043 mg/L      0.000242     0.00043 mg/L      0.000242  56.54%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†               0.5     0.00020 mg/L      0.000059     0.00020 mg/L      0.000059  30.15%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†              -7.5    -0.00057 mg/L      0.001785    -0.00057 mg/L      0.001785 311.97%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†               2.7    -0.00091 mg/L      0.000800    -0.00091 mg/L      0.000800  87.88%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†               3.6     0.00079 mg/L      0.005067     0.00079 mg/L      0.005067 638.90%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†             -47.8    -0.00170 mg/L      0.000248    -0.00170 mg/L      0.000248  14.54%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -7.7    -0.00104 mg/L      0.000811    -0.00104 mg/L      0.000811  78.01%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†              26.3    -0.00005 mg/L      0.000101    -0.00005 mg/L      0.000101 184.95%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -3.7    -0.00161 mg/L      0.003566    -0.00161 mg/L      0.003566 221.29%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†             -140.3    -0.00031 mg/L      0.000216    -0.00031 mg/L      0.000216  69.72%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†              -8.7    -0.00018 mg/L      0.000059    -0.00018 mg/L      0.000059  31.85%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              -36.5      0.0497 mg/L       0.02759      0.0497 mg/L       0.02759  55.53%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†              78.2      0.0295 mg/L       0.01240      0.0295 mg/L       0.01240  41.99%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†             -16.6     0.00010 mg/L      0.000018     0.00010 mg/L      0.000018  19.17%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†             -239.9    -0.00162 mg/L      0.000395    -0.00162 mg/L      0.000395  24.36%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.
```

Sequence No.: 5 **Autosampler Location: 57**
Sample ID: LLCCV **Date Collected: 4/12/2011 2:45:53 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLCCV

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5013288.7						14399.49	0.29%
YRADIAL	316689.2						662.86	0.21%
Ga 417.206	1304537.3						10802.53	0.83%
GaRADIAL	67258.7						1202.32	1.79%
Ag 328.068†	856.0	0.00434	mg/L	0.000299	0.00434	mg/L	0.000299	6.89%
Al 396.153†	538.4	0.111	mg/L	0.0152	0.111	mg/L	0.0152	13.64%
As 188.979†	3.1	0.00527	mg/L	0.001568	0.00527	mg/L	0.001568	29.74%
Ba 233.527†	538.3	0.0101	mg/L	0.00010	0.0101	mg/L	0.00010	0.97%
Be 234.861†	254.7	0.00050	mg/L	0.000017	0.00050	mg/L	0.000017	3.44%
B 249.677†	207.7	0.00572	mg/L	0.000026	0.00572	mg/L	0.000026	0.45%
Ca 227.546†	12.0	0.116	mg/L	0.0328	0.116	mg/L	0.0328	28.14%
Cd 228.802†	7.5	0.00042	mg/L	0.000160	0.00042	mg/L	0.000160	38.29%
Co 228.616†	37.7	0.00219	mg/L	0.000251	0.00219	mg/L	0.000251	11.48%
Cr 267.716†	577.5	0.00510	mg/L	0.000040	0.00510	mg/L	0.000040	0.79%
Cu 327.393†	832.1	0.00496	mg/L	0.000953	0.00496	mg/L	0.000953	19.22%
Fe 239.562†	10.6	0.0399	mg/L	0.00144	0.0399	mg/L	0.00144	3.61%

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Mg 279.077†	74.1	0.103	mg/L	0.0048	0.103	mg/L	0.0048	4.66%
Mn 257.610†	2360.5	0.00507	mg/L	0.000020	0.00507	mg/L	0.000020	0.39%
Mo 202.031†	113.0	0.00998	mg/L	0.000240	0.00998	mg/L	0.000240	2.41%
Ni 231.604†	147.9	0.00508	mg/L	0.000103	0.00508	mg/L	0.000103	2.03%
Pb 220.353†	16.9	0.00432	mg/L	0.000147	0.00432	mg/L	0.000147	3.41%
Sb 206.836†	17.2	0.0100	mg/L	0.00046	0.0100	mg/L	0.00046	4.58%
Se 196.026†	7.9	0.00437	mg/L	0.004397	0.00437	mg/L	0.004397	100.57%
Si 251.611†	1668.8	0.0509	mg/L	0.00086	0.0509	mg/L	0.00086	1.70%
Sn 189.927†	50.2	0.0102	mg/L	0.00047	0.0102	mg/L	0.00047	4.64%
Ti 334.940†	7173.1	0.00993	mg/L	0.000212	0.00993	mg/L	0.000212	2.14%
Tl 190.801†	7.0	0.00574	mg/L	0.003728	0.00574	mg/L	0.003728	64.99%
V 290.880†	1332.4	0.00977	mg/L	0.000523	0.00977	mg/L	0.000523	5.35%
Zn 206.200†	337.0	0.0117	mg/L	0.00027	0.0117	mg/L	0.00027	2.32%
K 766.490†	1218.1	0.491	mg/L	0.0220	0.491	mg/L	0.0220	4.47%
Na 589.592†	6742.1	0.508	mg/L	0.0045	0.508	mg/L	0.0045	0.89%
Sr 407.771†	9975.0	0.00953	mg/L	0.000601	0.00953	mg/L	0.000601	6.31%
Li 670.784†	575.7	0.00878	mg/L	0.001244	0.00878	mg/L	0.001244	14.16%

Sequence No.: 6 **Autosampler Location: 58**
Sample ID: LLCCV **Date Collected: 4/12/2011 2:52:32 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLCCV

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5089831.7						60348.76	1.19%
YRADIAL	312082.8						6433.99	2.06%
Ga 417.206	1312196.2						22806.95	1.74%
GaRADIAL	66849.3						350.76	0.52%
Ag 328.068†	1727.1	0.00866	mg/L	0.000339	0.00866	mg/L	0.000339	3.91%
Al 396.153†	1044.3	0.213	mg/L	0.0199	0.213	mg/L	0.0199	9.37%
As 188.979†	7.8	0.0103	mg/L	0.00397	0.0103	mg/L	0.00397	38.67%
Ba 233.527†	1045.5	0.0198	mg/L	0.00033	0.0198	mg/L	0.00033	1.69%
Be 234.861†	492.3	0.00098	mg/L	0.000015	0.00098	mg/L	0.000015	1.50%
B 249.677†	425.4	0.0100	mg/L	0.00013	0.0100	mg/L	0.00013	1.33%
Ca 227.546†	21.0	0.219	mg/L	0.0247	0.219	mg/L	0.0247	11.29%
Cd 228.802†	15.1	0.00089	mg/L	0.000145	0.00089	mg/L	0.000145	16.23%
Co 228.616†	68.6	0.00402	mg/L	0.000242	0.00402	mg/L	0.000242	6.00%
Cr 267.716†	1120.6	0.00996	mg/L	0.000233	0.00996	mg/L	0.000233	2.34%
Cu 327.393†	1612.9	0.0104	mg/L	0.00023	0.0104	mg/L	0.00023	2.16%
Fe 239.562†	23.8	0.0835	mg/L	0.00140	0.0835	mg/L	0.00140	1.68%
Mg 279.077†	144.7	0.199	mg/L	0.0063	0.199	mg/L	0.0063	3.15%
Mn 257.610†	4547.4	0.00996	mg/L	0.000147	0.00996	mg/L	0.000147	1.47%
Mo 202.031†	226.2	0.0195	mg/L	0.00023	0.0195	mg/L	0.00023	1.18%
Ni 231.604†	285.5	0.00964	mg/L	0.000399	0.00964	mg/L	0.000399	4.14%
Pb 220.353†	40.4	0.00906	mg/L	0.002044	0.00906	mg/L	0.002044	22.56%
Sb 206.836†	34.9	0.0234	mg/L	0.00068	0.0234	mg/L	0.00068	2.90%
Se 196.026†	9.7	0.00596	mg/L	0.002061	0.00596	mg/L	0.002061	34.55%
Si 251.611†	3220.0	0.0984	mg/L	0.00240	0.0984	mg/L	0.00240	2.44%
Sn 189.927†	99.8	0.0198	mg/L	0.00044	0.0198	mg/L	0.00044	2.25%
Ti 334.940†	14226.9	0.0198	mg/L	0.00035	0.0198	mg/L	0.00035	1.79%
Tl 190.801†	15.9	0.0119	mg/L	0.00416	0.0119	mg/L	0.00416	34.89%
V 290.880†	2733.5	0.0194	mg/L	0.00134	0.0194	mg/L	0.00134	6.92%
Zn 206.200†	631.2	0.0218	mg/L	0.00040	0.0218	mg/L	0.00040	1.81%
K 766.490†	2449.9	0.925	mg/L	0.0224	0.925	mg/L	0.0224	2.42%
Na 589.592†	13118.5	0.967	mg/L	0.0047	0.967	mg/L	0.0047	0.48%
Sr 407.771†	20262.2	0.0192	mg/L	0.00151	0.0192	mg/L	0.00151	7.85%
Li 670.784†	1491.3	0.0205	mg/L	0.00072	0.0205	mg/L	0.00072	3.50%

Sequence No.: 7 **Autosampler Location: 59**
Sample ID: L1104016601 **Date Collected: 4/12/2011 2:59:10 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**

Approved: April 13, 2011

Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016601

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: L1104016601

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4219401.5						238970.05	5.66%
YRADIAL	289760.2						4754.21	1.64%
Ga 417.206	1180377.3						68904.74	5.84%
GaRADIAL	63801.3						1431.52	2.24%
Ag 328.068†	387.4	0.00149	mg/L	0.000433	0.00149	mg/L	0.000433	29.12%
Al 396.153†	399123.1	80.0	mg/L	0.15	80.0	mg/L	0.15	0.18%
As 188.979†	13.4	0.0119	mg/L	0.00239	0.0119	mg/L	0.00239	20.12%
Ba 233.527†	15466.4	0.293	mg/L	0.0155	0.293	mg/L	0.0155	5.30%
Be 234.861†	-244.6	-0.00135	mg/L	0.000113	-0.00135	mg/L	0.000113	8.34%
B 249.677†	31596.7	0.535	mg/L	0.0260	0.535	mg/L	0.0260	4.86%
Ca 227.546†	1291.8	47.6	mg/L	2.96	47.6	mg/L	2.96	6.22%
Cd 228.802†	9.0	0.0158	mg/L	0.00153	0.0158	mg/L	0.00153	9.70%
Co 228.616†	68658.5	4.13	mg/L	0.231	4.13	mg/L	0.231	5.59%
Cr 267.716†	11645.7	0.102	mg/L	0.0058	0.102	mg/L	0.0058	5.70%
Cu 327.393†	28832.1	0.191	mg/L	0.0080	0.191	mg/L	0.0080	4.19%
Fe 239.562†	1956.3	6.49	mg/L	0.097	6.49	mg/L	0.097	1.50%
Mg 279.077†	13947.8	19.1	mg/L	0.31	19.1	mg/L	0.31	1.61%
Mn 257.610†	263943.3	0.608	mg/L	0.0309	0.608	mg/L	0.0309	5.07%
Mo 202.031†	256.7	0.0179	mg/L	0.00113	0.0179	mg/L	0.00113	6.34%
Ni 231.604†	1163891.5	38.6	mg/L	3.13	38.6	mg/L	3.13	8.10%
Pb 220.353†	15.4	0.00259	mg/L	0.001496	0.00259	mg/L	0.001496	57.77%
Sb 206.836†	18.7	0.0106	mg/L	0.00274	0.0106	mg/L	0.00274	25.87%
Se 196.026†	-30.9	-0.0282	mg/L	0.00717	-0.0282	mg/L	0.00717	25.40%
Si 251.611†	217193.2	6.67	mg/L	0.313	6.67	mg/L	0.313	4.69%
Sn 189.927†	22.8	0.00488	mg/L	0.000266	0.00488	mg/L	0.000266	5.45%
Ti 334.940†	5235.9	0.00734	mg/L	0.000455	0.00734	mg/L	0.000455	6.20%
Tl 190.801†	134.7	0.0778	mg/L	0.00609	0.0778	mg/L	0.00609	7.83%
V 290.880†	418.6	0.00399	mg/L	0.001378	0.00399	mg/L	0.001378	34.52%
Zn 206.200†	100240.4	3.45	mg/L	0.198	3.45	mg/L	0.198	5.73%
K 766.490†	49418.0	17.9	mg/L	0.06	17.9	mg/L	0.06	0.34%
Na 589.592†	Saturated2							
Sr 407.771†	553958.9	0.523	mg/L	0.0432	0.523	mg/L	0.0432	8.27%
Li 670.784†	1979702.4	25.3	mg/L	0.10	25.3	mg/L	0.10	0.38%

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Sequence No.: 8 **Autosampler Location: 60**
Sample ID: L1104016602 0.5 **Date Collected: 4/12/2011 3:05:50 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016602 0.5

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104016602 0.5

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4406619.5						51882.71	1.18%
YRADIAL	297958.9						1920.00	0.64%
Ga 417.206	1227653.6						27159.36	2.21%
GaRADIAL	65281.0						1345.20	2.06%
Ag 328.068†	216.4	0.00075	mg/L	0.000715	0.00075	mg/L	0.000715	95.36%
Al 396.153†	146269.5	29.3	mg/L	0.11	29.3	mg/L	0.11	0.36%
As 188.979†	9.2	0.0104	mg/L	0.00533	0.0104	mg/L	0.00533	51.25%
Ba 233.527†	10468.5	0.198	mg/L	0.0033	0.198	mg/L	0.0033	1.67%
Be 234.861†	359.4	-0.00038	mg/L	0.000100	-0.00038	mg/L	0.000100	26.40%
B 249.677†	15344.5	0.287	mg/L	0.0077	0.287	mg/L	0.0077	2.68%
Ca 227.546†	1724.3	31.8	mg/L	0.37	31.8	mg/L	0.37	1.15%
Cd 228.802†	4.8	0.00615	mg/L	0.000146	0.00615	mg/L	0.000146	2.38%

Approved: April 13, 2011

Co 228.616†	32008.4	1.92	mg/L	0.032	1.92	mg/L	0.032	1.65%
Cr 267.716†	5016.0	0.0440	mg/L	0.00126	0.0440	mg/L	0.00126	2.87%
Cu 327.393†	13700.0	0.0911	mg/L	0.00240	0.0911	mg/L	0.00240	2.64%
Fe 239.562†	1908.6	6.34	mg/L	0.157	6.34	mg/L	0.157	2.48%
Mg 279.077†	9689.5	13.2	mg/L	0.26	13.2	mg/L	0.26	1.96%
Mn 257.610†	119162.2	0.275	mg/L	0.0048	0.275	mg/L	0.0048	1.76%
Mo 202.031†	328.1	0.0266	mg/L	0.00033	0.0266	mg/L	0.00033	1.23%
Ni 231.604†	452359.0	15.0	mg/L	0.14	15.0	mg/L	0.14	0.95%
Pb 220.353†	24.1	0.00563	mg/L	0.001659	0.00563	mg/L	0.001659	29.48%
Sb 206.836†	9.0	0.00374	mg/L	0.004983	0.00374	mg/L	0.004983	133.10%
Se 196.026†	-21.8	-0.0152	mg/L	0.00409	-0.0152	mg/L	0.00409	26.93%
Si 251.611†	152104.2	4.67	mg/L	0.074	4.67	mg/L	0.074	1.58%
Sn 189.927†	18.9	0.00413	mg/L	0.000041	0.00413	mg/L	0.000041	1.00%
Ti 334.940†	10994.3	0.0154	mg/L	0.00039	0.0154	mg/L	0.00039	2.54%
Tl 190.801†	85.9	0.0514	mg/L	0.00499	0.0514	mg/L	0.00499	9.71%
V 290.880†	505.9	0.00458	mg/L	0.000352	0.00458	mg/L	0.000352	7.70%
Zn 206.200†	46069.4	1.59	mg/L	0.032	1.59	mg/L	0.032	2.04%
K 766.490†	24266.5	8.70	mg/L	0.092	8.70	mg/L	0.092	1.06%
Na 589.592†	Saturated2							
Sr 407.771†	281829.9	0.266	mg/L	0.0197	0.266	mg/L	0.0197	7.43%
Li 670.784†	898300.1	11.5	mg/L	0.05	11.5	mg/L	0.05	0.46%

Sequence No.: 9 **Autosampler Location: 61**
Sample ID: L1104016603 0.2 **Date Collected: 4/12/2011 3:12:30 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016603 0.2

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104016603 0.2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4642396.1						6729.40	0.14%
YRADIAL	309039.6						11820.80	3.83%
Ga 417.206	1260697.1						5077.95	0.40%
GaRADIAL	67205.6						2044.73	3.04%
Ag 328.068†	261.1	0.00099	mg/L	0.000194	0.00099	mg/L	0.000194	19.75%
Al 396.153†	211984.1	42.5	mg/L	1.45	42.5	mg/L	1.45	3.42%
As 188.979†	9.5	0.0104	mg/L	0.00265	0.0104	mg/L	0.00265	25.43%
Ba 233.527†	10970.4	0.208	mg/L	0.0012	0.208	mg/L	0.0012	0.56%
Be 234.861†	149.9	-0.00069	mg/L	0.000050	-0.00069	mg/L	0.000050	7.31%
B 249.677†	11666.5	0.195	mg/L	0.0027	0.195	mg/L	0.0027	1.38%
Ca 227.546†	-651.7	10.7	mg/L	0.19	10.7	mg/L	0.19	1.78%
Cd 228.802†	4.8	0.00841	mg/L	0.000238	0.00841	mg/L	0.000238	2.83%
Co 228.616†	41670.3	2.51	mg/L	0.016	2.51	mg/L	0.016	0.62%
Cr 267.716†	6664.1	0.0584	mg/L	0.00099	0.0584	mg/L	0.00099	1.69%
Cu 327.393†	17998.8	0.121	mg/L	0.0019	0.121	mg/L	0.0019	1.53%
Fe 239.562†	1814.3	6.02	mg/L	0.151	6.02	mg/L	0.151	2.50%
Mg 279.077†	6129.9	8.37	mg/L	0.239	8.37	mg/L	0.239	2.86%
Mn 257.610†	158110.3	0.359	mg/L	0.0006	0.359	mg/L	0.0006	0.16%
Mo 202.031†	159.6	0.0118	mg/L	0.00028	0.0118	mg/L	0.00028	2.35%
Ni 231.604†	624109.8	20.7	mg/L	0.01	20.7	mg/L	0.01	0.04%
Pb 220.353†	18.8	0.00305	mg/L	0.001238	0.00305	mg/L	0.001238	40.64%
Sb 206.836†	11.4	0.00538	mg/L	0.000831	0.00538	mg/L	0.000831	15.45%
Se 196.026†	-13.7	-0.0160	mg/L	0.00066	-0.0160	mg/L	0.00066	4.14%
Si 251.611†	110925.6	3.41	mg/L	0.044	3.41	mg/L	0.044	1.30%
Sn 189.927†	15.5	0.00345	mg/L	0.000532	0.00345	mg/L	0.000532	15.42%
Ti 334.940†	9011.7	0.0124	mg/L	0.00031	0.0124	mg/L	0.00031	2.47%
Tl 190.801†	76.0	0.0451	mg/L	0.00526	0.0451	mg/L	0.00526	11.66%
V 290.880†	528.5	0.00472	mg/L	0.000424	0.00472	mg/L	0.000424	8.98%
Zn 206.200†	56870.5	1.96	mg/L	0.001	1.96	mg/L	0.001	0.05%
K 766.490†	16747.0	5.63	mg/L	0.195	5.63	mg/L	0.195	3.47%
Na 589.592†	3653499.2	367	mg/L	0.0	367	mg/L	0.0	0.00%
Sr 407.771†	230981.9	0.218	mg/L	0.0218	0.218	mg/L	0.0218	10.01%
Li 670.784†	316675.0	4.04	mg/L	0.116	4.04	mg/L	0.116	2.88%

Approved: April 13, 2011

Sequence No.: 10 **Autosampler Location: 62**
Sample ID: L1104016604 0.2 **Date Collected: 4/12/2011 3:19:14 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016604 0.2

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104016604 0.2

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4625974.9						36210.78	0.78%
YRADIAL	311630.6						1560.46	0.50%
Ga 417.206	1255688.4						14199.16	1.13%
GaRADIAL	67319.9						1558.93	2.32%
Ag 328.068†	242.1	0.00083	mg/L	0.000218	0.00083	mg/L	0.000218	26.23%
Al 396.153†	200578.2	40.2	mg/L	0.07	40.2	mg/L	0.07	0.18%
As 188.979†	7.5	0.00846	mg/L	0.002815	0.00846	mg/L	0.002815	33.27%
Ba 233.527†	11460.0	0.217	mg/L	0.0022	0.217	mg/L	0.0022	1.03%
Be 234.861†	328.6	-0.00055	mg/L	0.000201	-0.00055	mg/L	0.000201	36.79%
B 249.677†	12151.3	0.212	mg/L	0.0054	0.212	mg/L	0.0054	2.57%
Ca 227.546†	232.9	20.1	mg/L	0.36	20.1	mg/L	0.36	1.79%
Cd 228.802†	4.7	0.00830	mg/L	0.000141	0.00830	mg/L	0.000141	1.70%
Co 228.616†	43239.1	2.60	mg/L	0.020	2.60	mg/L	0.020	0.78%
Cr 267.716†	6720.5	0.0590	mg/L	0.00062	0.0590	mg/L	0.00062	1.05%
Cu 327.393†	19065.5	0.129	mg/L	0.0031	0.129	mg/L	0.0031	2.41%
Fe 239.562†	2127.7	7.07	mg/L	0.125	7.07	mg/L	0.125	1.76%
Mg 279.077†	9880.6	13.5	mg/L	0.17	13.5	mg/L	0.17	1.28%
Mn 257.610†	154026.2	0.350	mg/L	0.0016	0.350	mg/L	0.0016	0.46%
Mo 202.031†	187.8	0.0142	mg/L	0.00060	0.0142	mg/L	0.00060	4.18%
Ni 231.604†	614880.2	20.4	mg/L	0.07	20.4	mg/L	0.07	0.33%
Pb 220.353†	20.1	0.00368	mg/L	0.001516	0.00368	mg/L	0.001516	41.23%
Sb 206.836†	13.4	0.00684	mg/L	0.002552	0.00684	mg/L	0.002552	37.31%
Se 196.026†	-20.2	-0.0183	mg/L	0.00565	-0.0183	mg/L	0.00565	30.95%
Si 251.611†	147584.1	4.53	mg/L	0.082	4.53	mg/L	0.082	1.80%
Sn 189.927†	12.2	0.00282	mg/L	0.001358	0.00282	mg/L	0.001358	48.07%
Ti 334.940†	10779.7	0.0150	mg/L	0.00013	0.0150	mg/L	0.00013	0.87%
Tl 190.801†	87.2	0.0516	mg/L	0.00255	0.0516	mg/L	0.00255	4.94%
V 290.880†	274.7	0.00306	mg/L	0.000725	0.00306	mg/L	0.000725	23.71%
Zn 206.200†	54800.1	1.89	mg/L	0.022	1.89	mg/L	0.022	1.14%
K 766.490†	19467.4	6.61	mg/L	0.046	6.61	mg/L	0.046	0.70%
Na 589.592†	4324610.4	367	mg/L	0.0	367	mg/L	0.0	0.00%
Sr 407.771†	265470.5	0.250	mg/L	0.0242	0.250	mg/L	0.0242	9.68%
Li 670.784†	354254.8	4.52	mg/L	0.022	4.52	mg/L	0.022	0.48%

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Sequence No.: 11 **Autosampler Location: 63**
Sample ID: L1104016605 **Date Collected: 4/12/2011 3:25:58 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016605

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104016605

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4281063.9						53639.06	1.25%
YRADIAL	292141.3						8801.12	3.01%
Ga 417.206	1206430.4						14235.39	1.18%
GaRADIAL	64543.7						396.62	0.61%
Ag 328.068†	888.9	0.00369	mg/L	0.000898	0.00369	mg/L	0.000898	24.31%
Al 396.153†	679422.6	136	mg/L	2.5	136	mg/L	2.5	1.82%
As 188.979†	14.8	0.00626	mg/L	0.006028	0.00626	mg/L	0.006028	96.36%
Ba 233.527†	13644.3	0.258	mg/L	0.0024	0.258	mg/L	0.0024	0.93%

Approved: April 13, 2011

Be 234.861†	-1137.2	-0.00171	mg/L	0.000111	-0.00171	mg/L	0.000111 6.48%
B 249.677†	72889.0	1.20	mg/L	0.016	1.20	mg/L	0.016 1.32%
Ca 227.546†	14878.2	207	mg/L	1.6	207	mg/L	1.6 0.76%
Cd 228.802†	88.3	0.0272	mg/L	0.00035	0.0272	mg/L	0.00035 1.29%
Co 228.616†	228739.7	13.8	mg/L	0.11	13.8	mg/L	0.11 0.78%
Cr 267.716†	17175.2	0.149	mg/L	0.0012	0.149	mg/L	0.0012 0.80%
Cu 327.393†	51809.8	0.347	mg/L	0.0044	0.347	mg/L	0.0044 1.28%
Fe 239.562†	464.8	1.52	mg/L	0.018	1.52	mg/L	0.018 1.20%
Mg 279.077†	59100.1	80.7	mg/L	0.10	80.7	mg/L	0.10 0.12%
Mn 257.610†	1234062.6	2.76	mg/L	0.008	2.76	mg/L	0.008 0.30%
Mo 202.031†	53.3	-0.00086	mg/L	0.001110	-0.00086	mg/L	0.001110 128.44%
Ni 231.604†	1624387.0	53.8	mg/L	0.11	53.8	mg/L	0.11 0.20%
Pb 220.353†	-114.5	-0.0171	mg/L	0.00233	-0.0171	mg/L	0.00233 13.59%
Sb 206.836†	23.2	0.0135	mg/L	0.00132	0.0135	mg/L	0.00132 9.77%
Se 196.026†	-58.6	-0.00967	mg/L	0.006240	-0.00967	mg/L	0.006240 64.55%
Si 251.611†	533214.3	16.4	mg/L	0.04	16.4	mg/L	0.04 0.24%
Sn 189.927†	23.5	0.00500	mg/L	0.001452	0.00500	mg/L	0.001452 29.04%
Ti 334.940†	-1415.8	-0.00049	mg/L	0.000006	-0.00049	mg/L	0.000006 1.20%
Tl 190.801†	248.4	0.111	mg/L	0.0093	0.111	mg/L	0.0093 8.39%
V 290.880†	-619.3	-0.00349	mg/L	0.001143	-0.00349	mg/L	0.001143 32.76%
Zn 206.200†	361936.7	12.4	mg/L	0.09	12.4	mg/L	0.09 0.75%
K 766.490†	121206.9	45.3	mg/L	0.03	45.3	mg/L	0.03 0.07%
Na 589.592†	Saturated2						
Sr 407.771†	1745894.7	1.65	mg/L	0.174	1.65	mg/L	0.174 10.58%
Li 670.784†	1330428.2	17.0	mg/L	0.31	17.0	mg/L	0.31 1.85%

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Sequence No.: 12 **Autosampler Location: 64**
Sample ID: L1104024701 **Date Collected: 4/12/2011 3:32:42 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104024701

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104024701

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4769806.1						42594.03	0.89%
YRADIAL	306091.4						2984.91	0.98%
Ga 417.206	1330149.8						13882.17	1.04%
GaRADIAL	67686.0						1375.68	2.03%
Ag 328.068†	374.2	0.00165	mg/L	0.000607	0.00165	mg/L	0.000607	36.78%
Al 396.153†	354.2	0.0745	mg/L	0.01066	0.0745	mg/L	0.01066	14.30%
As 188.979†	5.8	0.00698	mg/L	0.003352	0.00698	mg/L	0.003352	48.03%
Ba 233.527†	7261.5	0.138	mg/L	0.0031	0.138	mg/L	0.0031	2.22%
Be 234.861†	38.0	0.00000	mg/L	0.000015	0.00000	mg/L	0.000015	416.70%
B 249.677†	7060.3	0.141	mg/L	0.0006	0.141	mg/L	0.0006	0.44%
Ca 227.546†	5694.2	62.4	mg/L	0.49	62.4	mg/L	0.49	0.78%
Cd 228.802†	-1.5	-0.00021	mg/L	0.000072	-0.00021	mg/L	0.000072	33.54%
Co 228.616†	18.9	0.00103	mg/L	0.000306	0.00103	mg/L	0.000306	29.73%
Cr 267.716†	48.7	0.00033	mg/L	0.000063	0.00033	mg/L	0.000063	19.15%
Cu 327.393†	-10.3	-0.00092	mg/L	0.000461	-0.00092	mg/L	0.000461	50.00%
Fe 239.562†	101.3	0.341	mg/L	0.0128	0.341	mg/L	0.0128	3.77%
Mg 279.077†	12034.1	16.4	mg/L	0.08	16.4	mg/L	0.08	0.49%
Mn 257.610†	43458.0	0.101	mg/L	0.0017	0.101	mg/L	0.0017	1.71%
Mo 202.031†	17.2	0.00195	mg/L	0.000599	0.00195	mg/L	0.000599	30.76%
Ni 231.604†	112.1	0.00386	mg/L	0.000176	0.00386	mg/L	0.000176	4.58%
Pb 220.353†	-16.3	0.00064	mg/L	0.001293	0.00064	mg/L	0.001293	201.41%
Sb 206.836†	9.2	0.00400	mg/L	0.001130	0.00400	mg/L	0.001130	28.21%
Se 196.026†	-23.9	-0.00671	mg/L	0.010204	-0.00671	mg/L	0.010204	152.07%
Si 251.611†	168161.9	5.17	mg/L	0.050	5.17	mg/L	0.050	0.98%
Sn 189.927†	-1.8	0.00011	mg/L	0.000088	0.00011	mg/L	0.000088	77.65%
Ti 334.940†	3.8	0.00054	mg/L	0.000145	0.00054	mg/L	0.000145	26.88%
Tl 190.801†	88.6	0.0556	mg/L	0.00635	0.0556	mg/L	0.00635	11.41%
V 290.880†	-472.4	-0.00257	mg/L	0.000516	-0.00257	mg/L	0.000516	20.12%
Zn 206.200†	158.9	0.00557	mg/L	0.000101	0.00557	mg/L	0.000101	1.82%
K 766.490†	6059.9	1.84	mg/L	0.033	1.84	mg/L	0.033	1.79%
Na 589.592†	2587887.6	356	mg/L	18.9	356	mg/L	18.9	5.32%

Approved: April 13, 2011

Sr 407.771†	1344469.3	1.27	mg/L	0.109	1.27	mg/L	0.109 8.62%
Li 670.784†	3763.9	0.0495	mg/L	0.00370	0.0495	mg/L	0.00370 7.48%

Sequence No.: 13 **Autosampler Location: 65**
Sample ID: L1104024702 **Date Collected: 4/12/2011 3:39:24 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104024702

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104024702

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4753857.7						28345.11	0.60%
YRADIAL	312855.1						11682.87	3.73%
Ga 417.206	1320545.8						15133.17	1.15%
GaRADIAL	68724.3						1442.38	2.10%
Ag 328.068†	174.8	0.00074	mg/L	0.000563	0.00074	mg/L	0.000563	75.54%
Al 396.153†	5509.2	1.11	mg/L	0.013	1.11	mg/L	0.013	1.19%
As 188.979†	6.0	0.00809	mg/L	0.001735	0.00809	mg/L	0.001735	21.46%
Ba 233.527†	4125.4	0.0782	mg/L	0.00062	0.0782	mg/L	0.00062	0.79%
Be 234.861†	165.2	0.00010	mg/L	0.000052	0.00010	mg/L	0.000052	51.41%
B 249.677†	10814.6	0.217	mg/L	0.0050	0.217	mg/L	0.0050	2.31%
Ca 227.546†	1707.7	18.7	mg/L	0.27	18.7	mg/L	0.27	1.42%
Cd 228.802†	1.2	-0.00004	mg/L	0.000142	-0.00004	mg/L	0.000142	383.83%
Co 228.616†	15.2	0.00077	mg/L	0.000406	0.00077	mg/L	0.000406	53.00%
Cr 267.716†	213.7	0.00181	mg/L	0.000057	0.00181	mg/L	0.000057	3.13%
Cu 327.393†	417.7	0.00218	mg/L	0.000832	0.00218	mg/L	0.000832	38.19%
Fe 239.562†	327.9	1.09	mg/L	0.029	1.09	mg/L	0.029	2.67%
Mg 279.077†	3799.1	5.19	mg/L	0.143	5.19	mg/L	0.143	2.76%
Mn 257.610†	17234.6	0.0421	mg/L	0.00058	0.0421	mg/L	0.00058	1.39%
Mo 202.031†	52.5	0.00495	mg/L	0.000075	0.00495	mg/L	0.000075	1.52%
Ni 231.604†	76.3	0.00269	mg/L	0.000148	0.00269	mg/L	0.000148	5.49%
Pb 220.353†	80.6	0.0179	mg/L	0.00235	0.0179	mg/L	0.00235	13.13%
Sb 206.836†	2.9	-0.00074	mg/L	0.003183	-0.00074	mg/L	0.003183	428.07%
Se 196.026†	-10.4	-0.00610	mg/L	0.004058	-0.00610	mg/L	0.004058	66.50%
Si 251.611†	229160.4	7.04	mg/L	0.031	7.04	mg/L	0.031	0.45%
Sn 189.927†	-1.7	0.00013	mg/L	0.000773	0.00013	mg/L	0.000773	603.29%
Ti 334.940†	12412.2	0.0174	mg/L	0.00159	0.0174	mg/L	0.00159	9.14%
Tl 190.801†	40.7	0.0271	mg/L	0.00339	0.0271	mg/L	0.00339	12.48%
V 290.880†	388.0	0.00339	mg/L	0.001006	0.00339	mg/L	0.001006	29.71%
Zn 206.200†	218.9	0.00762	mg/L	0.000272	0.00762	mg/L	0.000272	3.57%
K 766.490†	4935.7	1.56	mg/L	0.039	1.56	mg/L	0.039	2.49%
Na 589.592†	2256927.8	242	mg/L	8.4	242	mg/L	8.4	3.47%
Sr 407.771†	797896.5	0.754	mg/L	0.0707	0.754	mg/L	0.0707	9.38%
Li 670.784†	2771.0	0.0368	mg/L	0.00117	0.0368	mg/L	0.00117	3.19%

Sequence No.: 14 **Autosampler Location: 66**
Sample ID: L1104018301 **Date Collected: 4/12/2011 3:46:06 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104018301

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104018301

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4886600.2						60494.45	1.24%
YRADIAL	314078.8						1926.45	0.61%
Ga 417.206	1355660.9						13933.65	1.03%
GaRADIAL	69218.9						1115.03	1.61%

Approved: April 13, 2011

Ag 328.068†	425.6	0.00212	mg/L	0.000704	0.00212	mg/L	0.000704 33.21%
Al 396.153†	52.7	0.0141	mg/L	0.00255	0.0141	mg/L	0.00255 18.04%
As 188.979†	6.2	0.00728	mg/L	0.002123	0.00728	mg/L	0.002123 29.16%
Ba 233.527†	388.1	0.00724	mg/L	0.000154	0.00724	mg/L	0.000154 2.12%
Be 234.861†	28.1	0.00003	mg/L	0.000044	0.00003	mg/L	0.000044 155.43%
B 249.677†	1739.8	0.0363	mg/L	0.00046	0.0363	mg/L	0.00046 1.28%
Ca 227.546†	6249.1	68.4	mg/L	0.52	68.4	mg/L	0.52 0.76%
Cd 228.802†	0.2	-0.00010	mg/L	0.000023	-0.00010	mg/L	0.000023 21.61%
Co 228.616†	3.1	0.00013	mg/L	0.000284	0.00013	mg/L	0.000284 220.82%
Cr 267.716†	102.3	0.00078	mg/L	0.000097	0.00078	mg/L	0.000097 12.49%
Cu 327.393†	-72.2	-0.00137	mg/L	0.001040	-0.00137	mg/L	0.001040 75.89%
Fe 239.562†	46.0	0.157	mg/L	0.0158	0.157	mg/L	0.0158 10.07%
Mg 279.077†	14509.1	19.8	mg/L	0.14	19.8	mg/L	0.14 0.69%
Mn 257.610†	74268.9	0.166	mg/L	0.0008	0.166	mg/L	0.0008 0.49%
Mo 202.031†	-0.0	0.00051	mg/L	0.000647	0.00051	mg/L	0.000647 127.17%
Ni 231.604†	17.8	0.00073	mg/L	0.000381	0.00073	mg/L	0.000381 52.22%
Pb 220.353†	-22.1	-0.00023	mg/L	0.000952	-0.00023	mg/L	0.000952 419.87%
Sb 206.836†	13.6	0.00728	mg/L	0.002767	0.00728	mg/L	0.002767 38.01%
Se 196.026†	-22.5	-0.00413	mg/L	0.002955	-0.00413	mg/L	0.002955 71.49%
Si 251.611†	204510.0	6.28	mg/L	0.036	6.28	mg/L	0.036 0.58%
Sn 189.927†	-3.9	-0.00029	mg/L	0.001879	-0.00029	mg/L	0.001879 650.63%
Ti 334.940†	-660.4	-0.00033	mg/L	0.000204	-0.00033	mg/L	0.000204 61.81%
Tl 190.801†	93.3	0.0584	mg/L	0.00356	0.0584	mg/L	0.00356 6.09%
V 290.880†	-615.4	-0.00355	mg/L	0.000881	-0.00355	mg/L	0.000881 24.78%
Zn 206.200†	257.5	0.00896	mg/L	0.000277	0.00896	mg/L	0.000277 3.09%
K 766.490†	4019.1	1.47	mg/L	0.016	1.47	mg/L	0.016 1.12%
Na 589.592†	159424.0	11.6	mg/L	0.12	11.6	mg/L	0.12 1.02%
Sr 407.771†	203776.4	0.193	mg/L	0.0174	0.193	mg/L	0.0174 9.04%
Li 670.784†	654.4	0.00979	mg/L	0.001746	0.00979	mg/L	0.001746 17.84%

Sequence No.: 15 **Autosampler Location: 67**
Sample ID: L1104018401 **Date Collected: 4/12/2011 3:52:48 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104018401

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104018401

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4907588.1						18652.08	0.38%
YRADIAL	313694.6						5516.52	1.76%
Ga 417.206	1363711.4						9246.23	0.68%
GaRADIAL	69082.9						206.15	0.30%
Ag 328.068†	409.8	0.00203	mg/L	0.000062	0.00203	mg/L	0.000062	3.07%
Al 396.153†	281.4	0.0600	mg/L	0.01613	0.0600	mg/L	0.01613	26.89%
As 188.979†	5.8	0.00727	mg/L	0.001680	0.00727	mg/L	0.001680	23.10%
Ba 233.527†	1060.2	0.0200	mg/L	0.00010	0.0200	mg/L	0.00010	0.50%
Be 234.861†	75.6	0.00002	mg/L	0.000033	0.00002	mg/L	0.000033	143.59%
B 249.677†	658.0	0.0173	mg/L	0.00022	0.0173	mg/L	0.00022	1.28%
Ca 227.546†	4410.3	48.3	mg/L	0.38	48.3	mg/L	0.38	0.79%
Cd 228.802†	0.4	-0.00009	mg/L	0.000033	-0.00009	mg/L	0.000033	38.23%
Co 228.616†	6.0	0.00028	mg/L	0.000343	0.00028	mg/L	0.000343	121.16%
Cr 267.716†	119.5	0.00095	mg/L	0.000121	0.00095	mg/L	0.000121	12.70%
Cu 327.393†	59.1	-0.00039	mg/L	0.000162	-0.00039	mg/L	0.000162	41.04%
Fe 239.562†	186.2	0.623	mg/L	0.0087	0.623	mg/L	0.0087	1.40%
Mg 279.077†	4983.4	6.81	mg/L	0.050	6.81	mg/L	0.050	0.74%
Mn 257.610†	54852.4	0.122	mg/L	0.0013	0.122	mg/L	0.0013	1.04%
Mo 202.031†	6.4	0.00106	mg/L	0.000314	0.00106	mg/L	0.000314	29.62%
Ni 231.604†	3.2	0.00025	mg/L	0.000054	0.00025	mg/L	0.000054	21.42%
Pb 220.353†	-15.0	0.00022	mg/L	0.001174	0.00022	mg/L	0.001174	535.27%
Sb 206.836†	11.1	0.00542	mg/L	0.001702	0.00542	mg/L	0.001702	31.40%
Se 196.026†	-23.4	-0.00969	mg/L	0.005970	-0.00969	mg/L	0.005970	61.62%
Si 251.611†	97005.7	2.98	mg/L	0.043	2.98	mg/L	0.043	1.46%
Sn 189.927†	-5.1	-0.00053	mg/L	0.000523	-0.00053	mg/L	0.000523	98.11%
Ti 334.940†	581.0	0.00120	mg/L	0.000063	0.00120	mg/L	0.000063	5.27%
Tl 190.801†	77.7	0.0496	mg/L	0.00267	0.0496	mg/L	0.00267	5.39%

Approved: April 13, 2011

V 290.880†	-259.5	-0.00108 mg/L	0.000048	-0.00108 mg/L	0.000048	4.43%
Zn 206.200†	198.6	0.00693 mg/L	0.000143	0.00693 mg/L	0.000143	2.06%
K 766.490†	8889.8	3.20 mg/L	0.018	3.20 mg/L	0.018	0.55%
Na 589.592†	90567.1	6.58 mg/L	0.054	6.58 mg/L	0.054	0.82%
Sr 407.771†	179029.3	0.169 mg/L	0.0140	0.169 mg/L	0.0140	8.26%
Li 670.784†	105.9	0.00279 mg/L	0.000913	0.00279 mg/L	0.000913	32.73%

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Sequence No.: 16 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/12/2011 3:59:26 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4799245.2						46732.28	0.97%
YRADIAL	310286.1						5689.03	1.83%
Ga 417.206	1275292.9						14686.37	1.15%
GaRADIAL	67135.6						889.63	1.33%
Ag 328.068†	83325.3	0.414	mg/L	0.0079	0.414	mg/L	0.0079	1.91%
QC value within limits for Ag 328.068 Recovery = 103.52%								
Al 396.153†	51968.7	10.4	mg/L	0.04	10.4	mg/L	0.04	0.41%
QC value within limits for Al 396.153 Recovery = 104.03%								
As 188.979†	387.5	0.413	mg/L	0.0058	0.413	mg/L	0.0058	1.41%
QC value within limits for As 188.979 Recovery = 103.16%								
Ba 233.527†	54162.0	1.03	mg/L	0.019	1.03	mg/L	0.019	1.87%
QC value within limits for Ba 233.527 Recovery = 103.09%								
Be 234.861†	26458.4	0.0538	mg/L	0.00124	0.0538	mg/L	0.00124	2.30%
QC value within limits for Be 234.861 Recovery = 107.51%								
B 249.677†	26762.6	0.530	mg/L	0.0081	0.530	mg/L	0.0081	1.54%
QC value within limits for B 249.677 Recovery = 106.03%								
Ca 227.546†	949.5	10.7	mg/L	0.06	10.7	mg/L	0.06	0.53%
QC value within limits for Ca 227.546 Recovery = 107.32%								
Cd 228.802†	761.6	0.0487	mg/L	0.00070	0.0487	mg/L	0.00070	1.43%
QC value within limits for Cd 228.802 Recovery = 97.34%								
Co 228.616†	3434.7	0.204	mg/L	0.0021	0.204	mg/L	0.0021	1.04%
QC value within limits for Co 228.616 Recovery = 102.09%								
Cr 267.716†	57213.5	0.512	mg/L	0.0100	0.512	mg/L	0.0100	1.95%
QC value within limits for Cr 267.716 Recovery = 102.33%								
Cu 327.393†	75930.0	0.532	mg/L	0.0098	0.532	mg/L	0.0098	1.84%
QC value within limits for Cu 327.393 Recovery = 106.46%								
Fe 239.562†	1182.4	3.93	mg/L	0.070	3.93	mg/L	0.070	1.78%
QC value within limits for Fe 239.562 Recovery = 98.26%								
Mg 279.077†	7192.7	9.83	mg/L	0.148	9.83	mg/L	0.148	1.51%
QC value within limits for Mg 279.077 Recovery = 98.30%								
Mn 257.610†	233932.6	0.523	mg/L	0.0094	0.523	mg/L	0.0094	1.80%
QC value within limits for Mn 257.610 Recovery = 104.59%								
Mo 202.031†	12135.9	1.02	mg/L	0.010	1.02	mg/L	0.010	0.99%
QC value within limits for Mo 202.031 Recovery = 102.19%								
Ni 231.604†	15614.2	0.517	mg/L	0.0076	0.517	mg/L	0.0076	1.47%
QC value within limits for Ni 231.604 Recovery = 103.50%								
Pb 220.353†	2520.5	0.508	mg/L	0.0046	0.508	mg/L	0.0046	0.90%
QC value within limits for Pb 220.353 Recovery = 101.66%								
Sb 206.836†	1654.4	1.24	mg/L	0.015	1.24	mg/L	0.015	1.24%
QC value within limits for Sb 206.836 Recovery = 103.54%								
Se 196.026†	491.9	0.415	mg/L	0.0034	0.415	mg/L	0.0034	0.81%
QC value within limits for Se 196.026 Recovery = 103.66%								
Si 251.611†	168201.7	5.15	mg/L	0.088	5.15	mg/L	0.088	1.71%
QC value within limits for Si 251.611 Recovery = 103.05%								
Sn 189.927†	5204.0	1.01	mg/L	0.011	1.01	mg/L	0.011	1.10%
QC value within limits for Sn 189.927 Recovery = 100.85%								
Ti 334.940†	745260.3	1.04	mg/L	0.004	1.04	mg/L	0.004	0.40%
QC value within limits for Ti 334.940 Recovery = 104.14%								
Tl 190.801†	751.5	0.524	mg/L	0.0013	0.524	mg/L	0.0013	0.25%
QC value within limits for Tl 190.801 Recovery = 104.73%								

Approved: April 13, 2011

V 290.880† 150436.6 1.03 mg/L 0.016 1.03 mg/L 0.016 1.58%
QC value within limits for V 290.880 Recovery = 103.07%
Zn 206.200† 29492.1 1.02 mg/L 0.018 1.02 mg/L 0.018 1.78%
QC value within limits for Zn 206.200 Recovery = 101.52%
K 766.490† 131166.4 49.2 mg/L 0.30 49.2 mg/L 0.30 0.60%
QC value within limits for K 766.490 Recovery = 98.42%
Na 589.592† 631754.5 48.6 mg/L 0.50 48.6 mg/L 0.50 1.04%
QC value within limits for Na 589.592 Recovery = 97.15%
Sr 407.771† 979500.3 0.925 mg/L 0.0627 0.925 mg/L 0.0627 6.77%
QC value within limits for Sr 407.771 Recovery = 92.50%
Li 670.784† 82411.6 1.05 mg/L 0.005 1.05 mg/L 0.005 0.43%
QC value within limits for Li 670.784 Recovery = 105.27%
All analyte(s) passed QC.

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Sequence No.: 17 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/12/2011 4:06:07 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5071110.8						24505.54	0.48%
YRADIAL	315872.0						7693.11	2.44%
Ga 417.206	1309152.3						12128.13	0.93%
GaRADIAL	67634.6						2292.49	3.39%
Ag 328.068†	180.0	0.00098	mg/L	0.000264	0.00098	mg/L	0.000264	27.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-26.8	-0.00183	mg/L	0.018470	-0.00183	mg/L	0.018470	>999.9%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.6	0.00268	mg/L	0.002547	0.00268	mg/L	0.002547	95.21%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	2.4	-0.00007	mg/L	0.000015	-0.00007	mg/L	0.000015	20.91%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-32.9	-0.00008	mg/L	0.000024	-0.00008	mg/L	0.000024	29.13%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	66.6	0.00294	mg/L	0.000203	0.00294	mg/L	0.000203	6.91%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	1.3	-0.00416	mg/L	0.086874	-0.00416	mg/L	0.086874	>999.9%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-0.3	-0.00010	mg/L	0.000066	-0.00010	mg/L	0.000066	67.58%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	3.1	0.00013	mg/L	0.000417	0.00013	mg/L	0.000417	320.47%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-18.2	-0.00022	mg/L	0.000114	-0.00022	mg/L	0.000114	51.01%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	208.2	0.00057	mg/L	0.000701	0.00057	mg/L	0.000701	121.99%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.4	0.00597	mg/L	0.003905	0.00597	mg/L	0.003905	65.38%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-1.5	-0.00035	mg/L	0.007166	-0.00035	mg/L	0.007166	>999.9%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	0.5	-0.00020	mg/L	0.000017	-0.00020	mg/L	0.000017	8.67%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	0.8	0.00054	mg/L	0.000514	0.00054	mg/L	0.000514	95.63%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-3.0	0.00008	mg/L	0.000394	0.00008	mg/L	0.000394	515.77%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-5.2	-0.00011	mg/L	0.000566	-0.00011	mg/L	0.000566	505.44%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.2	-0.00201	mg/L	0.002160	-0.00201	mg/L	0.002160	107.24%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	4.8	0.00177	mg/L	0.005371	0.00177	mg/L	0.005371	304.12%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	8.9	0.00004	mg/L	0.000555	0.00004	mg/L	0.000555	>999.9%

Approved: April 13, 2011

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   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -1.3     0.00020 mg/L      0.000316     0.00020 mg/L      0.000316 156.52%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†              45.2    -0.00003 mg/L      0.000071    -0.00003 mg/L      0.000071 255.41%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               2.3     0.00248 mg/L      0.002291     0.00248 mg/L      0.002291  92.22%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              -76.9     0.00013 mg/L      0.000677     0.00013 mg/L      0.000677 541.62%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†              -6.8    -0.00012 mg/L      0.000082    -0.00012 mg/L      0.000082  68.69%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              -33.0      0.0508 mg/L       0.00971      0.0508 mg/L       0.00971  19.10%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             968.9      0.0935 mg/L       0.00391      0.0935 mg/L       0.00391   4.18%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†              32.2     0.00014 mg/L      0.000051     0.00014 mg/L      0.000051  36.47%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              56.3     0.00216 mg/L      0.002137     0.00216 mg/L      0.002137  99.04%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.
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Approved: April 13, 2011

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Analysis Begun

Start Time: 4/12/2011 4:10:38 PM **Plasma On Time: 4/12/2011 7:48:47 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\TUESDAY1.sif
Batch ID:
Results Data Set: 041211H2
Results Library: C:\pe\peicp2\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 98**
Sample ID: PBW 59 WG361498-02 **Date Collected: 4/12/2011 4:10:40 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 59 WG361498-02

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: PBW 59 WG361498-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5091172.5						54761.42	1.08%
YRADIAL	317891.6						4529.03	1.42%
Ga 417.206	1281772.6						22090.25	1.72%
GaRADIAL	69196.3						626.63	0.91%
Ag 328.068†	73.0	0.00045	mg/L	0.000751	0.00045	mg/L	0.000751	168.61%
Al 396.153†	-30.5	-0.00256	mg/L	0.008410	-0.00256	mg/L	0.008410	329.09%
As 188.979†	-1.3	0.00061	mg/L	0.001947	0.00061	mg/L	0.001947	319.48%
Ba 233.527†	0.8	-0.00010	mg/L	0.000133	-0.00010	mg/L	0.000133	129.56%
Be 234.861†	-104.5	-0.00023	mg/L	0.000031	-0.00023	mg/L	0.000031	13.44%
B 249.677†	58.8	0.00277	mg/L	0.000271	0.00277	mg/L	0.000271	9.79%
Ca 227.546†	12.6	0.120	mg/L	0.0264	0.120	mg/L	0.0264	22.04%
Cd 228.802†	3.1	0.00015	mg/L	0.000147	0.00015	mg/L	0.000147	97.52%
Co 228.616†	-3.7	-0.00028	mg/L	0.000094	-0.00028	mg/L	0.000094	34.17%
Cr 267.716†	-10.2	-0.00015	mg/L	0.000058	-0.00015	mg/L	0.000058	38.06%
Cu 327.393†	56.7	-0.00049	mg/L	0.000676	-0.00049	mg/L	0.000676	139.35%
Fe 239.562†	-0.4	0.00320	mg/L	0.001122	0.00320	mg/L	0.001122	35.06%
Mg 279.077†	83.3	0.116	mg/L	0.0059	0.116	mg/L	0.0059	5.11%
Mn 257.610†	214.5	0.00027	mg/L	0.000018	0.00027	mg/L	0.000018	6.48%
Mo 202.031†	-5.4	0.00002	mg/L	0.000284	0.00002	mg/L	0.000284	>999.9%
Ni 231.604†	-4.9	0.00002	mg/L	0.000330	0.00002	mg/L	0.000330	>999.9%
Pb 220.353†	-8.9	-0.00086	mg/L	0.001262	-0.00086	mg/L	0.001262	146.92%
Sb 206.836†	3.0	-0.00066	mg/L	0.001509	-0.00066	mg/L	0.001509	230.32%
Se 196.026†	5.4	0.00233	mg/L	0.003649	0.00233	mg/L	0.003649	156.68%
Si 251.611†	10.3	0.00009	mg/L	0.000915	0.00009	mg/L	0.000915	>999.9%
Sn 189.927†	1.7	0.00078	mg/L	0.000945	0.00078	mg/L	0.000945	121.31%
Ti 334.940†	-54.0	-0.00017	mg/L	0.000056	-0.00017	mg/L	0.000056	33.95%
Tl 190.801†	-3.3	-0.00137	mg/L	0.004201	-0.00137	mg/L	0.004201	307.13%
V 290.880†	-80.9	0.00010	mg/L	0.000287	0.00010	mg/L	0.000287	291.44%
Zn 206.200†	81.8	0.00292	mg/L	0.000107	0.00292	mg/L	0.000107	3.67%
K 766.490†	165.3	0.121	mg/L	0.0169	0.121	mg/L	0.0169	14.05%
Na 589.592†	2590.5	0.210	mg/L	0.0139	0.210	mg/L	0.0139	6.61%
Sr 407.771†	936.2	0.00100	mg/L	0.000079	0.00100	mg/L	0.000079	7.90%
Li 670.784†	-51.9	0.00078	mg/L	0.000719	0.00078	mg/L	0.000719	92.41%

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Sequence No.: 2 **Autosampler Location: 99**
Sample ID: LCSW 59 WG361498-03 **Date Collected: 4/12/2011 4:17:19 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 59 WG361498-03

Analyte	Back Pressure	Flow

Approved: April 13, 2011

All 204.0 kPa 0.50 L/min

Mean Data: LCSW 59 WG361498-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4990623.0						18888.47	0.38%
YRADIAL	302208.7						1383.31	0.46%
Ga 417.206	1285732.3						8112.05	0.63%
GaRADIAL	65338.2						973.46	1.49%
Ag 328.068†	40328.7	0.200	mg/L	0.0035	0.200	mg/L	0.0035	1.75%
Al 396.153†	25633.9	5.13	mg/L	0.042	5.13	mg/L	0.042	0.81%
As 188.979†	185.1	0.198	mg/L	0.0012	0.198	mg/L	0.0012	0.58%
Ba 233.527†	26042.3	0.496	mg/L	0.0065	0.496	mg/L	0.0065	1.32%
Be 234.861†	12374.7	0.0251	mg/L	0.00019	0.0251	mg/L	0.00019	0.76%
B 249.677†	50248.8	0.986	mg/L	0.0141	0.986	mg/L	0.0141	1.43%
Ca 227.546†	440.6	4.97	mg/L	0.087	4.97	mg/L	0.087	1.75%
Cd 228.802†	366.6	0.0234	mg/L	0.00021	0.0234	mg/L	0.00021	0.89%
Co 228.616†	1671.9	0.0994	mg/L	0.00117	0.0994	mg/L	0.00117	1.18%
Cr 267.716†	27375.6	0.245	mg/L	0.0040	0.245	mg/L	0.0040	1.63%
Cu 327.393†	36742.7	0.257	mg/L	0.0044	0.257	mg/L	0.0044	1.72%
Fe 239.562†	599.2	1.99	mg/L	0.025	1.99	mg/L	0.025	1.23%
Mg 279.077†	3717.6	5.08	mg/L	0.037	5.08	mg/L	0.037	0.72%
Mn 257.610†	113737.1	0.254	mg/L	0.0042	0.254	mg/L	0.0042	1.66%
Mo 202.031†	5811.9	0.490	mg/L	0.0024	0.490	mg/L	0.0024	0.49%
Ni 231.604†	7398.7	0.245	mg/L	0.0041	0.245	mg/L	0.0041	1.67%
Pb 220.353†	1207.1	0.244	mg/L	0.0023	0.244	mg/L	0.0023	0.92%
Sb 206.836†	800.6	0.600	mg/L	0.0076	0.600	mg/L	0.0076	1.26%
Se 196.026†	238.7	0.200	mg/L	0.0039	0.200	mg/L	0.0039	1.94%
Si 251.611†	84268.3	2.58	mg/L	0.037	2.58	mg/L	0.037	1.43%
Sn 189.927†	0.0	0.00046	mg/L	0.000408	0.00046	mg/L	0.000408	88.88%
Ti 334.940†	365453.0	0.511	mg/L	0.0062	0.511	mg/L	0.0062	1.22%
Tl 190.801†	360.8	0.252	mg/L	0.0060	0.252	mg/L	0.0060	2.39%
V 290.880†	72093.2	0.494	mg/L	0.0087	0.494	mg/L	0.0087	1.77%
Zn 206.200†	13854.5	0.477	mg/L	0.0058	0.477	mg/L	0.0058	1.23%
K 766.490†	64480.4	23.4	mg/L	0.14	23.4	mg/L	0.14	0.60%
Na 589.592†	330541.1	24.6	mg/L	0.38	24.6	mg/L	0.38	1.55%
Sr 407.771†	500626.5	0.473	mg/L	0.0261	0.473	mg/L	0.0261	5.53%
Li 670.784†	40357.6	0.516	mg/L	0.0020	0.516	mg/L	0.0020	0.39%

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Sequence No.: 3 **Autosampler Location: 100**
Sample ID: L1104029202 WG361498-01 **Date Collected: 4/12/2011 4:24:05 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104029202 WG361498-01

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104029202 WG361498-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4866405.7						26381.98	0.54%
YRADIAL	311747.7						5563.45	1.78%
Ga 417.206	1279636.5						14573.70	1.14%
GaRADIAL	65381.9						1458.21	2.23%
Ag 328.068†	301.5	0.00155	mg/L	0.000535	0.00155	mg/L	0.000535	34.59%
Al 396.153†	1328.6	0.270	mg/L	0.0563	0.270	mg/L	0.0563	20.88%
As 188.979†	3.8	0.00570	mg/L	0.003058	0.00570	mg/L	0.003058	53.69%
Ba 233.527†	8472.8	0.161	mg/L	0.0028	0.161	mg/L	0.0028	1.72%
Be 234.861†	-70.3	-0.00025	mg/L	0.000111	-0.00025	mg/L	0.000111	43.72%
B 249.677†	7715.6	0.154	mg/L	0.0033	0.154	mg/L	0.0033	2.16%
Ca 227.546†	1711.7	18.7	mg/L	0.09	18.7	mg/L	0.09	0.49%
Cd 228.802†	3.8	0.00016	mg/L	0.000183	0.00016	mg/L	0.000183	114.33%
Co 228.616†	-3.3	-0.00033	mg/L	0.000169	-0.00033	mg/L	0.000169	50.58%
Cr 267.716†	104.5	0.00086	mg/L	0.000150	0.00086	mg/L	0.000150	17.43%
Cu 327.393†	281.4	0.00115	mg/L	0.000107	0.00115	mg/L	0.000107	9.29%
Fe 239.562†	145.1	0.487	mg/L	0.0108	0.487	mg/L	0.0108	2.22%
Mg 279.077†	2173.0	2.97	mg/L	0.056	2.97	mg/L	0.056	1.90%

Approved: April 13, 2011

Mn 257.610†	8596.8	0.0205 mg/L	0.00044	0.0205 mg/L	0.00044	2.17%
Mo 202.031†	1.8	0.00065 mg/L	0.000358	0.00065 mg/L	0.000358	54.88%
Ni 231.604†	2.4	0.00024 mg/L	0.000226	0.00024 mg/L	0.000226	92.87%
Pb 220.353†	-7.2	0.00037 mg/L	0.000553	0.00037 mg/L	0.000553	149.57%
Sb 206.836†	6.9	0.00228 mg/L	0.001357	0.00228 mg/L	0.001357	59.42%
Se 196.026†	-5.5	-0.00203 mg/L	0.002200	-0.00203 mg/L	0.002200	108.50%
Si 251.611†	27058.5	0.831 mg/L	0.0285	0.831 mg/L	0.0285	3.43%
Sn 189.927†	1.1	0.00068 mg/L	0.001102	0.00068 mg/L	0.001102	162.07%
Ti 334.940†	4818.5	0.00683 mg/L	0.000465	0.00683 mg/L	0.000465	6.81%
Tl 190.801†	31.0	0.0204 mg/L	0.00463	0.0204 mg/L	0.00463	22.66%
V 290.880†	75.5	0.00120 mg/L	0.000210	0.00120 mg/L	0.000210	17.54%
Zn 206.200†	1482.9	0.0510 mg/L	0.00025	0.0510 mg/L	0.00025	0.49%
K 766.490†	5508.5	1.85 mg/L	0.040	1.85 mg/L	0.040	2.15%
Na 589.592†	1708777.4	156 mg/L	2.0	156 mg/L	2.0	1.31%
Sr 407.771†	40570.2	0.0384 mg/L	0.00251	0.0384 mg/L	0.00251	6.54%
Li 670.784†	288.2	0.00512 mg/L	0.000708	0.00512 mg/L	0.000708	13.85%

Sequence No.: 4 **Autosampler Location: 101**
Sample ID: L1104029202S WG361498-04 **Date Collected: 4/12/2011 4:30:48 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104029202S WG361498-04

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104029202S WG361498-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4762521.4						23870.62	0.50%
YRADIAL	302345.0						5576.42	1.84%
Ga 417.206	1235330.9						6214.90	0.50%
GaRADIAL	65039.1						1715.82	2.64%
Ag 328.068†	41486.1	0.206	mg/L	0.0028	0.206	mg/L	0.0028	1.35%
Al 396.153†	26027.7	5.21	mg/L	0.031	5.21	mg/L	0.031	0.60%
As 188.979†	198.0	0.211	mg/L	0.0020	0.211	mg/L	0.0020	0.94%
Ba 233.527†	34575.3	0.658	mg/L	0.0085	0.658	mg/L	0.0085	1.30%
Be 234.861†	12675.1	0.0257	mg/L	0.00045	0.0257	mg/L	0.00045	1.74%
B 249.677†	60249.0	1.18	mg/L	0.019	1.18	mg/L	0.019	1.63%
Ca 227.546†	2253.7	24.8	mg/L	0.04	24.8	mg/L	0.04	0.17%
Cd 228.802†	372.8	0.0237	mg/L	0.00023	0.0237	mg/L	0.00023	0.98%
Co 228.616†	1646.2	0.0977	mg/L	0.00050	0.0977	mg/L	0.00050	0.51%
Cr 267.716†	27873.9	0.249	mg/L	0.0046	0.249	mg/L	0.0046	1.84%
Cu 327.393†	37934.0	0.266	mg/L	0.0039	0.266	mg/L	0.0039	1.46%
Fe 239.562†	605.8	2.02	mg/L	0.062	2.02	mg/L	0.062	3.07%
Mg 279.077†	5749.2	7.86	mg/L	0.184	7.86	mg/L	0.184	2.34%
Mn 257.610†	120233.5	0.271	mg/L	0.0033	0.271	mg/L	0.0033	1.23%
Mo 202.031†	6035.8	0.508	mg/L	0.0032	0.508	mg/L	0.0032	0.62%
Ni 231.604†	7372.1	0.244	mg/L	0.0029	0.244	mg/L	0.0029	1.18%
Pb 220.353†	1208.0	0.245	mg/L	0.0016	0.245	mg/L	0.0016	0.66%
Sb 206.836†	818.4	0.613	mg/L	0.0041	0.613	mg/L	0.0041	0.67%
Se 196.026†	233.7	0.201	mg/L	0.0015	0.201	mg/L	0.0015	0.76%
Si 251.611†	115451.0	3.54	mg/L	0.053	3.54	mg/L	0.053	1.50%
Sn 189.927†	2.2	0.00089	mg/L	0.000891	0.00089	mg/L	0.000891	100.23%
Ti 334.940†	372355.0	0.520	mg/L	0.0061	0.520	mg/L	0.0061	1.16%
Tl 190.801†	397.2	0.275	mg/L	0.0058	0.275	mg/L	0.0058	2.12%
V 290.880†	74264.7	0.509	mg/L	0.0075	0.509	mg/L	0.0075	1.48%
Zn 206.200†	15591.4	0.537	mg/L	0.0071	0.537	mg/L	0.0071	1.32%
K 766.490†	70257.2	25.4	mg/L	0.12	25.4	mg/L	0.12	0.49%
Na 589.592†	2050889.8	204	mg/L	8.4	204	mg/L	8.4	4.10%
Sr 407.771†	521515.2	0.493	mg/L	0.0402	0.493	mg/L	0.0402	8.16%
Li 670.784†	40593.1	0.519	mg/L	0.0007	0.519	mg/L	0.0007	0.13%

Sequence No.: 5 **Autosampler Location: 102**
Sample ID: L1104029202SD WG361498-05 **Date Collected: 4/12/2011 4:37:47 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 13, 2011

Nebulizer Parameters: L1104029202SD WG361498-05

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104029202SD WG361498-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4800082.8						21035.62	0.44%
YRADIAL	303154.5						4111.08	1.36%
Ga 417.206	1261932.8						10964.71	0.87%
GaRADIAL	65138.7						1232.67	1.89%
Ag 328.068†	39685.7	0.197	mg/L	0.0010	0.197	mg/L	0.0010	0.51%
Al 396.153†	32784.1	6.57	mg/L	0.037	6.57	mg/L	0.037	0.57%
As 188.979†	189.8	0.203	mg/L	0.0033	0.203	mg/L	0.0033	1.61%
Ba 233.527†	34129.9	0.649	mg/L	0.0049	0.649	mg/L	0.0049	0.75%
Be 234.861†	12628.1	0.0252	mg/L	0.00038	0.0252	mg/L	0.00038	1.52%
B 249.677†	57759.1	1.14	mg/L	0.014	1.14	mg/L	0.014	1.24%
Ca 227.546†	2285.4	25.2	mg/L	0.21	25.2	mg/L	0.21	0.84%
Cd 228.802†	368.5	0.0235	mg/L	0.00015	0.0235	mg/L	0.00015	0.65%
Co 228.616†	1647.0	0.0977	mg/L	0.00058	0.0977	mg/L	0.00058	0.59%
Cr 267.716†	27256.3	0.244	mg/L	0.0016	0.244	mg/L	0.0016	0.67%
Cu 327.393†	36691.5	0.257	mg/L	0.0034	0.257	mg/L	0.0034	1.34%
Fe 239.562†	1311.4	4.36	mg/L	0.068	4.36	mg/L	0.068	1.56%
Mg 279.077†	5979.9	8.17	mg/L	0.086	8.17	mg/L	0.086	1.05%
Mn 257.610†	133345.6	0.300	mg/L	0.0025	0.300	mg/L	0.0025	0.82%
Mo 202.031†	5991.2	0.505	mg/L	0.0014	0.505	mg/L	0.0014	0.29%
Ni 231.604†	7309.0	0.242	mg/L	0.0015	0.242	mg/L	0.0015	0.63%
Pb 220.353†	1203.8	0.244	mg/L	0.0015	0.244	mg/L	0.0015	0.60%
Sb 206.836†	803.4	0.602	mg/L	0.0028	0.602	mg/L	0.0028	0.47%
Se 196.026†	225.1	0.194	mg/L	0.0061	0.194	mg/L	0.0061	3.13%
Si 251.611†	111205.5	3.41	mg/L	0.046	3.41	mg/L	0.046	1.36%
Sn 189.927†	-0.4	0.00038	mg/L	0.000985	0.00038	mg/L	0.000985	261.19%
Ti 334.940†	374764.9	0.524	mg/L	0.0036	0.524	mg/L	0.0036	0.69%
Tl 190.801†	388.9	0.270	mg/L	0.0033	0.270	mg/L	0.0033	1.24%
V 290.880†	72134.4	0.495	mg/L	0.0039	0.495	mg/L	0.0039	0.79%
Zn 206.200†	15735.7	0.542	mg/L	0.0030	0.542	mg/L	0.0030	0.56%
K 766.490†	70400.4	25.5	mg/L	0.10	25.5	mg/L	0.10	0.40%
Na 589.592†	2064216.8	206	mg/L	4.8	206	mg/L	4.8	2.34%
Sr 407.771†	519026.0	0.490	mg/L	0.0378	0.490	mg/L	0.0378	7.71%
Li 670.784†	40586.6	0.519	mg/L	0.0045	0.519	mg/L	0.0045	0.87%

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Sequence No.: 6 **Autosampler Location: 103**
Sample ID: L1104029204 **Date Collected: 4/12/2011 4:44:31 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104029204

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104029204

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4886808.2						12345.15	0.25%
YRADIAL	317654.9						2861.39	0.90%
Ga 417.206	1277855.9						1863.70	0.15%
GaRADIAL	66811.8						1122.99	1.68%
Ag 328.068†	370.7	0.00191	mg/L	0.000746	0.00191	mg/L	0.000746	39.14%
Al 396.153†	257.2	0.0551	mg/L	0.00240	0.0551	mg/L	0.00240	4.35%
As 188.979†	2.3	0.00374	mg/L	0.001345	0.00374	mg/L	0.001345	35.99%
Ba 233.527†	8127.5	0.154	mg/L	0.0018	0.154	mg/L	0.0018	1.15%
Be 234.861†	-106.1	-0.00024	mg/L	0.000030	-0.00024	mg/L	0.000030	12.50%
B 249.677†	6528.3	0.129	mg/L	0.0015	0.129	mg/L	0.0015	1.17%
Ca 227.546†	3378.0	37.0	mg/L	0.11	37.0	mg/L	0.11	0.30%
Cd 228.802†	7.4	0.00041	mg/L	0.000239	0.00041	mg/L	0.000239	57.91%
Co 228.616†	-0.7	-0.00017	mg/L	0.000154	-0.00017	mg/L	0.000154	88.85%

Approved: April 13, 2011

Cr 267.716†	61.8	0.00048	mg/L	0.000115	0.00048	mg/L	0.000115	23.66%
Cu 327.393†	32.1	-0.00063	mg/L	0.000558	-0.00063	mg/L	0.000558	88.12%
Fe 239.562†	17.2	0.0617	mg/L	0.00410	0.0617	mg/L	0.00410	6.65%
Mg 279.077†	2388.3	3.26	mg/L	0.029	3.26	mg/L	0.029	0.88%
Mn 257.610†	7697.8	0.0186	mg/L	0.00019	0.0186	mg/L	0.00019	1.01%
Mo 202.031†	-0.3	0.00045	mg/L	0.000708	0.00045	mg/L	0.000708	156.77%
Ni 231.604†	-5.4	-0.00003	mg/L	0.000361	-0.00003	mg/L	0.000361	>999.9%
Pb 220.353†	-18.1	-0.00092	mg/L	0.000753	-0.00092	mg/L	0.000753	82.11%
Sb 206.836†	8.0	0.00308	mg/L	0.000821	0.00308	mg/L	0.000821	26.67%
Se 196.026†	-13.8	-0.00464	mg/L	0.002789	-0.00464	mg/L	0.002789	60.08%
Si 251.611†	26897.2	0.826	mg/L	0.0176	0.826	mg/L	0.0176	2.14%
Sn 189.927†	1.7	0.00078	mg/L	0.001424	0.00078	mg/L	0.001424	182.24%
Ti 334.940†	8766.0	0.0125	mg/L	0.00032	0.0125	mg/L	0.00032	2.58%
Tl 190.801†	61.9	0.0398	mg/L	0.00419	0.0398	mg/L	0.00419	10.51%
V 290.880†	3.4	0.00067	mg/L	0.000516	0.00067	mg/L	0.000516	76.72%
Zn 206.200†	1155.1	0.0398	mg/L	0.00042	0.0398	mg/L	0.00042	1.06%
K 766.490†	6287.4	2.12	mg/L	0.029	2.12	mg/L	0.029	1.35%
Na 589.592†	1741925.7	160	mg/L	3.0	160	mg/L	3.0	1.89%
Sr 407.771†	57149.2	0.0541	mg/L	0.00439	0.0541	mg/L	0.00439	8.12%
Li 670.784†	389.5	0.00641	mg/L	0.002044	0.00641	mg/L	0.002044	31.90%

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Sequence No.: 7 **Autosampler Location: 104**
Sample ID: L1104029206 **Date Collected: 4/12/2011 4:51:14 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104029206

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104029206

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4869932.5						29891.93	0.61%
YRADIAL	311609.9						2618.23	0.84%
Ga 417.206	1277418.2						15520.05	1.21%
GaRADIAL	65437.5						1171.12	1.79%
Ag 328.068†	425.2	0.00199	mg/L	0.000567	0.00199	mg/L	0.000567	28.55%
Al 396.153†	14344.4	2.88	mg/L	0.004	2.88	mg/L	0.004	0.14%
As 188.979†	5.4	0.00757	mg/L	0.003191	0.00757	mg/L	0.003191	42.15%
Ba 233.527†	9935.2	0.188	mg/L	0.0010	0.188	mg/L	0.0010	0.50%
Be 234.861†	341.0	-0.00010	mg/L	0.000066	-0.00010	mg/L	0.000066	66.53%
B 249.677†	7376.8	0.160	mg/L	0.0013	0.160	mg/L	0.0013	0.81%
Ca 227.546†	2589.3	28.4	mg/L	0.36	28.4	mg/L	0.36	1.27%
Cd 228.802†	5.4	0.00025	mg/L	0.000114	0.00025	mg/L	0.000114	45.01%
Co 228.616†	13.3	0.00054	mg/L	0.000130	0.00054	mg/L	0.000130	23.84%
Cr 267.716†	597.2	0.00517	mg/L	0.000071	0.00517	mg/L	0.000071	1.38%
Cu 327.393†	1060.7	0.00700	mg/L	0.000217	0.00700	mg/L	0.000217	3.10%
Fe 239.562†	1136.6	3.78	mg/L	0.086	3.78	mg/L	0.086	2.28%
Mg 279.077†	2937.2	4.01	mg/L	0.060	4.01	mg/L	0.060	1.50%
Mn 257.610†	48004.8	0.108	mg/L	0.0009	0.108	mg/L	0.0009	0.79%
Mo 202.031†	-3.8	0.00036	mg/L	0.000554	0.00036	mg/L	0.000554	153.67%
Ni 231.604†	72.2	0.00255	mg/L	0.000270	0.00255	mg/L	0.000270	10.57%
Pb 220.353†	89.4	0.0200	mg/L	0.00146	0.0200	mg/L	0.00146	7.30%
Sb 206.836†	7.7	0.00279	mg/L	0.001777	0.00279	mg/L	0.001777	63.67%
Se 196.026†	-17.5	-0.00883	mg/L	0.006207	-0.00883	mg/L	0.006207	70.30%
Si 251.611†	31032.9	0.953	mg/L	0.0312	0.953	mg/L	0.0312	3.27%
Sn 189.927†	11.2	0.00263	mg/L	0.000621	0.00263	mg/L	0.000621	23.65%
Ti 334.940†	13525.6	0.0191	mg/L	0.00019	0.0191	mg/L	0.00019	0.97%
Tl 190.801†	56.0	0.0368	mg/L	0.00403	0.0368	mg/L	0.00403	10.96%
V 290.880†	547.1	0.00468	mg/L	0.000566	0.00468	mg/L	0.000566	12.09%
Zn 206.200†	2119.4	0.0728	mg/L	0.00063	0.0728	mg/L	0.00063	0.87%
K 766.490†	6841.1	2.31	mg/L	0.017	2.31	mg/L	0.017	0.73%
Na 589.592†	1782339.5	165	mg/L	2.1	165	mg/L	2.1	1.28%
Sr 407.771†	54673.3	0.0513	mg/L	0.00267	0.0513	mg/L	0.00267	5.20%
Li 670.784†	655.6	0.00980	mg/L	0.000321	0.00980	mg/L	0.000321	3.27%

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Sequence No.: 8 **Autosampler Location: 105**

Approved: April 13, 2011

Sample ID: L1104029206PS WG361557-01 **Date Collected: 4/12/2011 4:57:54 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104029206PS WG361557-01

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104029206PS WG361557-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4770546.2						22445.56	0.47%
YRADIAL	310911.8						3485.24	1.12%
Ga 417.206	1244852.7						12449.35	1.00%
GaRADIAL	66140.5						818.68	1.24%
Ag 328.068†	41288.0	0.205	mg/L	0.0020	0.205	mg/L	0.0020	1.00%
Al 396.153†	39365.2	7.88	mg/L	0.016	7.88	mg/L	0.016	0.21%
As 188.979†	199.5	0.213	mg/L	0.0008	0.213	mg/L	0.0008	0.36%
Ba 233.527†	35169.0	0.669	mg/L	0.0068	0.669	mg/L	0.0068	1.02%
Be 234.861†	13285.7	0.0263	mg/L	0.00039	0.0263	mg/L	0.00039	1.50%
B 249.677†	58572.2	1.16	mg/L	0.011	1.16	mg/L	0.011	0.99%
Ca 227.546†	2905.5	32.0	mg/L	0.38	32.0	mg/L	0.38	1.18%
Cd 228.802†	378.2	0.0241	mg/L	0.00041	0.0241	mg/L	0.00041	1.70%
Co 228.616†	1685.5	0.1000	mg/L	0.00085	0.1000	mg/L	0.00085	0.85%
Cr 267.716†	28198.1	0.252	mg/L	0.0029	0.252	mg/L	0.0029	1.16%
Cu 327.393†	38594.5	0.271	mg/L	0.0029	0.271	mg/L	0.0029	1.05%
Fe 239.562†	1613.7	5.36	mg/L	0.061	5.36	mg/L	0.061	1.13%
Mg 279.077†	6227.1	8.51	mg/L	0.057	8.51	mg/L	0.057	0.67%
Mn 257.610†	158058.9	0.354	mg/L	0.0001	0.354	mg/L	0.0001	0.03%
Mo 202.031†	5958.5	0.502	mg/L	0.0096	0.502	mg/L	0.0096	1.91%
Ni 231.604†	7469.6	0.248	mg/L	0.0017	0.248	mg/L	0.0017	0.67%
Pb 220.353†	1311.0	0.266	mg/L	0.0024	0.266	mg/L	0.0024	0.91%
Sb 206.836†	825.2	0.618	mg/L	0.0062	0.618	mg/L	0.0062	1.00%
Se 196.026†	228.9	0.199	mg/L	0.0035	0.199	mg/L	0.0035	1.76%
Si 251.611†	115416.9	3.54	mg/L	0.032	3.54	mg/L	0.032	0.91%
Sn 189.927†	1.0	0.00065	mg/L	0.000416	0.00065	mg/L	0.000416	64.42%
Ti 334.940†	385619.2	0.539	mg/L	0.0018	0.539	mg/L	0.0018	0.34%
Tl 190.801†	404.4	0.280	mg/L	0.0078	0.280	mg/L	0.0078	2.77%
V 290.880†	74528.4	0.511	mg/L	0.0045	0.511	mg/L	0.0045	0.87%
Zn 206.200†	16193.9	0.557	mg/L	0.0058	0.557	mg/L	0.0058	1.04%
K 766.490†	71880.9	26.0	mg/L	0.24	26.0	mg/L	0.24	0.93%
Na 589.592†	1923946.1	184	mg/L	1.8	184	mg/L	1.8	0.99%
Sr 407.771†	527866.1	0.498	mg/L	0.0409	0.498	mg/L	0.0409	8.21%
Li 670.784†	41705.4	0.533	mg/L	0.0047	0.533	mg/L	0.0047	0.88%

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Sequence No.: 9 **Autosampler Location: 106**
Sample ID: L1104029206DL WG361557-02 **Date Collected: 4/12/2011 5:04:35 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104029206DL WG361557-02

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104029206DL WG361557-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4942124.8						39784.42	0.81%
YRADIAL	315619.7						7508.43	2.38%
Ga 417.206	1301902.8						20970.30	1.61%
GaRADIAL	66882.6						912.19	1.36%
Ag 328.068†	307.9	0.00157	mg/L	0.000206	0.00157	mg/L	0.000206	13.17%
Al 396.153†	2742.2	0.553	mg/L	0.0173	0.553	mg/L	0.0173	3.13%
As 188.979†	0.6	0.00254	mg/L	0.002064	0.00254	mg/L	0.002064	81.40%
Ba 233.527†	2044.5	0.0387	mg/L	0.00034	0.0387	mg/L	0.00034	0.88%
Be 234.861†	60.4	-0.00005	mg/L	0.000134	-0.00005	mg/L	0.000134	260.55%

Approved: April 13, 2011

B 249.677†	1814.5	0.0400	mg/L	0.00099	0.0400	mg/L	0.00099 2.46%
Ca 227.546†	522.1	5.71	mg/L	0.074	5.71	mg/L	0.074 1.30%
Cd 228.802†	0.9	-0.00001	mg/L	0.000147	-0.00001	mg/L	0.000147 >999.9%
Co 228.616†	7.7	0.00037	mg/L	0.000331	0.00037	mg/L	0.000331 90.19%
Cr 267.716†	112.0	0.00092	mg/L	0.000027	0.00092	mg/L	0.000027 2.94%
Cu 327.393†	357.8	0.00172	mg/L	0.000500	0.00172	mg/L	0.000500 29.16%
Fe 239.562†	230.8	0.771	mg/L	0.0206	0.771	mg/L	0.0206 2.67%
Mg 279.077†	596.9	0.817	mg/L	0.0121	0.817	mg/L	0.0121 1.49%
Mn 257.610†	9933.3	0.0221	mg/L	0.00021	0.0221	mg/L	0.00021 0.94%
Mo 202.031†	6.2	0.00104	mg/L	0.000282	0.00104	mg/L	0.000282 27.18%
Ni 231.604†	8.5	0.00046	mg/L	0.000199	0.00046	mg/L	0.000199 43.77%
Pb 220.353†	10.7	0.00330	mg/L	0.000458	0.00330	mg/L	0.000458 13.87%
Sb 206.836†	2.9	-0.00075	mg/L	0.002213	-0.00075	mg/L	0.002213 294.59%
Se 196.026†	-10.4	-0.00938	mg/L	0.003100	-0.00938	mg/L	0.003100 33.05%
Si 251.611†	6162.0	0.189	mg/L	0.0018	0.189	mg/L	0.0018 0.98%
Sn 189.927†	-6.4	-0.00078	mg/L	0.000738	-0.00078	mg/L	0.000738 94.10%
Ti 334.940†	2765.5	0.00383	mg/L	0.000048	0.00383	mg/L	0.000048 1.27%
Tl 190.801†	12.0	0.00863	mg/L	0.002370	0.00863	mg/L	0.002370 27.46%
V 290.880†	14.4	0.00081	mg/L	0.000825	0.00081	mg/L	0.000825 102.11%
Zn 206.200†	494.2	0.0171	mg/L	0.00009	0.0171	mg/L	0.00009 0.53%
K 766.490†	1358.4	0.514	mg/L	0.0302	0.514	mg/L	0.0302 5.88%
Na 589.592†	360061.4	26.8	mg/L	0.23	26.8	mg/L	0.23 0.84%
Sr 407.771†	11409.5	0.0108	mg/L	0.00079	0.0108	mg/L	0.00079 7.34%
Li 670.784†	310.5	0.00540	mg/L	0.001586	0.00540	mg/L	0.001586 29.37%

Sequence No.: 10 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/12/2011 5:11:18 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4848338.4						39231.16	0.81%
YRADIAL	308695.1						6270.77	2.03%
Ga 417.206	1286833.9						12558.84	0.98%
GaRADIAL	66602.6						1211.15	1.82%
Ag 328.068†	81569.8	0.405	mg/L	0.0060	0.405	mg/L	0.0060	1.48%
QC value within limits for Ag 328.068 Recovery = 101.34%								
Al 396.153†	50628.9	10.1	mg/L	0.02	10.1	mg/L	0.02	0.17%
QC value within limits for Al 396.153 Recovery = 101.35%								
As 188.979†	380.4	0.405	mg/L	0.0037	0.405	mg/L	0.0037	0.92%
QC value within limits for As 188.979 Recovery = 101.26%								
Ba 233.527†	52909.0	1.01	mg/L	0.009	1.01	mg/L	0.009	0.91%
QC value within limits for Ba 233.527 Recovery = 100.70%								
Be 234.861†	25825.9	0.0525	mg/L	0.00110	0.0525	mg/L	0.00110	2.11%
QC value within limits for Be 234.861 Recovery = 104.94%								
B 249.677†	26189.8	0.519	mg/L	0.0095	0.519	mg/L	0.0095	1.83%
QC value within limits for B 249.677 Recovery = 103.85%								
Ca 227.546†	930.1	10.5	mg/L	0.08	10.5	mg/L	0.08	0.79%
QC value within limits for Ca 227.546 Recovery = 105.07%								
Cd 228.802†	741.9	0.0474	mg/L	0.00066	0.0474	mg/L	0.00066	1.39%
QC value within limits for Cd 228.802 Recovery = 94.76%								
Co 228.616†	3381.2	0.201	mg/L	0.0016	0.201	mg/L	0.0016	0.82%
QC value within limits for Co 228.616 Recovery = 100.50%								
Cr 267.716†	55659.4	0.498	mg/L	0.0049	0.498	mg/L	0.0049	0.98%
QC value within limits for Cr 267.716 Recovery = 99.55%								
Cu 327.393†	74242.0	0.520	mg/L	0.0094	0.520	mg/L	0.0094	1.81%
QC value within limits for Cu 327.393 Recovery = 104.10%								
Fe 239.562†	1177.8	3.92	mg/L	0.070	3.92	mg/L	0.070	1.78%
QC value within limits for Fe 239.562 Recovery = 97.88%								
Mg 279.077†	7185.4	9.82	mg/L	0.184	9.82	mg/L	0.184	1.88%
QC value within limits for Mg 279.077 Recovery = 98.20%								
Mn 257.610†	228489.0	0.511	mg/L	0.0046	0.511	mg/L	0.0046	0.91%
QC value within limits for Mn 257.610 Recovery = 102.15%								

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Mo 202.031†	11963.3	1.01 mg/L	0.010	1.01 mg/L	0.010	0.96%
QC value within limits for Mo 202.031 Recovery = 100.74%						
Ni 231.604†	15089.7	0.500 mg/L	0.0061	0.500 mg/L	0.0061	1.21%
QC value within limits for Ni 231.604 Recovery = 100.02%						
Pb 220.353†	2487.0	0.502 mg/L	0.0048	0.502 mg/L	0.0048	0.96%
QC value within limits for Pb 220.353 Recovery = 100.32%						
Sb 206.836†	1623.5	1.22 mg/L	0.011	1.22 mg/L	0.011	0.89%
QC value within limits for Sb 206.836 Recovery = 101.61%						
Se 196.026†	487.5	0.411 mg/L	0.0083	0.411 mg/L	0.0083	2.02%
QC value within limits for Se 196.026 Recovery = 102.74%						
Si 251.611†	163797.5	5.02 mg/L	0.065	5.02 mg/L	0.065	1.29%
QC value within limits for Si 251.611 Recovery = 100.35%						
Sn 189.927†	5111.8	0.991 mg/L	0.0087	0.991 mg/L	0.0087	0.88%
QC value within limits for Sn 189.927 Recovery = 99.06%						
Ti 334.940†	729982.6	1.02 mg/L	0.002	1.02 mg/L	0.002	0.15%
QC value within limits for Ti 334.940 Recovery = 102.00%						
Tl 190.801†	752.5	0.524 mg/L	0.0052	0.524 mg/L	0.0052	0.99%
QC value within limits for Tl 190.801 Recovery = 104.82%						
V 290.880†	146709.9	1.01 mg/L	0.010	1.01 mg/L	0.010	0.99%
QC value within limits for V 290.880 Recovery = 100.52%						
Zn 206.200†	28741.1	0.989 mg/L	0.0076	0.989 mg/L	0.0076	0.77%
QC value within limits for Zn 206.200 Recovery = 98.94%						
K 766.490†	127842.1	47.9 mg/L	0.23	47.9 mg/L	0.23	0.47%
QC value within limits for K 766.490 Recovery = 95.75%						
Na 589.592†	636862.8	49.0 mg/L	1.59	49.0 mg/L	1.59	3.24%
QC value within limits for Na 589.592 Recovery = 98.00%						
Sr 407.771†	955355.0	0.902 mg/L	0.0871	0.902 mg/L	0.0871	9.65%
QC value within limits for Sr 407.771 Recovery = 90.22%						
Li 670.784†	79810.3	1.02 mg/L	0.006	1.02 mg/L	0.006	0.63%
QC value within limits for Li 670.784 Recovery = 101.95%						

All analyte(s) passed QC.

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Sequence No.: 11 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/12/2011 5:17:59 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4964286.7						21255.18	0.43%
YRADIAL	323612.3						3645.36	1.13%
Ga 417.206	1298474.1						20511.44	1.58%
GaRADIAL	68809.7						676.96	0.98%
Ag 328.068†	277.6	0.00146	mg/L	0.000587	0.00146	mg/L	0.000587	40.21%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-48.5	-0.00617	mg/L	0.013885	-0.00617	mg/L	0.013885	225.12%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.4	0.00236	mg/L	0.001011	0.00236	mg/L	0.001011	42.80%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-4.9	-0.00021	mg/L	0.000052	-0.00021	mg/L	0.000052	24.81%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-46.8	-0.00011	mg/L	0.000007	-0.00011	mg/L	0.000007	6.26%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	196.0	0.00545	mg/L	0.000597	0.00545	mg/L	0.000597	10.97%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	5.7	0.0432	mg/L	0.09456	0.0432	mg/L	0.09456	218.64%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	4.2	0.00021	mg/L	0.000099	0.00021	mg/L	0.000099	46.97%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	7.3	0.00039	mg/L	0.000211	0.00039	mg/L	0.000211	54.62%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-23.7	-0.00027	mg/L	0.000054	-0.00027	mg/L	0.000054	19.66%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	135.3	0.00006	mg/L	0.000462	0.00006	mg/L	0.000462	712.37%

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   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†              -0.8     0.00203 mg/L      0.006074     0.00203 mg/L      0.006074 299.79%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†               2.9     0.00570 mg/L      0.001556     0.00570 mg/L      0.001556  27.31%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†             -20.6    -0.00025 mg/L      0.000014    -0.00025 mg/L      0.000014   5.88%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -2.0     0.00030 mg/L      0.000029     0.00030 mg/L      0.000029   9.65%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†             -15.7    -0.00034 mg/L      0.000264    -0.00034 mg/L      0.000264  77.37%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†              -9.8    -0.00104 mg/L      0.001543    -0.00104 mg/L      0.001543 148.94%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†              -1.0    -0.00364 mg/L      0.000261    -0.00364 mg/L      0.000261   7.18%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -1.2    -0.00323 mg/L      0.010283    -0.00323 mg/L      0.010283 318.65%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†              36.4     0.00088 mg/L      0.001071     0.00088 mg/L      0.001071 121.10%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†              -2.5    -0.00003 mg/L      0.000321    -0.00003 mg/L      0.000321 >999.9%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†             -56.7    -0.00017 mg/L      0.000209    -0.00017 mg/L      0.000209 122.95%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†               0.0     0.00090 mg/L      0.004279     0.00090 mg/L      0.004279 475.92%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†               -9.9     0.00058 mg/L      0.000357     0.00058 mg/L      0.000357  61.15%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†              -1.3     0.00007 mg/L      0.000234     0.00007 mg/L      0.000234 342.58%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†               30.7      0.0733 mg/L       0.01415      0.0733 mg/L       0.01415  19.31%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             899.3      0.0885 mg/L       0.00553      0.0885 mg/L       0.00553   6.25%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†              54.0     0.00016 mg/L      0.000014     0.00016 mg/L      0.000014   8.87%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†             139.4     0.00322 mg/L      0.001413     0.00322 mg/L      0.001413  43.93%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 12 **Autosampler Location: 107**
Sample ID: L1104030203 **Date Collected: 4/12/2011 5:24:35 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030203

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104030203

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5028933.7						40002.43	0.80%
YRADIAL	317615.5						2282.72	0.72%
Ga 417.206	1322847.8						10207.74	0.77%
GaRADIAL	68726.5						743.88	1.08%
Ag 328.068†	79198.2	0.392	mg/L	0.0085	0.392	mg/L	0.0085	2.17%
Al 396.153†	8783.4	1.76	mg/L	0.007	1.76	mg/L	0.007	0.42%
As 188.979†	3.8	0.00590	mg/L	0.001735	0.00590	mg/L	0.001735	29.43%
Ba 233.527†	1873.2	0.0354	mg/L	0.00045	0.0354	mg/L	0.00045	1.28%
Be 234.861†	317.1	-0.00006	mg/L	0.000056	-0.00006	mg/L	0.000056	97.91%
B 249.677†	2332.1	0.0609	mg/L	0.00130	0.0609	mg/L	0.00130	2.13%
Ca 227.546†	2195.8	24.1	mg/L	0.21	24.1	mg/L	0.21	0.85%
Cd 228.802†	6.9	0.00037	mg/L	0.000272	0.00037	mg/L	0.000272	72.94%
Co 228.616†	7.6	0.00027	mg/L	0.000259	0.00027	mg/L	0.000259	96.49%
Cr 267.716†	338.3	0.00286	mg/L	0.000040	0.00286	mg/L	0.000040	1.39%
Cu 327.393†	1390.4	0.00925	mg/L	0.000119	0.00925	mg/L	0.000119	1.28%
Fe 239.562†	1015.6	3.38	mg/L	0.036	3.38	mg/L	0.036	1.06%
Mg 279.077†	5178.4	7.07	mg/L	0.057	7.07	mg/L	0.057	0.81%
Mn 257.610†	71188.6	0.158	mg/L	0.0029	0.158	mg/L	0.0029	1.82%

Approved: April 13, 2011

Mo 202.031†	1.2	0.00077	mg/L	0.000077	0.00077	mg/L	0.000077 10.01%
Ni 231.604†	44.6	0.00164	mg/L	0.000396	0.00164	mg/L	0.000396 24.20%
Pb 220.353†	38.4	0.00960	mg/L	0.000899	0.00960	mg/L	0.000899 9.36%
Sb 206.836†	9.6	0.00423	mg/L	0.001280	0.00423	mg/L	0.001280 30.29%
Se 196.026†	-13.0	-0.00621	mg/L	0.001258	-0.00621	mg/L	0.001258 20.26%
Si 251.611†	27448.0	0.843	mg/L	0.0174	0.843	mg/L	0.0174 2.06%
Sn 189.927†	13.0	0.00298	mg/L	0.000522	0.00298	mg/L	0.000522 17.53%
Ti 334.940†	11837.5	0.0167	mg/L	0.00038	0.0167	mg/L	0.00038 2.29%
Tl 190.801†	46.6	0.0309	mg/L	0.00484	0.0309	mg/L	0.00484 15.69%
V 290.880†	41.2	0.00119	mg/L	0.000406	0.00119	mg/L	0.000406 34.10%
Zn 206.200†	782.9	0.0269	mg/L	0.00024	0.0269	mg/L	0.00024 0.91%
K 766.490†	9616.2	3.45	mg/L	0.008	3.45	mg/L	0.008 0.23%
Na 589.592†	119677.5	8.72	mg/L	0.067	8.72	mg/L	0.067 0.77%
Sr 407.771†	155780.1	0.147	mg/L	0.0123	0.147	mg/L	0.0123 8.35%
Li 670.784†	15.7	0.00164	mg/L	0.002018	0.00164	mg/L	0.002018 123.03%

Sequence No.: 13 **Autosampler Location: 108**
Sample ID: L1104030501 **Date Collected: 4/12/2011 5:31:14 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030501

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104030501

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4818392.6						48614.11	1.01%
YRADIAL	312193.5						3457.76	1.11%
Ga 417.206	1298690.5						5907.80	0.45%
GaRADIAL	66531.0						781.09	1.17%
Ag 328.068†	741.2	0.00365	mg/L	0.000523	0.00365	mg/L	0.000523	14.30%
Al 396.153†	735.6	0.151	mg/L	0.0221	0.151	mg/L	0.0221	14.65%
As 188.979†	6.8	0.00796	mg/L	0.001001	0.00796	mg/L	0.001001	12.57%
Ba 233.527†	8544.1	0.162	mg/L	0.0024	0.162	mg/L	0.0024	1.45%
Be 234.861†	-70.1	-0.00013	mg/L	0.000025	-0.00013	mg/L	0.000025	19.86%
B 249.677†	3700.4	0.0747	mg/L	0.00256	0.0747	mg/L	0.00256	3.42%
Ca 227.546†	6282.3	68.8	mg/L	0.39	68.8	mg/L	0.39	0.57%
Cd 228.802†	3.4	0.00011	mg/L	0.000109	0.00011	mg/L	0.000109	102.72%
Co 228.616†	9.5	0.00045	mg/L	0.000138	0.00045	mg/L	0.000138	30.49%
Cr 267.716†	273.3	0.00214	mg/L	0.000078	0.00214	mg/L	0.000078	3.63%
Cu 327.393†	12.6	-0.00076	mg/L	0.000115	-0.00076	mg/L	0.000115	15.09%
Fe 239.562†	63.9	0.216	mg/L	0.0047	0.216	mg/L	0.0047	2.17%
Mg 279.077†	2022.3	2.76	mg/L	0.026	2.76	mg/L	0.026	0.93%
Mn 257.610†	254424.1	0.566	mg/L	0.0096	0.566	mg/L	0.0096	1.69%
Mo 202.031†	1.8	0.00075	mg/L	0.000422	0.00075	mg/L	0.000422	56.58%
Ni 231.604†	44.8	0.00162	mg/L	0.000217	0.00162	mg/L	0.000217	13.39%
Pb 220.353†	40.2	0.0122	mg/L	0.00191	0.0122	mg/L	0.00191	15.71%
Sb 206.836†	26.8	0.0172	mg/L	0.00141	0.0172	mg/L	0.00141	8.17%
Se 196.026†	-22.9	-0.00453	mg/L	0.004981	-0.00453	mg/L	0.004981	109.95%
Si 251.611†	146442.6	4.50	mg/L	0.046	4.50	mg/L	0.046	1.02%
Sn 189.927†	10.3	0.00246	mg/L	0.001486	0.00246	mg/L	0.001486	60.37%
Ti 334.940†	2499.2	0.00409	mg/L	0.000139	0.00409	mg/L	0.000139	3.39%
Tl 190.801†	94.8	0.0600	mg/L	0.00404	0.0600	mg/L	0.00404	6.73%
V 290.880†	10.1	0.00073	mg/L	0.001494	0.00073	mg/L	0.001494	204.83%
Zn 206.200†	761.3	0.0263	mg/L	0.00029	0.0263	mg/L	0.00029	1.09%
K 766.490†	3267.8	1.06	mg/L	0.030	1.06	mg/L	0.030	2.84%
Na 589.592†	1706975.1	155	mg/L	1.5	155	mg/L	1.5	0.97%
Sr 407.771†	101549.2	0.0960	mg/L	0.00697	0.0960	mg/L	0.00697	7.26%
Li 670.784†	269.5	0.00488	mg/L	0.000929	0.00488	mg/L	0.000929	19.04%

Sequence No.: 14 **Autosampler Location: 109**
Sample ID: L1104030502 **Date Collected: 4/12/2011 5:37:58 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 13, 2011

Nebulizer Parameters: L1104030502

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104030502

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4871132.5						7495.16	0.15%
YRADIAL	313591.9						2292.52	0.73%
Ga 417.206	1282947.1						7542.06	0.59%
GaRADIAL	66710.4						1268.04	1.90%
Ag 328.068†	660.7	0.00327	mg/L	0.000564	0.00327	mg/L	0.000564	17.25%
Al 396.153†	4885.8	0.983	mg/L	0.0054	0.983	mg/L	0.0054	0.55%
As 188.979†	7.5	0.00869	mg/L	0.003012	0.00869	mg/L	0.003012	34.67%
Ba 233.527†	3470.1	0.0658	mg/L	0.00012	0.0658	mg/L	0.00012	0.18%
Be 234.861†	68.2	-0.00017	mg/L	0.000158	-0.00017	mg/L	0.000158	93.31%
B 249.677†	1460.2	0.0357	mg/L	0.00098	0.0357	mg/L	0.00098	2.75%
Ca 227.546†	7239.9	79.3	mg/L	0.63	79.3	mg/L	0.63	0.79%
Cd 228.802†	5.5	0.00024	mg/L	0.000158	0.00024	mg/L	0.000158	64.90%
Co 228.616†	15.6	0.00081	mg/L	0.000185	0.00081	mg/L	0.000185	22.85%
Cr 267.716†	1919.9	0.0171	mg/L	0.00013	0.0171	mg/L	0.00013	0.75%
Cu 327.393†	687.5	0.00411	mg/L	0.000469	0.00411	mg/L	0.000469	11.42%
Fe 239.562†	430.3	1.43	mg/L	0.036	1.43	mg/L	0.036	2.54%
Mg 279.077†	631.3	0.863	mg/L	0.0172	0.863	mg/L	0.0172	1.99%
Mn 257.610†	9473.6	0.0227	mg/L	0.00025	0.0227	mg/L	0.00025	1.09%
Mo 202.031†	18.3	0.00209	mg/L	0.000193	0.00209	mg/L	0.000193	9.25%
Ni 231.604†	13.5	0.00059	mg/L	0.000349	0.00059	mg/L	0.000349	59.69%
Pb 220.353†	22.3	0.00913	mg/L	0.000313	0.00913	mg/L	0.000313	3.43%
Sb 206.836†	15.0	0.00825	mg/L	0.005022	0.00825	mg/L	0.005022	60.85%
Se 196.026†	-22.7	-0.00113	mg/L	0.001643	-0.00113	mg/L	0.001643	144.96%
Si 251.611†	69102.4	2.12	mg/L	0.024	2.12	mg/L	0.024	1.15%
Sn 189.927†	11.6	0.00271	mg/L	0.000791	0.00271	mg/L	0.000791	29.23%
Ti 334.940†	6641.6	0.00998	mg/L	0.000096	0.00998	mg/L	0.000096	0.96%
Tl 190.801†	97.9	0.0605	mg/L	0.00152	0.0605	mg/L	0.00152	2.51%
V 290.880†	744.0	0.00585	mg/L	0.000468	0.00585	mg/L	0.000468	7.99%
Zn 206.200†	334.9	0.0116	mg/L	0.00047	0.0116	mg/L	0.00047	4.07%
K 766.490†	3299.9	1.07	mg/L	0.028	1.07	mg/L	0.028	2.60%
Na 589.592†	1671503.4	151	mg/L	2.4	151	mg/L	2.4	1.56%
Sr 407.771†	110304.6	0.104	mg/L	0.0089	0.104	mg/L	0.0089	8.51%
Li 670.784†	141.0	0.00324	mg/L	0.001392	0.00324	mg/L	0.001392	42.99%

Sequence No.: 15 **Autosampler Location: 110**
Sample ID: L1104030503 **Date Collected: 4/12/2011 5:44:41 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030503

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104030503

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4808845.0						34052.62	0.71%
YRADIAL	311001.8						3727.91	1.20%
Ga 417.206	1268871.7						9947.77	0.78%
GaRADIAL	66409.4						500.27	0.75%
Ag 328.068†	691.2	0.00342	mg/L	0.000467	0.00342	mg/L	0.000467	13.66%
Al 396.153†	5805.6	1.17	mg/L	0.015	1.17	mg/L	0.015	1.30%
As 188.979†	8.1	0.00918	mg/L	0.006265	0.00918	mg/L	0.006265	68.24%
Ba 233.527†	4320.2	0.0819	mg/L	0.00044	0.0819	mg/L	0.00044	0.53%
Be 234.861†	42.9	-0.00023	mg/L	0.000124	-0.00023	mg/L	0.000124	54.06%
B 249.677†	1404.0	0.0346	mg/L	0.00046	0.0346	mg/L	0.00046	1.33%
Ca 227.546†	7932.9	86.9	mg/L	0.39	86.9	mg/L	0.39	0.45%
Cd 228.802†	3.8	0.00012	mg/L	0.000090	0.00012	mg/L	0.000090	73.95%
Co 228.616†	25.1	0.00137	mg/L	0.000226	0.00137	mg/L	0.000226	16.41%
Cr 267.716†	2403.3	0.0214	mg/L	0.00023	0.0214	mg/L	0.00023	1.09%

Approved: April 13, 2011

Cu 327.393†	1161.4	0.00744 mg/L	0.000113	0.00744 mg/L	0.000113	1.52%
Fe 239.562†	444.7	1.48 mg/L	0.006	1.48 mg/L	0.006	0.41%
Mg 279.077†	235.6	0.323 mg/L	0.0074	0.323 mg/L	0.0074	2.28%
Mn 257.610†	11633.5	0.0277 mg/L	0.00012	0.0277 mg/L	0.00012	0.42%
Mo 202.031†	19.8	0.00222 mg/L	0.000211	0.00222 mg/L	0.000211	9.52%
Ni 231.604†	42.6	0.00155 mg/L	0.000135	0.00155 mg/L	0.000135	8.72%
Pb 220.353†	14.6	0.00797 mg/L	0.000286	0.00797 mg/L	0.000286	3.59%
Sb 206.836†	20.4	0.0122 mg/L	0.00098	0.0122 mg/L	0.00098	7.99%
Se 196.026†	-24.9	-0.00110 mg/L	0.003628	-0.00110 mg/L	0.003628	328.81%
Si 251.611†	72022.8	2.21 mg/L	0.031	2.21 mg/L	0.031	1.38%
Sn 189.927†	7.9	0.00198 mg/L	0.001128	0.00198 mg/L	0.001128	56.99%
Ti 334.940†	7577.6	0.0114 mg/L	0.00013	0.0114 mg/L	0.00013	1.13%
Tl 190.801†	101.7	0.0624 mg/L	0.00228	0.0624 mg/L	0.00228	3.66%
V 290.880†	1431.4	0.0106 mg/L	0.00013	0.0106 mg/L	0.00013	1.21%
Zn 206.200†	605.0	0.0209 mg/L	0.00036	0.0209 mg/L	0.00036	1.72%
K 766.490†	5023.4	1.67 mg/L	0.030	1.67 mg/L	0.030	1.78%
Na 589.592†	1755109.6	162 mg/L	2.3	162 mg/L	2.3	1.40%
Sr 407.771†	136227.8	0.129 mg/L	0.0096	0.129 mg/L	0.0096	7.44%
Li 670.784†	252.4	0.00466 mg/L	0.000907	0.00466 mg/L	0.000907	19.47%

Sequence No.: 16 **Autosampler Location: 111**
Sample ID: L1104030504 **Date Collected: 4/12/2011 5:51:25 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030504

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104030504

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4779882.0						36991.32	0.77%
YRADIAL	307576.6						2703.69	0.88%
Ga 417.206	1263157.2						13202.36	1.05%
GaRADIAL	65449.7						1123.72	1.72%
Ag 328.068†	603.1	0.00300 mg/L		0.000685	0.00300 mg/L		0.000685	22.81%
Al 396.153†	285.5	0.0608 mg/L		0.01500	0.0608 mg/L		0.01500	24.69%
As 188.979†	7.6	0.00912 mg/L		0.002295	0.00912 mg/L		0.002295	25.17%
Ba 233.527†	10190.0	0.193 mg/L		0.0013	0.193 mg/L		0.0013	0.69%
Be 234.861†	-113.4	-0.00020 mg/L		0.000034	-0.00020 mg/L		0.000034	16.63%
B 249.677†	6478.7	0.128 mg/L		0.0016	0.128 mg/L		0.0016	1.22%
Ca 227.546†	4475.7	49.0 mg/L		0.50	49.0 mg/L		0.50	1.01%
Cd 228.802†	6.3	0.00030 mg/L		0.000103	0.00030 mg/L		0.000103	33.99%
Co 228.616†	21.6	0.00118 mg/L		0.000078	0.00118 mg/L		0.000078	6.63%
Cr 267.716†	210.7	0.00165 mg/L		0.000056	0.00165 mg/L		0.000056	3.41%
Cu 327.393†	82.9	-0.00039 mg/L		0.000274	-0.00039 mg/L		0.000274	69.63%
Fe 239.562†	17.1	0.0611 mg/L		0.00517	0.0611 mg/L		0.00517	8.45%
Mg 279.077†	1729.2	2.36 mg/L		0.018	2.36 mg/L		0.018	0.76%
Mn 257.610†	184180.3	0.410 mg/L		0.0011	0.410 mg/L		0.0011	0.26%
Mo 202.031†	1.8	0.00071 mg/L		0.000373	0.00071 mg/L		0.000373	52.36%
Ni 231.604†	106.1	0.00366 mg/L		0.000100	0.00366 mg/L		0.000100	2.74%
Pb 220.353†	2048.6	0.411 mg/L		0.0032	0.411 mg/L		0.0032	0.77%
Sb 206.836†	34.0	0.0226 mg/L		0.00032	0.0226 mg/L		0.00032	1.42%
Se 196.026†	-12.5	-0.00071 mg/L		0.004017	-0.00071 mg/L		0.004017	564.60%
Si 251.611†	141907.8	4.36 mg/L		0.063	4.36 mg/L		0.063	1.45%
Sn 189.927†	2.5	0.00095 mg/L		0.000291	0.00095 mg/L		0.000291	30.63%
Ti 334.940†	1154.7	0.00201 mg/L		0.000214	0.00201 mg/L		0.000214	10.62%
Tl 190.801†	76.5	0.0491 mg/L		0.00278	0.0491 mg/L		0.00278	5.66%
V 290.880†	49.1	0.00098 mg/L		0.000585	0.00098 mg/L		0.000585	59.46%
Zn 206.200†	1786.2	0.0615 mg/L		0.00069	0.0615 mg/L		0.00069	1.13%
K 766.490†	2413.4	0.749 mg/L		0.0386	0.749 mg/L		0.0386	5.16%
Na 589.592†	1776477.4	164 mg/L		1.6	164 mg/L		1.6	0.98%
Sr 407.771†	69664.9	0.0659 mg/L		0.00579	0.0659 mg/L		0.00579	8.78%
Li 670.784†	256.0	0.00471 mg/L		0.001899	0.00471 mg/L		0.001899	40.37%

Sequence No.: 17 **Autosampler Location: 112**
Sample ID: L1104030505 **Date Collected: 4/12/2011 5:58:09 PM**

Approved: April 13, 2011

Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030505

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104030505

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4812871.8						56070.48	1.17%
YRADIAL	311282.6						3175.86	1.02%
Ga 417.206	1274835.7						28093.29	2.20%
GaRADIAL	66005.2						931.82	1.41%
Ag 328.068†	584.4	0.00297	mg/L	0.000635	0.00297	mg/L	0.000635	21.42%
Al 396.153†	104.9	0.0246	mg/L	0.00750	0.0246	mg/L	0.00750	30.54%
As 188.979†	8.8	0.00992	mg/L	0.004016	0.00992	mg/L	0.004016	40.47%
Ba 233.527†	1837.3	0.0348	mg/L	0.00044	0.0348	mg/L	0.00044	1.27%
Be 234.861†	-120.8	-0.00027	mg/L	0.000028	-0.00027	mg/L	0.000028	10.53%
B 249.677†	1243.3	0.0261	mg/L	0.00067	0.0261	mg/L	0.00067	2.56%
Ca 227.546†	7403.4	81.1	mg/L	1.94	81.1	mg/L	1.94	2.40%
Cd 228.802†	6.9	0.00033	mg/L	0.000182	0.00033	mg/L	0.000182	55.14%
Co 228.616†	1.4	0.00000	mg/L	0.000326	0.00000	mg/L	0.000326	>999.9%
Cr 267.716†	1933.0	0.0172	mg/L	0.00036	0.0172	mg/L	0.00036	2.09%
Cu 327.393†	392.5	0.00189	mg/L	0.000819	0.00189	mg/L	0.000819	43.42%
Fe 239.562†	13.8	0.0504	mg/L	0.00453	0.0504	mg/L	0.00453	9.00%
Mg 279.077†	723.9	0.990	mg/L	0.0151	0.990	mg/L	0.0151	1.53%
Mn 257.610†	1560.8	0.00526	mg/L	0.000033	0.00526	mg/L	0.000033	0.63%
Mo 202.031†	17.2	0.00192	mg/L	0.000602	0.00192	mg/L	0.000602	31.35%
Ni 231.604†	-5.2	-0.00003	mg/L	0.000085	-0.00003	mg/L	0.000085	261.81%
Pb 220.353†	-26.1	-0.00038	mg/L	0.000802	-0.00038	mg/L	0.000802	209.90%
Sb 206.836†	19.8	0.0118	mg/L	0.00285	0.0118	mg/L	0.00285	24.13%
Se 196.026†	-30.5	-0.00763	mg/L	0.002798	-0.00763	mg/L	0.002798	36.67%
Si 251.611†	78188.4	2.40	mg/L	0.038	2.40	mg/L	0.038	1.59%
Sn 189.927†	7.2	0.00186	mg/L	0.000345	0.00186	mg/L	0.000345	18.55%
Ti 334.940†	5120.9	0.00787	mg/L	0.000195	0.00787	mg/L	0.000195	2.47%
Tl 190.801†	94.8	0.0581	mg/L	0.00306	0.0581	mg/L	0.00306	5.27%
V 290.880†	696.0	0.00542	mg/L	0.000401	0.00542	mg/L	0.000401	7.40%
Zn 206.200†	123.1	0.00441	mg/L	0.000185	0.00441	mg/L	0.000185	4.20%
K 766.490†	2660.1	0.839	mg/L	0.0150	0.839	mg/L	0.0150	1.79%
Na 589.592†	1747716.2	161	mg/L	2.4	161	mg/L	2.4	1.49%
Sr 407.771†	104113.2	0.0985	mg/L	0.00915	0.0985	mg/L	0.00915	9.30%
Li 670.784†	216.3	0.00420	mg/L	0.000705	0.00420	mg/L	0.000705	16.78%

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Sequence No.: 18 **Autosampler Location: 113**
Sample ID: L1104030506 **Date Collected: 4/12/2011 6:04:53 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030506

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104030506

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4778507.7						19397.85	0.41%
YRADIAL	308537.5						5626.29	1.82%
Ga 417.206	1271909.6						7056.73	0.55%
GaRADIAL	65570.1						336.46	0.51%
Ag 328.068†	781.9	0.00395	mg/L	0.000554	0.00395	mg/L	0.000554	14.01%
Al 396.153†	16.3	0.00681	mg/L	0.007875	0.00681	mg/L	0.007875	115.60%
As 188.979†	5.7	0.00657	mg/L	0.004687	0.00657	mg/L	0.004687	71.38%
Ba 233.527†	4180.8	0.0793	mg/L	0.00064	0.0793	mg/L	0.00064	0.81%
Be 234.861†	-125.1	-0.00027	mg/L	0.000028	-0.00027	mg/L	0.000028	10.33%
B 249.677†	1563.8	0.0323	mg/L	0.00022	0.0323	mg/L	0.00022	0.69%

Approved: April 13, 2011

Ca 227.546†	7553.4	82.7	mg/L	0.66	82.7	mg/L	0.66	0.80%
Cd 228.802†	4.0	0.00015	mg/L	0.000084	0.00015	mg/L	0.000084	54.62%
Co 228.616†	17.9	0.00100	mg/L	0.000172	0.00100	mg/L	0.000172	17.27%
Cr 267.716†	1623.8	0.0145	mg/L	0.00010	0.0145	mg/L	0.00010	0.69%
Cu 327.393†	619.2	0.00347	mg/L	0.000269	0.00347	mg/L	0.000269	7.76%
Fe 239.562†	12.8	0.0470	mg/L	0.00793	0.0470	mg/L	0.00793	16.87%
Mg 279.077†	145.3	0.200	mg/L	0.0027	0.200	mg/L	0.0027	1.36%
Mn 257.610†	648.2	0.00326	mg/L	0.000020	0.00326	mg/L	0.000020	0.62%
Mo 202.031†	15.3	0.00176	mg/L	0.000641	0.00176	mg/L	0.000641	36.44%
Ni 231.604†	9.0	0.00043	mg/L	0.000301	0.00043	mg/L	0.000301	69.32%
Pb 220.353†	-26.5	-0.00038	mg/L	0.002320	-0.00038	mg/L	0.002320	604.35%
Sb 206.836†	19.6	0.0117	mg/L	0.00119	0.0117	mg/L	0.00119	10.18%
Se 196.026†	-28.2	-0.00527	mg/L	0.001387	-0.00527	mg/L	0.001387	26.33%
Si 251.611†	81983.8	2.52	mg/L	0.032	2.52	mg/L	0.032	1.26%
Sn 189.927†	5.6	0.00154	mg/L	0.001047	0.00154	mg/L	0.001047	67.97%
Ti 334.940†	402.5	0.00129	mg/L	0.000192	0.00129	mg/L	0.000192	14.86%
Tl 190.801†	103.4	0.0637	mg/L	0.00385	0.0637	mg/L	0.00385	6.04%
V 290.880†	1307.7	0.00961	mg/L	0.000523	0.00961	mg/L	0.000523	5.45%
Zn 206.200†	115.6	0.00414	mg/L	0.000300	0.00414	mg/L	0.000300	7.25%
K 766.490†	2861.9	0.913	mg/L	0.0285	0.913	mg/L	0.0285	3.12%
Na 589.592†	1728327.0	158	mg/L	1.7	158	mg/L	1.7	1.05%
Sr 407.771†	115855.0	0.110	mg/L	0.0108	0.110	mg/L	0.0108	9.89%
Li 670.784†	33.5	0.00187	mg/L	0.002880	0.00187	mg/L	0.002880	154.29%

Sequence No.: 19 **Autosampler Location: 114**
Sample ID: L1104030507 **Date Collected: 4/12/2011 6:12:32 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030507

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104030507

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4773609.2						57398.23	1.20%
YRADIAL	310995.6						2655.90	0.85%
Ga 417.206	1258433.2						18591.43	1.48%
GaRADIAL	65453.9						843.27	1.29%
Ag 328.068†	738.2	0.00371	mg/L	0.000581	0.00371	mg/L	0.000581	15.64%
Al 396.153†	686.5	0.141	mg/L	0.0144	0.141	mg/L	0.0144	10.23%
As 188.979†	5.6	0.00626	mg/L	0.004143	0.00626	mg/L	0.004143	66.19%
Ba 233.527†	5758.3	0.109	mg/L	0.0016	0.109	mg/L	0.0016	1.45%
Be 234.861†	-118.2	-0.00028	mg/L	0.000033	-0.00028	mg/L	0.000033	11.84%
B 249.677†	1176.4	0.0251	mg/L	0.00089	0.0251	mg/L	0.00089	3.56%
Ca 227.546†	8539.3	93.5	mg/L	1.71	93.5	mg/L	1.71	1.83%
Cd 228.802†	5.2	0.00024	mg/L	0.000085	0.00024	mg/L	0.000085	35.20%
Co 228.616†	17.5	0.00096	mg/L	0.000120	0.00096	mg/L	0.000120	12.60%
Cr 267.716†	2533.1	0.0226	mg/L	0.00023	0.0226	mg/L	0.00023	1.01%
Cu 327.393†	657.5	0.00375	mg/L	0.001038	0.00375	mg/L	0.001038	27.67%
Fe 239.562†	44.9	0.154	mg/L	0.0096	0.154	mg/L	0.0096	6.27%
Mg 279.077†	37.3	0.0526	mg/L	0.01044	0.0526	mg/L	0.01044	19.85%
Mn 257.610†	2467.4	0.00704	mg/L	0.000080	0.00704	mg/L	0.000080	1.14%
Mo 202.031†	22.4	0.00236	mg/L	0.000268	0.00236	mg/L	0.000268	11.37%
Ni 231.604†	24.2	0.00093	mg/L	0.000430	0.00093	mg/L	0.000430	46.19%
Pb 220.353†	-17.3	0.00196	mg/L	0.001313	0.00196	mg/L	0.001313	67.13%
Sb 206.836†	14.3	0.00765	mg/L	0.002841	0.00765	mg/L	0.002841	37.17%
Se 196.026†	-27.9	-0.00234	mg/L	0.007985	-0.00234	mg/L	0.007985	340.51%
Si 251.611†	25539.5	0.784	mg/L	0.0142	0.784	mg/L	0.0142	1.81%
Sn 189.927†	10.3	0.00246	mg/L	0.000452	0.00246	mg/L	0.000452	18.39%
Ti 334.940†	3766.9	0.00610	mg/L	0.000079	0.00610	mg/L	0.000079	1.30%
Tl 190.801†	114.1	0.0701	mg/L	0.00309	0.0701	mg/L	0.00309	4.40%
V 290.880†	582.8	0.00465	mg/L	0.000543	0.00465	mg/L	0.000543	11.69%
Zn 206.200†	180.7	0.00640	mg/L	0.000339	0.00640	mg/L	0.000339	5.30%
K 766.490†	3620.3	1.18	mg/L	0.004	1.18	mg/L	0.004	0.38%
Na 589.592†	1749994.2	161	mg/L	1.9	161	mg/L	1.9	1.16%
Sr 407.771†	147000.4	0.139	mg/L	0.0111	0.139	mg/L	0.0111	7.97%
Li 670.784†	76.1	0.00241	mg/L	0.001536	0.00241	mg/L	0.001536	63.72%

Approved: April 13, 2011

Sequence No.: 20 **Autosampler Location: 115**
Sample ID: L1104033501 **Date Collected: 4/12/2011 6:19:16 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104033501

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104033501

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4761883.0						70409.43	1.48%
YRADIAL	312723.7						1451.40	0.46%
Ga 417.206	1244931.2						14116.21	1.13%
GaRADIAL	65829.5						1576.58	2.39%
Ag 328.068†	656.9	0.00329	mg/L	0.000636	0.00329	mg/L	0.000636	19.35%
Al 396.153†	379.0	0.0795	mg/L	0.01157	0.0795	mg/L	0.01157	14.56%
As 188.979†	6.8	0.00790	mg/L	0.001388	0.00790	mg/L	0.001388	17.56%
Ba 233.527†	6679.8	0.127	mg/L	0.0010	0.127	mg/L	0.0010	0.81%
Be 234.861†	-127.6	-0.00025	mg/L	0.000015	-0.00025	mg/L	0.000015	5.83%
B 249.677†	4885.3	0.0973	mg/L	0.00099	0.0973	mg/L	0.00099	1.01%
Ca 227.546†	6112.3	67.0	mg/L	0.76	67.0	mg/L	0.76	1.14%
Cd 228.802†	16.0	0.00096	mg/L	0.000108	0.00096	mg/L	0.000108	11.17%
Co 228.616†	22.1	0.00123	mg/L	0.000554	0.00123	mg/L	0.000554	45.07%
Cr 267.716†	48.9	0.00027	mg/L	0.000103	0.00027	mg/L	0.000103	38.76%
Cu 327.393†	-82.3	-0.00144	mg/L	0.001080	-0.00144	mg/L	0.001080	74.96%
Fe 239.562†	22.1	0.0778	mg/L	0.00513	0.0778	mg/L	0.00513	6.59%
Mg 279.077†	1316.0	1.80	mg/L	0.004	1.80	mg/L	0.004	0.21%
Mn 257.610†	116446.3	0.260	mg/L	0.0026	0.260	mg/L	0.0026	0.99%
Mo 202.031†	-2.4	0.00033	mg/L	0.000402	0.00033	mg/L	0.000402	122.48%
Ni 231.604†	49.1	0.00177	mg/L	0.000367	0.00177	mg/L	0.000367	20.74%
Pb 220.353†	-23.6	-0.00060	mg/L	0.001203	-0.00060	mg/L	0.001203	200.14%
Sb 206.836†	11.8	0.00591	mg/L	0.000640	0.00591	mg/L	0.000640	10.82%
Se 196.026†	-26.0	-0.00754	mg/L	0.000611	-0.00754	mg/L	0.000611	8.11%
Si 251.611†	24370.2	0.749	mg/L	0.0081	0.749	mg/L	0.0081	1.08%
Sn 189.927†	5.0	0.00142	mg/L	0.000979	0.00142	mg/L	0.000979	69.04%
Ti 334.940†	979.9	0.00195	mg/L	0.000111	0.00195	mg/L	0.000111	5.71%
Tl 190.801†	91.9	0.0577	mg/L	0.00027	0.0577	mg/L	0.00027	0.48%
V 290.880†	55.4	0.00103	mg/L	0.000375	0.00103	mg/L	0.000375	36.44%
Zn 206.200†	1678.9	0.0578	mg/L	0.00051	0.0578	mg/L	0.00051	0.89%
K 766.490†	1546.6	0.438	mg/L	0.0220	0.438	mg/L	0.0220	5.02%
Na 589.592†	1813531.9	169	mg/L	3.1	169	mg/L	3.1	1.84%
Sr 407.771†	78609.6	0.0744	mg/L	0.00671	0.0744	mg/L	0.00671	9.02%
Li 670.784†	103.6	0.00276	mg/L	0.000278	0.00276	mg/L	0.000278	10.06%

Sequence No.: 21 **Autosampler Location: 116**
Sample ID: FBLK WG361453-01 **Date Collected: 4/12/2011 6:25:59 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG361453-01

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: FBLK WG361453-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4891950.9						66292.83	1.36%
YRADIAL	313664.7						7050.53	2.25%
Ga 417.206	1258963.5						22042.03	1.75%
GaRADIAL	65250.0						752.20	1.15%
Ag 328.068†	425.5	0.00218	mg/L	0.000476	0.00218	mg/L	0.000476	21.82%
Al 396.153†	621.3	0.128	mg/L	0.0030	0.128	mg/L	0.0030	2.35%

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As 188.979†	-0.4	0.00155 mg/L	0.002605	0.00155 mg/L	0.002605	168.05%
Ba 233.527†	79.3	0.00139 mg/L	0.000177	0.00139 mg/L	0.000177	12.75%
Be 234.861†	-110.0	-0.00029 mg/L	0.000056	-0.00029 mg/L	0.000056	19.27%
B 249.677†	788.2	0.0181 mg/L	0.00049	0.0181 mg/L	0.00049	2.73%
Ca 227.546†	26.7	0.275 mg/L	0.0760	0.275 mg/L	0.0760	27.61%
Cd 228.802†	4.3	0.00023 mg/L	0.000101	0.00023 mg/L	0.000101	44.50%
Co 228.616†	0.5	-0.00004 mg/L	0.000358	-0.00004 mg/L	0.000358	840.56%
Cr 267.716†	-0.4	-0.00007 mg/L	0.000039	-0.00007 mg/L	0.000039	55.82%
Cu 327.393†	495.3	0.00262 mg/L	0.000253	0.00262 mg/L	0.000253	9.65%
Fe 239.562†	76.4	0.258 mg/L	0.0035	0.258 mg/L	0.0035	1.37%
Mg 279.077†	93.2	0.129 mg/L	0.0086	0.129 mg/L	0.0086	6.67%
Mn 257.610†	2954.6	0.00784 mg/L	0.000106	0.00784 mg/L	0.000106	1.36%
Mo 202.031†	-3.8	0.00017 mg/L	0.000235	0.00017 mg/L	0.000235	141.06%
Ni 231.604†	8.2	0.00045 mg/L	0.000357	0.00045 mg/L	0.000357	79.61%
Pb 220.353†	9.4	0.00279 mg/L	0.000240	0.00279 mg/L	0.000240	8.62%
Sb 206.836†	2.0	-0.00139 mg/L	0.002094	-0.00139 mg/L	0.002094	150.92%
Se 196.026†	5.7	0.00264 mg/L	0.000818	0.00264 mg/L	0.000818	30.96%
Si 251.611†	2525.7	0.0774 mg/L	0.00250	0.0774 mg/L	0.00250	3.23%
Sn 189.927†	1.6	0.00076 mg/L	0.000481	0.00076 mg/L	0.000481	63.34%
Ti 334.940†	3128.3	0.00428 mg/L	0.000161	0.00428 mg/L	0.000161	3.76%
Tl 190.801†	2.5	0.00265 mg/L	0.001520	0.00265 mg/L	0.001520	57.25%
V 290.880†	173.5	0.00186 mg/L	0.001282	0.00186 mg/L	0.001282	68.92%
Zn 206.200†	317.4	0.0110 mg/L	0.00012	0.0110 mg/L	0.00012	1.06%
K 766.490†	486.0	0.0737 mg/L	0.01089	0.0737 mg/L	0.01089	14.78%
Na 589.592†	1742577.1	160 mg/L	2.3	160 mg/L	2.3	1.45%
Sr 407.771†	1250.6	0.00126 mg/L	0.000086	0.00126 mg/L	0.000086	6.80%
Li 670.784†	87.9	0.00256 mg/L	0.001695	0.00256 mg/L	0.001695	66.20%

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Sequence No.: 22 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/12/2011 6:32:42 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4769523.9						13195.57	0.28%
YRADIAL	308665.6						6907.31	2.24%
Ga 417.206	1257285.4						6957.57	0.55%
GaRADIAL	65800.4						500.97	0.76%
Ag 328.068†	83431.6	0.415	mg/L	0.0041	0.415	mg/L	0.0041	0.99%
QC value within limits for Ag 328.068 Recovery = 103.65%								
Al 396.153†	52637.1	10.5	mg/L	0.01	10.5	mg/L	0.01	0.08%
QC value within limits for Al 396.153 Recovery = 105.37%								
As 188.979†	393.0	0.418	mg/L	0.0010	0.418	mg/L	0.0010	0.25%
QC value within limits for As 188.979 Recovery = 104.59%								
Ba 233.527†	54136.7	1.03	mg/L	0.009	1.03	mg/L	0.009	0.91%
QC value within limits for Ba 233.527 Recovery = 103.04%								
Be 234.861†	26706.2	0.0543	mg/L	0.00073	0.0543	mg/L	0.00073	1.35%
QC value within limits for Be 234.861 Recovery = 108.52%								
B 249.677†	26490.3	0.525	mg/L	0.0062	0.525	mg/L	0.0062	1.17%
QC value within limits for B 249.677 Recovery = 104.93%								
Ca 227.546†	937.7	10.6	mg/L	0.08	10.6	mg/L	0.08	0.75%
QC value within limits for Ca 227.546 Recovery = 105.95%								
Cd 228.802†	761.7	0.0486	mg/L	0.00007	0.0486	mg/L	0.00007	0.15%
QC value within limits for Cd 228.802 Recovery = 97.26%								
Co 228.616†	3445.6	0.205	mg/L	0.0007	0.205	mg/L	0.0007	0.34%
QC value within limits for Co 228.616 Recovery = 102.41%								
Cr 267.716†	56916.6	0.509	mg/L	0.0041	0.509	mg/L	0.0041	0.80%
QC value within limits for Cr 267.716 Recovery = 101.80%								
Cu 327.393†	75562.9	0.530	mg/L	0.0058	0.530	mg/L	0.0058	1.09%
QC value within limits for Cu 327.393 Recovery = 105.95%								
Fe 239.562†	1178.5	3.92	mg/L	0.018	3.92	mg/L	0.018	0.46%
QC value within limits for Fe 239.562 Recovery = 97.94%								
Mg 279.077†	7196.7	9.84	mg/L	0.077	9.84	mg/L	0.077	0.78%

Approved: April 13, 2011

QC value within limits for Mg 279.077 Recovery = 98.35%
Mn 257.610† 233130.7 0.521 mg/L 0.0040 0.521 mg/L 0.0040 0.77%
QC value within limits for Mn 257.610 Recovery = 104.23%
Mo 202.031† 12197.2 1.03 mg/L 0.004 1.03 mg/L 0.004 0.42%
QC value within limits for Mo 202.031 Recovery = 102.71%
Ni 231.604† 15372.3 0.509 mg/L 0.0046 0.509 mg/L 0.0046 0.90%
QC value within limits for Ni 231.604 Recovery = 101.89%
Pb 220.353† 2550.9 0.514 mg/L 0.0020 0.514 mg/L 0.0020 0.40%
QC value within limits for Pb 220.353 Recovery = 102.88%
Sb 206.836† 1671.4 1.26 mg/L 0.010 1.26 mg/L 0.010 0.79%
QC value within limits for Sb 206.836 Recovery = 104.61%
Se 196.026† 489.4 0.412 mg/L 0.0020 0.412 mg/L 0.0020 0.47%
QC value within limits for Se 196.026 Recovery = 103.12%
Si 251.611† 167235.3 5.12 mg/L 0.056 5.12 mg/L 0.056 1.09%
QC value within limits for Si 251.611 Recovery = 102.46%
Sn 189.927† 5202.5 1.01 mg/L 0.003 1.01 mg/L 0.003 0.32%
QC value within limits for Sn 189.927 Recovery = 100.82%
Ti 334.940† 746790.4 1.04 mg/L 0.005 1.04 mg/L 0.005 0.44%
QC value within limits for Ti 334.940 Recovery = 104.35%
Tl 190.801† 760.2 0.530 mg/L 0.0024 0.530 mg/L 0.0024 0.45%
QC value within limits for Tl 190.801 Recovery = 105.92%
V 290.880† 149160.2 1.02 mg/L 0.007 1.02 mg/L 0.007 0.65%
QC value within limits for V 290.880 Recovery = 102.19%
Zn 206.200† 29534.4 1.02 mg/L 0.005 1.02 mg/L 0.005 0.53%
QC value within limits for Zn 206.200 Recovery = 101.66%
K 766.490† 130263.5 48.8 mg/L 0.34 48.8 mg/L 0.34 0.69%
QC value within limits for K 766.490 Recovery = 97.69%
Na 589.592† 646607.8 49.8 mg/L 0.75 49.8 mg/L 0.75 1.51%
QC value within limits for Na 589.592 Recovery = 99.61%
Sr 407.771† 922928.9 0.872 mg/L 0.0748 0.872 mg/L 0.0748 8.58%
QC value less than the lower limit for Sr 407.771 Recovery = 87.16%
Li 670.784† 82219.5 1.05 mg/L 0.004 1.05 mg/L 0.004 0.42%
QC value within limits for Li 670.784 Recovery = 105.02%
QC Failed. Continue with analysis.

Sequence No.: 23 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/12/2011 6:39:20 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5072734.9						13801.88	0.27%
YRADIAL	318502.1						2618.47	0.82%
Ga 417.206	1313202.1						14198.47	1.08%
GaRADIAL	67109.3						1556.93	2.32%
Ag 328.068†	382.9	0.00198	mg/L	0.000262	0.00198	mg/L	0.000262	13.25%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-23.5	-0.00116	mg/L	0.004207	-0.00116	mg/L	0.004207	362.52%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.7	0.00378	mg/L	0.003122	0.00378	mg/L	0.003122	82.61%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.3	-0.00012	mg/L	0.000055	-0.00012	mg/L	0.000055	44.33%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-51.2	-0.00012	mg/L	0.000014	-0.00012	mg/L	0.000014	11.47%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	0.6	0.00162	mg/L	0.000421	0.00162	mg/L	0.000421	25.95%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	6.2	0.0495	mg/L	0.07789	0.0495	mg/L	0.07789	157.21%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	1.7	0.00003	mg/L	0.000126	0.00003	mg/L	0.000126	373.75%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	4.7	0.00023	mg/L	0.000130	0.00023	mg/L	0.000130	55.98%
QC value within limits for Co 228.616 Recovery = Not calculated								

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Cr 267.716†	-37.7	-0.00040 mg/L	0.000134	-0.00040 mg/L	0.000134	33.73%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	188.5	0.00044 mg/L	0.000652	0.00044 mg/L	0.000652	149.35%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	-1.2	0.00052 mg/L	0.008489	0.00052 mg/L	0.008489	>999.9%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	-4.9	-0.00507 mg/L	0.002168	-0.00507 mg/L	0.002168	42.78%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	-43.0	-0.00030 mg/L	0.000012	-0.00030 mg/L	0.000012	3.99%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	8.9	0.00122 mg/L	0.000317	0.00122 mg/L	0.000317	26.04%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	-13.1	-0.00026 mg/L	0.000114	-0.00026 mg/L	0.000114	44.20%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	-12.5	-0.00158 mg/L	0.000574	-0.00158 mg/L	0.000574	36.43%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	-3.0	-0.00513 mg/L	0.002408	-0.00513 mg/L	0.002408	46.92%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	1.7	-0.00081 mg/L	0.003951	-0.00081 mg/L	0.003951	489.42%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	15.4	0.00023 mg/L	0.000706	0.00023 mg/L	0.000706	311.61%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-0.9	0.00029 mg/L	0.000157	0.00029 mg/L	0.000157	53.57%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-3.2	-0.00009 mg/L	0.000082	-0.00009 mg/L	0.000082	86.10%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	5.0	0.00426 mg/L	0.001560	0.00426 mg/L	0.001560	36.64%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	-154.5	-0.00041 mg/L	0.000693	-0.00041 mg/L	0.000693	170.28%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	-9.9	-0.00023 mg/L	0.000218	-0.00023 mg/L	0.000218	94.73%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	-84.2	0.0328 mg/L	0.03668	0.0328 mg/L	0.03668	111.77%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	905.1	0.0889 mg/L	0.00905	0.0889 mg/L	0.00905	10.19%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	60.2	0.00017 mg/L	0.000014	0.00017 mg/L	0.000014	8.46%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	-180.2	-0.00086 mg/L	0.000603	-0.00086 mg/L	0.000603	70.16%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 24 **Autosampler Location: 117**
Sample ID: L1104017601 0.2 **Date Collected: 4/12/2011 6:45:56 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104017601 0.2

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104017601 0.2

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4334378.7						46162.80	1.07%
YRADIAL	302127.5						4776.84	1.58%
Ga 417.206	1197477.6						14829.18	1.24%
GaRADIAL	65843.6						359.88	0.55%
Ag 328.068†	780.6	0.00343	mg/L	0.000466	0.00343	mg/L	0.000466	13.56%
Al 396.153†	2828.8	0.569	mg/L	0.0090	0.569	mg/L	0.0090	1.59%
As 188.979†	10.7	0.0110	mg/L	0.00173	0.0110	mg/L	0.00173	15.73%
Ba 233.527†	124365.1	2.36	mg/L	0.017	2.36	mg/L	0.017	0.71%
Be 234.861†	24.2	0.00002	mg/L	0.000013	0.00002	mg/L	0.000013	86.00%
B 249.677†	2801.3	0.0592	mg/L	0.00096	0.0592	mg/L	0.00096	1.62%
Ca 227.546†	9295.4	102	mg/L	1.1	102	mg/L	1.1	1.09%
Cd 228.802†	5.4	0.00021	mg/L	0.000083	0.00021	mg/L	0.000083	38.66%
Co 228.616†	-26.3	-0.00245	mg/L	0.000219	-0.00245	mg/L	0.000219	8.94%
Cr 267.716†	1480.7	0.0132	mg/L	0.00024	0.0132	mg/L	0.00024	1.81%
Cu 327.393†	734.2	0.00434	mg/L	0.000462	0.00434	mg/L	0.000462	10.64%

Approved: April 13, 2011

Fe 239.562†	214.2	0.716 mg/L	0.0082	0.716 mg/L	0.0082	1.15%
Mg 279.077†	618.0	0.846 mg/L	0.0055	0.846 mg/L	0.0055	0.65%
Mn 257.610†	9822.0	0.0249 mg/L	0.00023	0.0249 mg/L	0.00023	0.93%
Mo 202.031†	1007.9	0.0853 mg/L	0.00100	0.0853 mg/L	0.00100	1.18%
Ni 231.604†	76.3	0.00266 mg/L	0.000192	0.00266 mg/L	0.000192	7.21%
Pb 220.353†	-18.8	0.00246 mg/L	0.000646	0.00246 mg/L	0.000646	26.25%
Sb 206.836†	15.3	0.00913 mg/L	0.002142	0.00913 mg/L	0.002142	23.46%
Se 196.026†	-30.6	-0.00236 mg/L	0.001961	-0.00236 mg/L	0.001961	83.10%
Si 251.611†	45748.2	1.40 mg/L	0.013	1.40 mg/L	0.013	0.93%
Sn 189.927†	7.6	0.00194 mg/L	0.000642	0.00194 mg/L	0.000642	33.15%
Ti 334.940†	2107.1	0.00387 mg/L	0.000364	0.00387 mg/L	0.000364	9.40%
Tl 190.801†	115.8	0.0704 mg/L	0.00470	0.0704 mg/L	0.00470	6.67%
V 290.880†	1473.8	0.0107 mg/L	0.00024	0.0107 mg/L	0.00024	2.22%
Zn 206.200†	873.5	0.0301 mg/L	0.00028	0.0301 mg/L	0.00028	0.92%
K 766.490†	125224.4	46.9 mg/L	0.42	46.9 mg/L	0.42	0.90%
Na 589.592†	Saturated2					
Sr 407.771†	2582022.3	2.44 mg/L	0.201	2.44 mg/L	0.201	8.23%
Li 670.784†	8476.2	0.110 mg/L	0.0034	0.110 mg/L	0.0034	3.09%

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Sequence No.: 25 **Autosampler Location: 118**
Sample ID: L1104017701 **Date Collected: 4/12/2011 6:52:39 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104017701

Analyte	**Back Pressure**	**Flow**
All	202.0 kPa	0.50 L/min

Mean Data: L1104017701

Analyte	**Mean Corrected Intensity**	**Calib. Conc.**	**Units**	**Std.Dev.**	**Sample Conc.**	**Units**	**Std.Dev.**	**RSD**
Y 371.029	4895572.8						89190.90	1.82%
YRADIAL	312891.3						2433.74	0.78%
Ga 417.206	1353643.1						29444.15	2.18%
GaRADIAL	67902.6						751.72	1.11%
Ag 328.068†	498.5	0.00244	mg/L	0.000382	0.00244	mg/L	0.000382	15.68%
Al 396.153†	7465.2	1.50	mg/L	0.006	1.50	mg/L	0.006	0.41%
As 188.979†	3.0	0.00445	mg/L	0.002911	0.00445	mg/L	0.002911	65.36%
Ba 233.527†	6441.5	0.122	mg/L	0.0016	0.122	mg/L	0.0016	1.35%
Be 234.861†	213.1	0.00007	mg/L	0.000126	0.00007	mg/L	0.000126	171.53%
B 249.677†	1024.8	0.0276	mg/L	0.00135	0.0276	mg/L	0.00135	4.89%
Ca 227.546†	3750.3	41.1	mg/L	0.61	41.1	mg/L	0.61	1.49%
Cd 228.802†	7.7	0.00043	mg/L	0.000195	0.00043	mg/L	0.000195	45.49%
Co 228.616†	15.0	0.00071	mg/L	0.000290	0.00071	mg/L	0.000290	40.68%
Cr 267.716†	204.2	0.00174	mg/L	0.000047	0.00174	mg/L	0.000047	2.70%
Cu 327.393†	5900.4	0.0406	mg/L	0.00070	0.0406	mg/L	0.00070	1.73%
Fe 239.562†	493.8	1.64	mg/L	0.009	1.64	mg/L	0.009	0.56%
Mg 279.077†	6807.7	9.30	mg/L	0.044	9.30	mg/L	0.044	0.47%
Mn 257.610†	7501.8	0.0176	mg/L	0.00016	0.0176	mg/L	0.00016	0.89%
Mo 202.031†	5.8	0.00105	mg/L	0.000219	0.00105	mg/L	0.000219	20.91%
Ni 231.604†	32.8	0.00123	mg/L	0.000324	0.00123	mg/L	0.000324	26.26%
Pb 220.353†	-2.7	0.00230	mg/L	0.002871	0.00230	mg/L	0.002871	124.88%
Sb 206.836†	5.4	0.00114	mg/L	0.002997	0.00114	mg/L	0.002997	262.06%
Se 196.026†	-19.7	-0.00816	mg/L	0.004135	-0.00816	mg/L	0.004135	50.66%
Si 251.611†	171109.2	5.26	mg/L	0.041	5.26	mg/L	0.041	0.79%
Sn 189.927†	1.0	0.00064	mg/L	0.000906	0.00064	mg/L	0.000906	140.72%
Ti 334.940†	17175.6	0.0243	mg/L	0.00012	0.0243	mg/L	0.00012	0.48%
Tl 190.801†	72.0	0.0465	mg/L	0.00258	0.0465	mg/L	0.00258	5.55%
V 290.880†	7.0	0.00082	mg/L	0.000480	0.00082	mg/L	0.000480	58.46%
Zn 206.200†	10109.1	0.347	mg/L	0.0054	0.347	mg/L	0.0054	1.55%
K 766.490†	6787.2	2.45	mg/L	0.005	2.45	mg/L	0.005	0.19%
Na 589.592†	124822.6	9.09	mg/L	0.123	9.09	mg/L	0.123	1.35%
Sr 407.771†	166861.2	0.158	mg/L	0.0147	0.158	mg/L	0.0147	9.34%
Li 670.784†	71.3	0.00235	mg/L	0.001217	0.00235	mg/L	0.001217	51.81%

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Sequence No.: 26 **Autosampler Location: 119**
Sample ID: L1104000901 **Date Collected: 4/12/2011 6:59:19 PM**
Analyst: KHR **Data Type: Original**

Approved: April 13, 2011

Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104000901

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104000901

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5078281.1						53847.67	1.06%
YRADIAL	324500.3						3119.25	0.96%
Ga 417.206	1323388.4						9519.56	0.72%
GaRADIAL	68510.9						1926.93	2.81%
Ag 328.068†	500.9	0.00256	mg/L	0.000110	0.00256	mg/L	0.000110	4.30%
Al 396.153†	-29.9	-0.00244	mg/L	0.013567	-0.00244	mg/L	0.013567	555.33%
As 188.979†	-1.4	0.00050	mg/L	0.003449	0.00050	mg/L	0.003449	691.12%
Ba 233.527†	-0.7	-0.00013	mg/L	0.000109	-0.00013	mg/L	0.000109	82.16%
Be 234.861†	-41.0	-0.00010	mg/L	0.000004	-0.00010	mg/L	0.000004	3.82%
B 249.677†	-120.2	-0.00073	mg/L	0.000369	-0.00073	mg/L	0.000369	50.80%
Ca 227.546†	7.6	0.0640	mg/L	0.08647	0.0640	mg/L	0.08647	135.05%
Cd 228.802†	4.0	0.00021	mg/L	0.000012	0.00021	mg/L	0.000012	5.65%
Co 228.616†	5.6	0.00029	mg/L	0.000076	0.00029	mg/L	0.000076	26.51%
Cr 267.716†	-36.6	-0.00039	mg/L	0.000074	-0.00039	mg/L	0.000074	19.17%
Cu 327.393†	230.6	0.00073	mg/L	0.000721	0.00073	mg/L	0.000721	98.47%
Fe 239.562†	-0.3	0.00356	mg/L	0.003003	0.00356	mg/L	0.003003	84.34%
Mg 279.077†	-4.5	-0.00442	mg/L	0.008247	-0.00442	mg/L	0.008247	186.46%
Mn 257.610†	-50.6	-0.00031	mg/L	0.000024	-0.00031	mg/L	0.000024	7.75%
Mo 202.031†	1.1	0.00056	mg/L	0.000325	0.00056	mg/L	0.000325	57.84%
Ni 231.604†	-16.5	-0.00037	mg/L	0.000039	-0.00037	mg/L	0.000039	10.68%
Pb 220.353†	-13.3	-0.00173	mg/L	0.000586	-0.00173	mg/L	0.000586	33.84%
Sb 206.836†	1.0	-0.00215	mg/L	0.001281	-0.00215	mg/L	0.001281	59.47%
Se 196.026†	1.0	-0.00137	mg/L	0.004816	-0.00137	mg/L	0.004816	351.93%
Si 251.611†	-44.3	-0.00160	mg/L	0.000404	-0.00160	mg/L	0.000404	25.29%
Sn 189.927†	-0.5	0.00036	mg/L	0.000650	0.00036	mg/L	0.000650	182.64%
Ti 334.940†	39.2	-0.00004	mg/L	0.000064	-0.00004	mg/L	0.000064	180.97%
Tl 190.801†	2.9	0.00284	mg/L	0.001477	0.00284	mg/L	0.001477	52.01%
V 290.880†	-199.0	-0.00071	mg/L	0.000582	-0.00071	mg/L	0.000582	81.83%
Zn 206.200†	39.2	0.00146	mg/L	0.000125	0.00146	mg/L	0.000125	8.55%
K 766.490†	-19.9	0.0552	mg/L	0.02575	0.0552	mg/L	0.02575	46.67%
Na 589.592†	4660.4	0.359	mg/L	0.0099	0.359	mg/L	0.0099	2.76%
Sr 407.771†	62.5	0.00017	mg/L	0.000027	0.00017	mg/L	0.000027	15.63%
Li 670.784†	-12.4	0.00128	mg/L	0.000986	0.00128	mg/L	0.000986	76.91%

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Sequence No.: 27 **Autosampler Location: 120**
Sample ID: L1104000902 **Date Collected: 4/12/2011 7:05:59 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104000902

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104000902

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4934293.9						16777.67	0.34%
YRADIAL	316491.2						8005.04	2.53%
Ga 417.206	1273513.0						7145.07	0.56%
GaRADIAL	66683.1						350.03	0.52%
Ag 328.068†	502.2	0.00257	mg/L	0.000555	0.00257	mg/L	0.000555	21.55%
Al 396.153†	-50.4	-0.00655	mg/L	0.006950	-0.00655	mg/L	0.006950	106.14%
As 188.979†	-0.3	0.00165	mg/L	0.001283	0.00165	mg/L	0.001283	77.62%
Ba 233.527†	2.0	-0.00008	mg/L	0.000073	-0.00008	mg/L	0.000073	92.20%
Be 234.861†	-67.4	-0.00015	mg/L	0.000015	-0.00015	mg/L	0.000015	10.08%
B 249.677†	-108.0	-0.00050	mg/L	0.000038	-0.00050	mg/L	0.000038	7.71%
Ca 227.546†	1.3	-0.00370	mg/L	0.081877	-0.00370	mg/L	0.081877	>999.9%

Approved: April 13, 2011

Cd 228.802†	1.0	0.00000 mg/L	0.000107	0.00000 mg/L	0.000107	>999.9%
Co 228.616†	2.8	0.00011 mg/L	0.000187	0.00011 mg/L	0.000187	164.85%
Cr 267.716†	-34.1	-0.00037 mg/L	0.000107	-0.00037 mg/L	0.000107	29.17%
Cu 327.393†	123.9	-0.00002 mg/L	0.000728	-0.00002 mg/L	0.000728	>999.9%
Fe 239.562†	-1.6	-0.00066 mg/L	0.003673	-0.00066 mg/L	0.003673	553.13%
Mg 279.077†	-3.8	-0.00346 mg/L	0.003304	-0.00346 mg/L	0.003304	95.51%
Mn 257.610†	-52.2	-0.00032 mg/L	0.000003	-0.00032 mg/L	0.000003	1.01%
Mo 202.031†	-2.1	0.00030 mg/L	0.000614	0.00030 mg/L	0.000614	208.09%
Ni 231.604†	-0.9	0.00015 mg/L	0.000064	0.00015 mg/L	0.000064	43.75%
Pb 220.353†	-10.9	-0.00127 mg/L	0.001288	-0.00127 mg/L	0.001288	101.73%
Sb 206.836†	-2.7	-0.00493 mg/L	0.000084	-0.00493 mg/L	0.000084	1.70%
Se 196.026†	3.0	0.00023 mg/L	0.004015	0.00023 mg/L	0.004015	>999.9%
Si 251.611†	-19.3	-0.00083 mg/L	0.000081	-0.00083 mg/L	0.000081	9.83%
Sn 189.927†	0.0	0.00046 mg/L	0.000761	0.00046 mg/L	0.000761	164.87%
Ti 334.940†	-43.9	-0.00015 mg/L	0.000106	-0.00015 mg/L	0.000106	69.62%
Tl 190.801†	0.2	0.00102 mg/L	0.004126	0.00102 mg/L	0.004126	403.17%
V 290.880†	-44.5	0.00035 mg/L	0.001035	0.00035 mg/L	0.001035	298.39%
Zn 206.200†	17.6	0.00072 mg/L	0.000147	0.00072 mg/L	0.000147	20.55%
K 766.490†	-92.3	0.0298 mg/L	0.00457	0.0298 mg/L	0.00457	15.32%
Na 589.592†	2579.7	0.209 mg/L	0.0063	0.209 mg/L	0.0063	3.01%
Sr 407.771†	87.2	0.00019 mg/L	0.000028	0.00019 mg/L	0.000028	14.26%
Li 670.784†	-113.3	-0.00001 mg/L	0.000621	-0.00001 mg/L	0.000621	>999.9%

Sequence No.: 28 **Autosampler Location: 121**
Sample ID: L1104000903 **Date Collected: 4/12/2011 7:12:38 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104000903

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104000903

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5029839.7						42286.32	0.84%
YRADIAL	320182.2						9225.90	2.88%
Ga 417.206	1310578.5						21859.29	1.67%
GaRADIAL	67574.5						781.99	1.16%
Ag 328.068†	505.3	0.00259	mg/L	0.000256	0.00259	mg/L	0.000256	9.88%
Al 396.153†	-21.9	-0.00084	mg/L	0.003189	-0.00084	mg/L	0.003189	377.47%
As 188.979†	2.5	0.00470	mg/L	0.001964	0.00470	mg/L	0.001964	41.77%
Ba 233.527†	0.4	-0.00011	mg/L	0.000113	-0.00011	mg/L	0.000113	101.71%
Be 234.861†	-65.8	-0.00015	mg/L	0.000015	-0.00015	mg/L	0.000015	10.19%
B 249.677†	-138.0	-0.00109	mg/L	0.000140	-0.00109	mg/L	0.000140	12.90%
Ca 227.546†	3.8	0.0232	mg/L	0.06047	0.0232	mg/L	0.06047	261.01%
Cd 228.802†	0.9	-0.00003	mg/L	0.000109	-0.00003	mg/L	0.000109	408.07%
Co 228.616†	7.3	0.00039	mg/L	0.000051	0.00039	mg/L	0.000051	13.07%
Cr 267.716†	-30.4	-0.00033	mg/L	0.000078	-0.00033	mg/L	0.000078	23.57%
Cu 327.393†	158.3	0.00022	mg/L	0.000361	0.00022	mg/L	0.000361	160.80%
Fe 239.562†	-1.4	0.00007	mg/L	0.002557	0.00007	mg/L	0.002557	>999.9%
Mg 279.077†	-2.2	-0.00127	mg/L	0.002956	-0.00127	mg/L	0.002956	232.31%
Mn 257.610†	-40.6	-0.00029	mg/L	0.000019	-0.00029	mg/L	0.000019	6.36%
Mo 202.031†	-1.3	0.00036	mg/L	0.000209	0.00036	mg/L	0.000209	57.94%
Ni 231.604†	-12.3	-0.00023	mg/L	0.000032	-0.00023	mg/L	0.000032	14.15%
Pb 220.353†	-5.2	-0.00012	mg/L	0.001660	-0.00012	mg/L	0.001660	>999.9%
Sb 206.836†	-1.9	-0.00437	mg/L	0.003261	-0.00437	mg/L	0.003261	74.68%
Se 196.026†	10.1	0.00628	mg/L	0.000466	0.00628	mg/L	0.000466	7.42%
Si 251.611†	-55.5	-0.00194	mg/L	0.000366	-0.00194	mg/L	0.000366	18.87%
Sn 189.927†	-2.4	-0.00001	mg/L	0.000376	-0.00001	mg/L	0.000376	>999.9%
Ti 334.940†	47.2	-0.00002	mg/L	0.000157	-0.00002	mg/L	0.000157	638.27%
Tl 190.801†	1.2	0.00171	mg/L	0.005566	0.00171	mg/L	0.005566	326.04%
V 290.880†	-65.7	0.00020	mg/L	0.000250	0.00020	mg/L	0.000250	123.98%
Zn 206.200†	31.2	0.00118	mg/L	0.000140	0.00118	mg/L	0.000140	11.80%
K 766.490†	-166.4	0.00386	mg/L	0.051534	0.00386	mg/L	0.051534	>999.9%
Na 589.592†	1824.8	0.155	mg/L	0.0047	0.155	mg/L	0.0047	3.02%
Sr 407.771†	16.2	0.00013	mg/L	0.000047	0.00013	mg/L	0.000047	37.13%
Li 670.784†	-74.8	0.00049	mg/L	0.000674	0.00049	mg/L	0.000674	138.98%

Approved: April 13, 2011

Sequence No.: 29 **Autosampler Location: 122**
Sample ID: L1104000904 **Date Collected: 4/12/2011 7:19:18 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104000904

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104000904

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4984303.0						13559.14	0.27%
YRADIAL	322207.9						2121.15	0.66%
Ga 417.206	1294676.4						15470.09	1.19%
GaRADIAL	68401.9						903.99	1.32%
Ag 328.068†	501.5	0.00257	mg/L	0.000791	0.00257	mg/L	0.000791	30.79%
Al 396.153†	40.6	0.0117	mg/L	0.01570	0.0117	mg/L	0.01570	134.45%
As 188.979†	2.4	0.00453	mg/L	0.000694	0.00453	mg/L	0.000694	15.33%
Ba 233.527†	-3.0	-0.00017	mg/L	0.000100	-0.00017	mg/L	0.000100	57.16%
Be 234.861†	-55.6	-0.00013	mg/L	0.000026	-0.00013	mg/L	0.000026	20.30%
B 249.677†	-148.0	-0.00128	mg/L	0.000071	-0.00128	mg/L	0.000071	5.56%
Ca 227.546†	0.7	-0.0104	mg/L	0.03792	-0.0104	mg/L	0.03792	365.33%
Cd 228.802†	1.1	-0.00001	mg/L	0.000117	-0.00001	mg/L	0.000117	907.53%
Co 228.616†	4.7	0.00023	mg/L	0.000209	0.00023	mg/L	0.000209	89.84%
Cr 267.716†	-32.3	-0.00035	mg/L	0.000169	-0.00035	mg/L	0.000169	48.29%
Cu 327.393†	180.1	0.00038	mg/L	0.000456	0.00038	mg/L	0.000456	120.53%
Fe 239.562†	-0.5	0.00305	mg/L	0.007913	0.00305	mg/L	0.007913	259.55%
Mg 279.077†	-2.1	-0.00116	mg/L	0.004055	-0.00116	mg/L	0.004055	348.34%
Mn 257.610†	-56.5	-0.00033	mg/L	0.000021	-0.00033	mg/L	0.000021	6.33%
Mo 202.031†	2.8	0.00071	mg/L	0.000425	0.00071	mg/L	0.000425	60.00%
Ni 231.604†	-5.9	-0.00002	mg/L	0.000167	-0.00002	mg/L	0.000167	>999.9%
Pb 220.353†	-13.4	-0.00175	mg/L	0.001725	-0.00175	mg/L	0.001725	98.50%
Sb 206.836†	0.8	-0.00231	mg/L	0.004522	-0.00231	mg/L	0.004522	195.41%
Se 196.026†	7.0	0.00361	mg/L	0.005112	0.00361	mg/L	0.005112	141.52%
Si 251.611†	-56.1	-0.00196	mg/L	0.000048	-0.00196	mg/L	0.000048	2.44%
Sn 189.927†	-8.0	-0.00109	mg/L	0.000939	-0.00109	mg/L	0.000939	86.07%
Ti 334.940†	16.1	-0.00007	mg/L	0.000057	-0.00007	mg/L	0.000057	83.23%
Tl 190.801†	-0.4	0.00059	mg/L	0.001926	0.00059	mg/L	0.001926	326.22%
V 290.880†	-6.7	0.00061	mg/L	0.000701	0.00061	mg/L	0.000701	115.67%
Zn 206.200†	15.5	0.00065	mg/L	0.000205	0.00065	mg/L	0.000205	31.76%
K 766.490†	-116.4	0.0215	mg/L	0.01942	0.0215	mg/L	0.01942	90.41%
Na 589.592†	1042.3	0.0987	mg/L	0.00376	0.0987	mg/L	0.00376	3.81%
Sr 407.771†	34.6	0.00014	mg/L	0.000064	0.00014	mg/L	0.000064	44.83%
Li 670.784†	-128.3	-0.00020	mg/L	0.000956	-0.00020	mg/L	0.000956	484.55%

Sequence No.: 30 **Autosampler Location: 123**
Sample ID: L1104000905 **Date Collected: 4/12/2011 7:25:58 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104000905

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: L1104000905

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5094076.7						26145.58	0.51%
YRADIAL	325415.4						3419.83	1.05%
Ga 417.206	1313160.3						3929.03	0.30%
GaRADIAL	68323.5						734.10	1.07%
Ag 328.068†	463.3	0.00238	mg/L	0.000557	0.00238	mg/L	0.000557	23.40%
Al 396.153†	-2.8	0.00300	mg/L	0.003483	0.00300	mg/L	0.003483	116.01%
As 188.979†	0.2	0.00218	mg/L	0.002267	0.00218	mg/L	0.002267	103.94%

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Ba 233.527†	-2.4	-0.00016	mg/L	0.000123	-0.00016	mg/L	0.000123 74.75%
Be 234.861†	-46.6	-0.00011	mg/L	0.000006	-0.00011	mg/L	0.000006 5.89%
B 249.677†	-167.5	-0.00167	mg/L	0.000158	-0.00167	mg/L	0.000158 9.45%
Ca 227.546†	1.3	-0.00437	mg/L	0.057660	-0.00437	mg/L	0.057660 >999.9%
Cd 228.802†	2.3	0.00008	mg/L	0.000259	0.00008	mg/L	0.000259 306.22%
Co 228.616†	1.5	0.00004	mg/L	0.000250	0.00004	mg/L	0.000250 674.50%
Cr 267.716†	-42.5	-0.00044	mg/L	0.000164	-0.00044	mg/L	0.000164 37.08%
Cu 327.393†	213.9	0.00061	mg/L	0.000364	0.00061	mg/L	0.000364 59.32%
Fe 239.562†	-1.3	0.00022	mg/L	0.004002	0.00022	mg/L	0.004002 >999.9%
Mg 279.077†	0.7	0.00270	mg/L	0.006888	0.00270	mg/L	0.006888 255.47%
Mn 257.610†	-54.0	-0.00033	mg/L	0.000021	-0.00033	mg/L	0.000021 6.54%
Mo 202.031†	-2.2	0.00028	mg/L	0.000128	0.00028	mg/L	0.000128 45.93%
Ni 231.604†	-15.0	-0.00032	mg/L	0.000115	-0.00032	mg/L	0.000115 36.29%
Pb 220.353†	-10.1	-0.00111	mg/L	0.001106	-0.00111	mg/L	0.001106 100.02%
Sb 206.836†	-1.0	-0.00366	mg/L	0.002734	-0.00366	mg/L	0.002734 74.70%
Se 196.026†	4.0	0.00107	mg/L	0.001682	0.00107	mg/L	0.001682 157.12%
Si 251.611†	-69.9	-0.00238	mg/L	0.000435	-0.00238	mg/L	0.000435 18.27%
Sn 189.927†	-9.0	-0.00129	mg/L	0.000887	-0.00129	mg/L	0.000887 68.86%
Ti 334.940†	38.7	-0.00004	mg/L	0.000137	-0.00004	mg/L	0.000137 372.44%
Tl 190.801†	-4.4	-0.00211	mg/L	0.000546	-0.00211	mg/L	0.000546 25.88%
V 290.880†	-167.0	-0.00049	mg/L	0.000517	-0.00049	mg/L	0.000517 105.13%
Zn 206.200†	24.2	0.00094	mg/L	0.000077	0.00094	mg/L	0.000077 8.13%
K 766.490†	-130.9	0.0164	mg/L	0.01017	0.0164	mg/L	0.01017 62.07%
Na 589.592†	890.1	0.0878	mg/L	0.00616	0.0878	mg/L	0.00616 7.02%
Sr 407.771†	16.8	0.00013	mg/L	0.000047	0.00013	mg/L	0.000047 36.78%
Li 670.784†	-180.1	-0.00086	mg/L	0.000700	-0.00086	mg/L	0.000700 81.70%

Sequence No.: 31 **Autosampler Location: 124**
Sample ID: L1104000906 **Date Collected: 4/12/2011 7:32:39 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104000906

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104000906

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5058801.0						48537.91	0.96%
YRADIAL	323468.9						5978.22	1.85%
Ga 417.206	1312591.6						17861.16	1.36%
GaRADIAL	68277.6						1637.83	2.40%
Ag 328.068†	375.5	0.00194	mg/L	0.000239	0.00194	mg/L	0.000239	12.29%
Al 396.153†	-18.6	-0.00017	mg/L	0.005780	-0.00017	mg/L	0.005780	>999.9%
As 188.979†	1.5	0.00362	mg/L	0.003478	0.00362	mg/L	0.003478	96.16%
Ba 233.527†	1.3	-0.00009	mg/L	0.000049	-0.00009	mg/L	0.000049	52.27%
Be 234.861†	-51.3	-0.00012	mg/L	0.000025	-0.00012	mg/L	0.000025	20.62%
B 249.677†	-169.3	-0.00168	mg/L	0.000283	-0.00168	mg/L	0.000283	16.84%
Ca 227.546†	3.9	0.0246	mg/L	0.01177	0.0246	mg/L	0.01177	47.90%
Cd 228.802†	0.6	-0.00004	mg/L	0.000145	-0.00004	mg/L	0.000145	328.63%
Co 228.616†	4.2	0.00020	mg/L	0.000432	0.00020	mg/L	0.000432	217.70%
Cr 267.716†	-41.6	-0.00043	mg/L	0.000132	-0.00043	mg/L	0.000132	30.55%
Cu 327.393†	294.8	0.00118	mg/L	0.000615	0.00118	mg/L	0.000615	52.05%
Fe 239.562†	0.0	0.00472	mg/L	0.003923	0.00472	mg/L	0.003923	83.05%
Mg 279.077†	-0.4	0.00109	mg/L	0.004888	0.00109	mg/L	0.004888	448.43%
Mn 257.610†	-43.5	-0.00030	mg/L	0.000033	-0.00030	mg/L	0.000033	10.98%
Mo 202.031†	-0.7	0.00041	mg/L	0.000286	0.00041	mg/L	0.000286	70.49%
Ni 231.604†	-11.8	-0.00021	mg/L	0.000043	-0.00021	mg/L	0.000043	20.03%
Pb 220.353†	-12.4	-0.00156	mg/L	0.000663	-0.00156	mg/L	0.000663	42.55%
Sb 206.836†	-0.8	-0.00352	mg/L	0.001287	-0.00352	mg/L	0.001287	36.56%
Se 196.026†	4.8	0.00178	mg/L	0.003208	0.00178	mg/L	0.003208	179.97%
Si 251.611†	-60.4	-0.00209	mg/L	0.000379	-0.00209	mg/L	0.000379	18.12%
Sn 189.927†	-5.8	-0.00067	mg/L	0.000363	-0.00067	mg/L	0.000363	53.94%
Ti 334.940†	-1.0	-0.00009	mg/L	0.000179	-0.00009	mg/L	0.000179	195.13%
Tl 190.801†	2.7	0.00272	mg/L	0.001374	0.00272	mg/L	0.001374	50.55%
V 290.880†	-74.3	0.00014	mg/L	0.000921	0.00014	mg/L	0.000921	643.44%
Zn 206.200†	17.3	0.00070	mg/L	0.000110	0.00070	mg/L	0.000110	15.60%
K 766.490†	-132.8	0.0157	mg/L	0.02893	0.0157	mg/L	0.02893	183.84%

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Na 589.592†	889.0	0.0877	mg/L	0.01052	0.0877	mg/L	0.01052 11.99%
Sr 407.771†	6.9	0.00012	mg/L	0.000026	0.00012	mg/L	0.000026 22.40%
Li 670.784†	-88.7	0.00031	mg/L	0.000628	0.00031	mg/L	0.000628 203.77%

Sequence No.: 32 **Autosampler Location: 125**
Sample ID: L1104000907 **Date Collected: 4/12/2011 7:39:18 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104000907

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104000907

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5020960.2						37721.46	0.75%
YRADIAL	318939.6						6610.61	2.07%
Ga 417.206	1319754.9						18381.02	1.39%
GaRADIAL	67305.6						328.65	0.49%
Ag 328.068†	440.1	0.00227	mg/L	0.001050	0.00227	mg/L	0.001050	46.34%
Al 396.153†	-0.6	0.00343	mg/L	0.010061	0.00343	mg/L	0.010061	293.20%
As 188.979†	-2.5	-0.00071	mg/L	0.001687	-0.00071	mg/L	0.001687	239.12%
Ba 233.527†	0.9	-0.00010	mg/L	0.000047	-0.00010	mg/L	0.000047	46.55%
Be 234.861†	-44.7	-0.00011	mg/L	0.000027	-0.00011	mg/L	0.000027	25.61%
B 249.677†	-171.8	-0.00173	mg/L	0.000289	-0.00173	mg/L	0.000289	16.71%
Ca 227.546†	4.0	0.0253	mg/L	0.06854	0.0253	mg/L	0.06854	271.03%
Cd 228.802†	1.1	0.00002	mg/L	0.000071	0.00002	mg/L	0.000071	309.57%
Co 228.616†	5.7	0.00029	mg/L	0.000399	0.00029	mg/L	0.000399	137.39%
Cr 267.716†	-28.8	-0.00032	mg/L	0.000113	-0.00032	mg/L	0.000113	35.43%
Cu 327.393†	251.4	0.00088	mg/L	0.000709	0.00088	mg/L	0.000709	80.78%
Fe 239.562†	0.1	0.00510	mg/L	0.001769	0.00510	mg/L	0.001769	34.66%
Mg 279.077†	-1.3	-0.00012	mg/L	0.002221	-0.00012	mg/L	0.002221	>999.9%
Mn 257.610†	-56.4	-0.00033	mg/L	0.000005	-0.00033	mg/L	0.000005	1.51%
Mo 202.031†	-0.6	0.00042	mg/L	0.000494	0.00042	mg/L	0.000494	117.47%
Ni 231.604†	-7.8	-0.00008	mg/L	0.000240	-0.00008	mg/L	0.000240	296.17%
Pb 220.353†	-9.0	-0.00088	mg/L	0.000367	-0.00088	mg/L	0.000367	41.87%
Sb 206.836†	-0.7	-0.00344	mg/L	0.002060	-0.00344	mg/L	0.002060	59.81%
Se 196.026†	3.0	0.00030	mg/L	0.006651	0.00030	mg/L	0.006651	>999.9%
Si 251.611†	-53.1	-0.00187	mg/L	0.000787	-0.00187	mg/L	0.000787	42.15%
Sn 189.927†	-2.8	-0.00009	mg/L	0.000296	-0.00009	mg/L	0.000296	322.08%
Ti 334.940†	56.5	-0.00001	mg/L	0.000138	-0.00001	mg/L	0.000138	>999.9%
Tl 190.801†	3.9	0.00354	mg/L	0.003200	0.00354	mg/L	0.003200	90.50%
V 290.880†	-42.4	0.00036	mg/L	0.000358	0.00036	mg/L	0.000358	98.72%
Zn 206.200†	18.3	0.00074	mg/L	0.000104	0.00074	mg/L	0.000104	14.01%
K 766.490†	-144.3	0.0117	mg/L	0.02392	0.0117	mg/L	0.02392	204.76%
Na 589.592†	750.3	0.0778	mg/L	0.00542	0.0778	mg/L	0.00542	6.97%
Sr 407.771†	0.7	0.00011	mg/L	0.000027	0.00011	mg/L	0.000027	24.65%
Li 670.784†	-148.2	-0.00045	mg/L	0.000281	-0.00045	mg/L	0.000281	62.32%

Sequence No.: 33 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/12/2011 7:45:59 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4796983.3						31960.91	0.67%
YRADIAL	310468.9						1295.38	0.42%
Ga 417.206	1265701.0						6416.18	0.51%

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GaRADIAL	65991.8				1303.81	1.98%
Ag 328.068†	83381.7	0.414 mg/L	0.0056	0.414 mg/L	0.0056	1.36%
QC value within limits for Ag 328.068 Recovery = 103.59%						
Al 396.153†	52840.8	10.6 mg/L	0.03	10.6 mg/L	0.03	0.25%
QC value within limits for Al 396.153 Recovery = 105.78%						
As 188.979†	391.8	0.417 mg/L	0.0025	0.417 mg/L	0.0025	0.59%
QC value within limits for As 188.979 Recovery = 104.28%						
Ba 233.527†	53867.7	1.03 mg/L	0.019	1.03 mg/L	0.019	1.81%
QC value within limits for Ba 233.527 Recovery = 102.52%						
Be 234.861†	26696.2	0.0542 mg/L	0.00078	0.0542 mg/L	0.00078	1.44%
QC value within limits for Be 234.861 Recovery = 108.49%						
B 249.677†	26311.6	0.521 mg/L	0.0107	0.521 mg/L	0.0107	2.05%
QC value within limits for B 249.677 Recovery = 104.21%						
Ca 227.546†	946.7	10.7 mg/L	0.04	10.7 mg/L	0.04	0.42%
QC value within limits for Ca 227.546 Recovery = 106.93%						
Cd 228.802†	760.0	0.0485 mg/L	0.00043	0.0485 mg/L	0.00043	0.88%
QC value within limits for Cd 228.802 Recovery = 97.04%						
Co 228.616†	3441.1	0.205 mg/L	0.0022	0.205 mg/L	0.0022	1.09%
QC value within limits for Co 228.616 Recovery = 102.26%						
Cr 267.716†	56598.5	0.506 mg/L	0.0102	0.506 mg/L	0.0102	2.02%
QC value within limits for Cr 267.716 Recovery = 101.23%						
Cu 327.393†	75576.3	0.530 mg/L	0.0079	0.530 mg/L	0.0079	1.48%
QC value within limits for Cu 327.393 Recovery = 105.97%						
Fe 239.562†	1175.0	3.91 mg/L	0.047	3.91 mg/L	0.047	1.20%
QC value within limits for Fe 239.562 Recovery = 97.64%						
Mg 279.077†	7174.5	9.80 mg/L	0.076	9.80 mg/L	0.076	0.77%
QC value within limits for Mg 279.077 Recovery = 98.05%						
Mn 257.610†	232147.0	0.519 mg/L	0.0097	0.519 mg/L	0.0097	1.87%
QC value within limits for Mn 257.610 Recovery = 103.79%						
Mo 202.031†	12199.2	1.03 mg/L	0.009	1.03 mg/L	0.009	0.90%
QC value within limits for Mo 202.031 Recovery = 102.72%						
Ni 231.604†	15330.3	0.508 mg/L	0.0084	0.508 mg/L	0.0084	1.66%
QC value within limits for Ni 231.604 Recovery = 101.61%						
Pb 220.353†	2544.1	0.513 mg/L	0.0049	0.513 mg/L	0.0049	0.95%
QC value within limits for Pb 220.353 Recovery = 102.61%						
Sb 206.836†	1664.3	1.25 mg/L	0.007	1.25 mg/L	0.007	0.59%
QC value within limits for Sb 206.836 Recovery = 104.17%						
Se 196.026†	494.3	0.417 mg/L	0.0094	0.417 mg/L	0.0094	2.26%
QC value within limits for Se 196.026 Recovery = 104.17%						
Si 251.611†	166839.2	5.11 mg/L	0.075	5.11 mg/L	0.075	1.47%
QC value within limits for Si 251.611 Recovery = 102.21%						
Sn 189.927†	5199.9	1.01 mg/L	0.007	1.01 mg/L	0.007	0.70%
QC value within limits for Sn 189.927 Recovery = 100.77%						
Ti 334.940†	756595.7	1.06 mg/L	0.006	1.06 mg/L	0.006	0.52%
QC value within limits for Ti 334.940 Recovery = 105.72%						
Tl 190.801†	766.1	0.534 mg/L	0.0032	0.534 mg/L	0.0032	0.61%
QC value within limits for Tl 190.801 Recovery = 106.76%						
V 290.880†	148604.1	1.02 mg/L	0.021	1.02 mg/L	0.021	2.04%
QC value within limits for V 290.880 Recovery = 101.81%						
Zn 206.200†	29382.6	1.01 mg/L	0.015	1.01 mg/L	0.015	1.52%
QC value within limits for Zn 206.200 Recovery = 101.14%						
K 766.490†	130555.7	49.0 mg/L	0.23	49.0 mg/L	0.23	0.48%
QC value within limits for K 766.490 Recovery = 97.93%						
Na 589.592†	645931.0	49.7 mg/L	0.60	49.7 mg/L	0.60	1.21%
QC value within limits for Na 589.592 Recovery = 99.50%						
Sr 407.771†	910381.7	0.860 mg/L	0.0680	0.860 mg/L	0.0680	7.91%
QC value less than the lower limit for Sr 407.771 Recovery = 85.97%						
Li 670.784†	82262.6	1.05 mg/L	0.003	1.05 mg/L	0.003	0.29%
QC value within limits for Li 670.784 Recovery = 105.08%						

QC Failed. Continue with analysis.

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Sequence No.: 34 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/12/2011 7:52:36 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Approved: April 13, 2011

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5097775.4						31843.57	0.62%
YRADIAL	321855.2						4874.78	1.51%
Ga 417.206	1306703.7						19425.15	1.49%
GaRADIAL	67482.2						1498.31	2.22%
Ag 328.068†	490.3	0.00251	mg/L	0.000432	0.00251	mg/L	0.000432	17.20%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	22.9	0.00813	mg/L	0.003460	0.00813	mg/L	0.003460	42.56%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.0	0.00198	mg/L	0.001645	0.00198	mg/L	0.001645	83.15%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-1.9	-0.00015	mg/L	0.000033	-0.00015	mg/L	0.000033	21.89%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-40.6	-0.00010	mg/L	0.000046	-0.00010	mg/L	0.000046	47.11%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	-62.7	0.00037	mg/L	0.000432	0.00037	mg/L	0.000432	116.03%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	1.9	0.00166	mg/L	0.071782	0.00166	mg/L	0.071782	>999.9%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	0.5	-0.00003	mg/L	0.000154	-0.00003	mg/L	0.000154	456.76%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	6.7	0.00035	mg/L	0.000283	0.00035	mg/L	0.000283	80.59%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-31.4	-0.00034	mg/L	0.000091	-0.00034	mg/L	0.000091	26.74%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	282.9	0.00110	mg/L	0.000189	0.00110	mg/L	0.000189	17.19%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-1.5	-0.00030	mg/L	0.002929	-0.00030	mg/L	0.002929	977.36%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-0.7	0.00079	mg/L	0.001397	0.00079	mg/L	0.001397	177.10%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-47.8	-0.00031	mg/L	0.000019	-0.00031	mg/L	0.000019	6.07%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	6.5	0.00101	mg/L	0.000054	0.00101	mg/L	0.000054	5.31%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-12.1	-0.00022	mg/L	0.000116	-0.00022	mg/L	0.000116	52.33%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-13.7	-0.00182	mg/L	0.001103	-0.00182	mg/L	0.001103	60.71%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.3	-0.00265	mg/L	0.000119	-0.00265	mg/L	0.000119	4.50%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.0	-0.00140	mg/L	0.003122	-0.00140	mg/L	0.003122	223.22%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	11.0	0.00009	mg/L	0.000862	0.00009	mg/L	0.000862	932.25%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	1.1	0.00067	mg/L	0.000288	0.00067	mg/L	0.000288	43.14%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	49.5	-0.00002	mg/L	0.000036	-0.00002	mg/L	0.000036	166.71%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.7	0.00203	mg/L	0.002297	0.00203	mg/L	0.002297	113.17%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-57.9	0.00026	mg/L	0.000418	0.00026	mg/L	0.000418	163.92%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-6.9	-0.00012	mg/L	0.000150	-0.00012	mg/L	0.000150	120.36%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	-51.8	0.0443	mg/L	0.01942	0.0443	mg/L	0.01942	43.87%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	383.9	0.0515	mg/L	0.00489	0.0515	mg/L	0.00489	9.50%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	-30.3	0.00008	mg/L	0.000082	0.00008	mg/L	0.000082	99.40%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	-28.5	0.00108	mg/L	0.000738	0.00108	mg/L	0.000738	68.55%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

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Sequence No.: 35 **Autosampler Location: 126**
Sample ID: PBW 4R WG361324-02 **Date Collected: 4/12/2011 7:59:12 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**

Approved: April 13, 2011

Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 4R WG361324-02

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: PBW 4R WG361324-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5051047.7						68687.31	1.36%
YRADIAL	334327.2						9971.31	2.98%
Ga 417.206	1350624.3						10123.31	0.75%
GaRADIAL	69961.3						3033.52	4.34%
Ag 328.068†	473.1	0.00243	mg/L	0.000575	0.00243	mg/L	0.000575	23.68%
Al 396.153†	-28.8	-0.00221	mg/L	0.002984	-0.00221	mg/L	0.002984	134.85%
As 188.979†	-0.3	0.00167	mg/L	0.002106	0.00167	mg/L	0.002106	125.94%
Ba 233.527†	6.8	0.00001	mg/L	0.000096	0.00001	mg/L	0.000096	750.19%
Be 234.861†	-19.1	-0.00007	mg/L	0.000035	-0.00007	mg/L	0.000035	49.44%
B 249.677†	-141.7	-0.00081	mg/L	0.000237	-0.00081	mg/L	0.000237	29.33%
Ca 227.546†	6.6	0.0540	mg/L	0.06678	0.0540	mg/L	0.06678	123.64%
Cd 228.802†	1.7	0.00005	mg/L	0.000029	0.00005	mg/L	0.000029	63.83%
Co 228.616†	3.0	0.00013	mg/L	0.000238	0.00013	mg/L	0.000238	187.33%
Cr 267.716†	-36.4	-0.00039	mg/L	0.000126	-0.00039	mg/L	0.000126	32.63%
Cu 327.393†	271.7	0.00103	mg/L	0.000868	0.00103	mg/L	0.000868	84.38%
Fe 239.562†	21.3	0.0754	mg/L	0.00970	0.0754	mg/L	0.00970	12.87%
Mg 279.077†	1.3	0.00345	mg/L	0.006021	0.00345	mg/L	0.006021	174.69%
Mn 257.610†	46.5	-0.00009	mg/L	0.000015	-0.00009	mg/L	0.000015	15.66%
Mo 202.031†	1.6	0.00060	mg/L	0.000498	0.00060	mg/L	0.000498	82.41%
Ni 231.604†	-9.8	-0.00015	mg/L	0.000188	-0.00015	mg/L	0.000188	127.23%
Pb 220.353†	-5.8	-0.00025	mg/L	0.000353	-0.00025	mg/L	0.000353	143.81%
Sb 206.836†	-3.2	-0.00533	mg/L	0.001159	-0.00533	mg/L	0.001159	21.77%
Se 196.026†	0.7	-0.00160	mg/L	0.005153	-0.00160	mg/L	0.005153	322.40%
Si 251.611†	308.9	0.00925	mg/L	0.000465	0.00925	mg/L	0.000465	5.02%
Sn 189.927†	-4.6	-0.00044	mg/L	0.000311	-0.00044	mg/L	0.000311	71.29%
Ti 334.940†	-12.5	-0.00011	mg/L	0.000079	-0.00011	mg/L	0.000079	72.96%
Tl 190.801†	4.5	0.00396	mg/L	0.003963	0.00396	mg/L	0.003963	100.18%
V 290.880†	35.7	0.00090	mg/L	0.000375	0.00090	mg/L	0.000375	41.59%
Zn 206.200†	39.5	0.00147	mg/L	0.000049	0.00147	mg/L	0.000049	3.36%
K 766.490†	190.7	0.130	mg/L	0.0094	0.130	mg/L	0.0094	7.25%
Na 589.592†	289.6	0.0447	mg/L	0.00399	0.0447	mg/L	0.00399	8.92%
Sr 407.771†	68.1	0.00017	mg/L	0.000027	0.00017	mg/L	0.000027	16.25%
Li 670.784†	-90.9	0.00028	mg/L	0.000968	0.00028	mg/L	0.000968	344.93%

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Sequence No.: 36 **Autosampler Location: 127**
Sample ID: LCSW 4R WG361324-03 **Date Collected: 4/12/2011 8:05:52 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 4R WG361324-03

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: LCSW 4R WG361324-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4775769.9						43889.64	0.92%
YRADIAL	314602.9						20358.60	6.47%
Ga 417.206	1270506.9						3887.41	0.31%
GaRADIAL	66351.1						2467.79	3.72%
Ag 328.068†	43713.7	0.217	mg/L	0.0024	0.217	mg/L	0.0024	1.12%
Al 396.153†	27228.2	5.45	mg/L	0.208	5.45	mg/L	0.208	3.82%
As 188.979†	197.3	0.211	mg/L	0.0020	0.211	mg/L	0.0020	0.93%
Ba 233.527†	28059.2	0.534	mg/L	0.0045	0.534	mg/L	0.0045	0.83%
Be 234.861†	13771.2	0.0280	mg/L	0.00012	0.0280	mg/L	0.00012	0.43%
B 249.677†	54812.5	1.08	mg/L	0.015	1.08	mg/L	0.015	1.43%
Ca 227.546†	481.4	5.43	mg/L	0.031	5.43	mg/L	0.031	0.58%
Cd 228.802†	389.7	0.0249	mg/L	0.00014	0.0249	mg/L	0.00014	0.55%

Approved: April 13, 2011

Co 228.616†	1797.7	0.107 mg/L	0.0010	0.107 mg/L	0.0010	0.95%
Cr 267.716†	29336.7	0.262 mg/L	0.0027	0.262 mg/L	0.0027	1.05%
Cu 327.393†	39167.8	0.274 mg/L	0.0048	0.274 mg/L	0.0048	1.76%
Fe 239.562†	588.8	1.96 mg/L	0.116	1.96 mg/L	0.116	5.93%
Mg 279.077†	3650.6	4.99 mg/L	0.337	4.99 mg/L	0.337	6.76%
Mn 257.610†	122683.8	0.274 mg/L	0.0027	0.274 mg/L	0.0027	0.99%
Mo 202.031†	6312.7	0.532 mg/L	0.0052	0.532 mg/L	0.0052	0.99%
Ni 231.604†	8043.3	0.267 mg/L	0.0027	0.267 mg/L	0.0027	1.02%
Pb 220.353†	1311.3	0.265 mg/L	0.0031	0.265 mg/L	0.0031	1.16%
Sb 206.836†	859.5	0.644 mg/L	0.0040	0.644 mg/L	0.0040	0.63%
Se 196.026†	252.7	0.212 mg/L	0.0039	0.212 mg/L	0.0039	1.85%
Si 251.611†	89372.3	2.74 mg/L	0.038	2.74 mg/L	0.038	1.38%
Sn 189.927†	2501.6	0.485 mg/L	0.0056	0.485 mg/L	0.0056	1.16%
Ti 334.940†	384703.4	0.538 mg/L	0.0020	0.538 mg/L	0.0020	0.37%
Tl 190.801†	398.6	0.278 mg/L	0.0023	0.278 mg/L	0.0023	0.82%
V 290.880†	77211.5	0.529 mg/L	0.0058	0.529 mg/L	0.0058	1.10%
Zn 206.200†	15183.6	0.523 mg/L	0.0042	0.523 mg/L	0.0042	0.81%
K 766.490†	66430.1	24.1 mg/L	0.99	24.1 mg/L	0.99	4.11%
Na 589.592†	334797.9	24.9 mg/L	0.64	24.9 mg/L	0.64	2.57%
Sr 407.771†	470554.8	0.444 mg/L	0.0566	0.444 mg/L	0.0566	12.74%
Li 670.784†	42306.2	0.541 mg/L	0.0175	0.541 mg/L	0.0175	3.24%

Sequence No.: 37 **Autosampler Location: 128**
Sample ID: L1104030201 **Date Collected: 4/12/2011 8:12:34 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030201

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104030201

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4629391.8						19056.61	0.41%
YRADIAL	308408.0						7599.35	2.46%
Ga 417.206	1281934.1						5526.91	0.43%
GaRADIAL	66586.4						610.41	0.92%
Ag 328.068†	1275.0	0.00545	mg/L	0.000106	0.00545	mg/L	0.000106	1.95%
Al 396.153†	207.6	0.0459	mg/L	0.00422	0.0459	mg/L	0.00422	9.19%
As 188.979†	10.0	0.00884	mg/L	0.002254	0.00884	mg/L	0.002254	25.49%
Ba 233.527†	13541.4	0.257	mg/L	0.0014	0.257	mg/L	0.0014	0.56%
Be 234.861†	946.1	0.00007	mg/L	0.000045	0.00007	mg/L	0.000045	62.28%
B 249.677†	19989.6	0.437	mg/L	0.0009	0.437	mg/L	0.0009	0.20%
Ca 227.546†	23817.5	261	mg/L	1.9	261	mg/L	1.9	0.73%
Cd 228.802†	2.3	0.00001	mg/L	0.000288	0.00001	mg/L	0.000288	>999.9%
Co 228.616†	42.6	0.00218	mg/L	0.000114	0.00218	mg/L	0.000114	5.22%
Cr 267.716†	392.5	0.00292	mg/L	0.000114	0.00292	mg/L	0.000114	3.90%
Cu 327.393†	6289.9	0.0442	mg/L	0.00043	0.0442	mg/L	0.00043	0.98%
Fe 239.562†	2870.0	9.53	mg/L	0.146	9.53	mg/L	0.146	1.53%
Mg 279.077†	49679.4	67.9	mg/L	0.30	67.9	mg/L	0.30	0.44%
Mn 257.610†	557490.0	1.24	mg/L	0.004	1.24	mg/L	0.004	0.34%
Mo 202.031†	0.8	0.00126	mg/L	0.000753	0.00126	mg/L	0.000753	59.53%
Ni 231.604†	199.8	0.00673	mg/L	0.000116	0.00673	mg/L	0.000116	1.73%
Pb 220.353†	-30.8	0.00673	mg/L	0.001807	0.00673	mg/L	0.001807	26.83%
Sb 206.836†	14.2	0.00774	mg/L	0.001468	0.00774	mg/L	0.001468	18.96%
Se 196.026†	-47.0	0.0264	mg/L	0.00429	0.0264	mg/L	0.00429	16.23%
Si 251.611†	232735.3	7.15	mg/L	0.043	7.15	mg/L	0.043	0.60%
Sn 189.927†	5.0	0.00143	mg/L	0.000296	0.00143	mg/L	0.000296	20.67%
Ti 334.940†	-1675.5	0.00018	mg/L	0.000063	0.00018	mg/L	0.000063	35.71%
Tl 190.801†	156.9	0.0859	mg/L	0.00350	0.0859	mg/L	0.00350	4.08%
V 290.880†	-979.8	-0.00534	mg/L	0.002097	-0.00534	mg/L	0.002097	39.27%
Zn 206.200†	1260.0	0.0432	mg/L	0.00027	0.0432	mg/L	0.00027	0.61%
K 766.490†	100707.7	37.1	mg/L	0.10	37.1	mg/L	0.10	0.27%
Na 589.592†	1275347.0	107	mg/L	2.8	107	mg/L	2.8	2.60%
Sr 407.771†	1618928.3	1.53	mg/L	0.147	1.53	mg/L	0.147	9.65%
Li 670.784†	415.4	0.00674	mg/L	0.001003	0.00674	mg/L	0.001003	14.88%

Approved: April 13, 2011

Sequence No.: 38 **Autosampler Location: 129**
Sample ID: L1104030401 0.1 **Date Collected: 4/12/2011 8:19:19 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030401 0.1

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104030401 0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4822909.0						17434.43	0.36%
YRADIAL	306032.6						6031.06	1.97%
Ga 417.206	1308922.6						9396.62	0.72%
GaRADIAL	64756.6						441.18	0.68%
Ag 328.068†	539.2	0.00258	mg/L	0.000571	0.00258	mg/L	0.000571	22.17%
Al 396.153†	19882.4	3.99	mg/L	0.016	3.99	mg/L	0.016	0.40%
As 188.979†	-0.2	0.00194	mg/L	0.003456	0.00194	mg/L	0.003456	178.35%
Ba 233.527†	1102.8	0.0208	mg/L	0.00002	0.0208	mg/L	0.00002	0.08%
Be 234.861†	342.7	-0.00001	mg/L	0.000099	-0.00001	mg/L	0.000099	>999.9%
B 249.677†	-242.7	0.00819	mg/L	0.000206	0.00819	mg/L	0.000206	2.52%
Ca 227.546†	244.3	2.66	mg/L	0.005	2.66	mg/L	0.005	0.18%
Cd 228.802†	7.0	0.00041	mg/L	0.000155	0.00041	mg/L	0.000155	37.85%
Co 228.616†	36.4	0.00195	mg/L	0.000339	0.00195	mg/L	0.000339	17.41%
Cr 267.716†	545.7	0.00466	mg/L	0.000036	0.00466	mg/L	0.000036	0.76%
Cu 327.393†	879.1	0.00571	mg/L	0.001002	0.00571	mg/L	0.001002	17.55%
Fe 239.562†	1020.7	3.39	mg/L	0.027	3.39	mg/L	0.027	0.81%
Mg 279.077†	343.2	0.469	mg/L	0.0044	0.469	mg/L	0.0044	0.93%
Mn 257.610†	68414.9	0.153	mg/L	0.0021	0.153	mg/L	0.0021	1.38%
Mo 202.031†	6.8	0.00124	mg/L	0.000417	0.00124	mg/L	0.000417	33.67%
Ni 231.604†	141.3	0.00486	mg/L	0.000083	0.00486	mg/L	0.000083	1.71%
Pb 220.353†	53.2	0.0116	mg/L	0.00046	0.0116	mg/L	0.00046	4.00%
Sb 206.836†	1.9	-0.00154	mg/L	0.000839	-0.00154	mg/L	0.000839	54.44%
Se 196.026†	1.4	0.00033	mg/L	0.005493	0.00033	mg/L	0.005493	>999.9%
Si 251.611†	194349.2	5.97	mg/L	0.047	5.97	mg/L	0.047	0.78%
Sn 189.927†	2.1	0.00087	mg/L	0.000607	0.00087	mg/L	0.000607	69.56%
Ti 334.940†	31568.0	0.0441	mg/L	0.00010	0.0441	mg/L	0.00010	0.22%
Tl 190.801†	1.2	0.00222	mg/L	0.002100	0.00222	mg/L	0.002100	94.41%
V 290.880†	895.8	0.00705	mg/L	0.000975	0.00705	mg/L	0.000975	13.84%
Zn 206.200†	3679.1	0.126	mg/L	0.0005	0.126	mg/L	0.0005	0.37%
K 766.490†	12885.0	4.61	mg/L	0.079	4.61	mg/L	0.079	1.72%
Na 589.592†	151852.1	11.1	mg/L	0.06	11.1	mg/L	0.06	0.54%
Sr 407.771†	8174.0	0.00743	mg/L	0.000790	0.00743	mg/L	0.000790	10.64%
Li 670.784†	90.4	0.00259	mg/L	0.001864	0.00259	mg/L	0.001864	71.91%

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Sequence No.: 39 **Autosampler Location: 130**
Sample ID: L1104030601 **Date Collected: 4/12/2011 8:25:59 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030601

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104030601

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4866267.8						7019.96	0.14%
YRADIAL	325565.6						6799.26	2.09%
Ga 417.206	1303011.8						11918.42	0.91%
GaRADIAL	67691.8						994.83	1.47%
Ag 328.068†	343.5	-0.00276	mg/L	0.000514	-0.00276	mg/L	0.000514	18.60%
Al 396.153†	395264.4	79.2	mg/L	0.56	79.2	mg/L	0.56	0.70%
As 188.979†	14.2	0.0240	mg/L	0.00335	0.0240	mg/L	0.00335	13.93%
Ba 233.527†	13240.8	0.251	mg/L	0.0022	0.251	mg/L	0.0022	0.89%

Approved: April 13, 2011

Be 234.861†	10384.4	0.00265	mg/L	0.000593	0.00265	mg/L	0.000593	22.34%
B 249.677†	-4864.6	0.235	mg/L	0.0150	0.235	mg/L	0.0150	6.37%
Ca 227.546†	2573.7	28.4	mg/L	0.06	28.4	mg/L	0.06	0.22%
Cd 228.802†	224.2	0.0150	mg/L	0.00033	0.0150	mg/L	0.00033	2.19%
Co 228.616†	649.1	0.0340	mg/L	0.00020	0.0340	mg/L	0.00020	0.58%
Cr 267.716†	11256.7	0.0976	mg/L	0.00106	0.0976	mg/L	0.00106	1.09%
Cu 327.393†	16472.3	0.126	mg/L	0.0005	0.126	mg/L	0.0005	0.38%
Fe 239.562†	27008.3	89.7	mg/L	2.85	89.7	mg/L	2.85	3.18%
Mg 279.077†	5382.2	7.31	mg/L	0.182	7.31	mg/L	0.182	2.49%
Mn 257.610†	1223849.7	2.73	mg/L	0.001	2.73	mg/L	0.001	0.04%
Mo 202.031†	153.8	0.0185	mg/L	0.00088	0.0185	mg/L	0.00088	4.78%
Ni 231.604†	1720.0	0.0572	mg/L	0.00015	0.0572	mg/L	0.00015	0.26%
Pb 220.353†	259.6	0.0524	mg/L	0.00251	0.0524	mg/L	0.00251	4.80%
Sb 206.836†	45.0	0.0303	mg/L	0.00436	0.0303	mg/L	0.00436	14.39%
Se 196.026†	-53.6	-0.0163	mg/L	0.00021	-0.0163	mg/L	0.00021	1.30%
Si 251.611†	2224278.1	68.3	mg/L	0.40	68.3	mg/L	0.40	0.59%
Sn 189.927†	-8.9	-0.00126	mg/L	0.000495	-0.00126	mg/L	0.000495	39.13%
Ti 334.940†	847113.0	1.18	mg/L	0.010	1.18	mg/L	0.010	0.82%
Tl 190.801†	24.4	0.0333	mg/L	0.00165	0.0333	mg/L	0.00165	4.94%
V 290.880†	25831.0	0.184	mg/L	0.0030	0.184	mg/L	0.0030	1.63%
Zn 206.200†	17799.1	0.610	mg/L	0.0043	0.610	mg/L	0.0043	0.71%
K 766.490†	18704.1	6.65	mg/L	0.156	6.65	mg/L	0.156	2.34%
Na 589.592†	614076.7	47.1	mg/L	0.19	47.1	mg/L	0.19	0.41%
Sr 407.771†	76736.5	0.0618	mg/L	0.00163	0.0618	mg/L	0.00163	2.64%
Li 670.784†	3711.0	0.0488	mg/L	0.00165	0.0488	mg/L	0.00165	3.38%

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Sequence No.: 40 **Autosampler Location: 131**
Sample ID: L1104030601 0.1 **Date Collected: 4/12/2011 8:32:35 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030601 0.1

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104030601 0.1

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4941358.7						13204.25	0.27%
YRADIAL	324435.5						3425.47	1.06%
Ga 417.206	1335721.4						2891.42	0.22%
GaRADIAL	68257.0						1364.12	2.00%
Ag 328.068†	491.4	0.00206	mg/L	0.000512	0.00206	mg/L	0.000512	24.88%
Al 396.153†	40396.9	8.10	mg/L	0.051	8.10	mg/L	0.051	0.63%
As 188.979†	2.9	0.00580	mg/L	0.002581	0.00580	mg/L	0.002581	44.54%
Ba 233.527†	1369.6	0.0258	mg/L	0.00019	0.0258	mg/L	0.00019	0.73%
Be 234.861†	1046.8	0.00024	mg/L	0.000174	0.00024	mg/L	0.000174	73.40%
B 249.677†	-638.0	0.0225	mg/L	0.00055	0.0225	mg/L	0.00055	2.46%
Ca 227.546†	255.8	2.81	mg/L	0.075	2.81	mg/L	0.075	2.68%
Cd 228.802†	20.8	0.00132	mg/L	0.000173	0.00132	mg/L	0.000173	13.08%
Co 228.616†	73.0	0.00384	mg/L	0.000416	0.00384	mg/L	0.000416	10.85%
Cr 267.716†	1171.0	0.0101	mg/L	0.00011	0.0101	mg/L	0.00011	1.05%
Cu 327.393†	1794.4	0.0129	mg/L	0.00013	0.0129	mg/L	0.00013	1.03%
Fe 239.562†	2746.6	9.13	mg/L	0.158	9.13	mg/L	0.158	1.73%
Mg 279.077†	543.0	0.739	mg/L	0.0111	0.739	mg/L	0.0111	1.50%
Mn 257.610†	127363.3	0.284	mg/L	0.0004	0.284	mg/L	0.0004	0.15%
Mo 202.031†	19.3	0.00261	mg/L	0.000680	0.00261	mg/L	0.000680	26.04%
Ni 231.604†	168.2	0.00575	mg/L	0.000199	0.00575	mg/L	0.000199	3.46%
Pb 220.353†	20.9	0.00504	mg/L	0.000605	0.00504	mg/L	0.000605	12.01%
Sb 206.836†	5.8	0.00141	mg/L	0.000065	0.00141	mg/L	0.000065	4.62%
Se 196.026†	-1.8	-0.00062	mg/L	0.002813	-0.00062	mg/L	0.002813	451.17%
Si 251.611†	225526.5	6.93	mg/L	0.024	6.93	mg/L	0.024	0.35%
Sn 189.927†	-5.3	-0.00057	mg/L	0.000111	-0.00057	mg/L	0.000111	19.48%
Ti 334.940†	84437.6	0.118	mg/L	0.0004	0.118	mg/L	0.0004	0.31%
Tl 190.801†	6.5	0.00690	mg/L	0.001521	0.00690	mg/L	0.001521	22.05%
V 290.880†	2646.9	0.0195	mg/L	0.00005	0.0195	mg/L	0.00005	0.27%
Zn 206.200†	1880.3	0.0645	mg/L	0.00022	0.0645	mg/L	0.00022	0.34%
K 766.490†	1780.1	0.685	mg/L	0.0164	0.685	mg/L	0.0164	2.40%
Na 589.592†	62993.5	4.57	mg/L	0.027	4.57	mg/L	0.027	0.58%

Approved: April 13, 2011

Sr 407.771†	8495.2	0.00704 mg/L	0.000828	0.00704 mg/L	0.000828	11.75%
Li 670.784†	171.3	0.00362 mg/L	0.001754	0.00362 mg/L	0.001754	48.40%

Sequence No.: 41 **Autosampler Location: 132**
Sample ID: L1104026401 **Date Collected: 4/12/2011 8:39:15 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104026401

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: L1104026401

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4987300.1						21047.24	0.42%
YRADIAL	322212.7						5116.63	1.59%
Ga 417.206	1327706.0						11582.54	0.87%
GaRADIAL	68395.6						524.50	0.77%
Ag 328.068†	555.9	0.00284	mg/L	0.000354	0.00284	mg/L	0.000354	12.47%
Al 396.153†	19.5	0.00747	mg/L	0.010718	0.00747	mg/L	0.010718	143.57%
As 188.979†	-0.4	0.00157	mg/L	0.000350	0.00157	mg/L	0.000350	22.28%
Ba 233.527†	-0.6	-0.00013	mg/L	0.000132	-0.00013	mg/L	0.000132	102.37%
Be 234.861†	-43.8	-0.00011	mg/L	0.000040	-0.00011	mg/L	0.000040	37.17%
B 249.677†	2341.5	0.0474	mg/L	0.00111	0.0474	mg/L	0.00111	2.34%
Ca 227.546†	-0.1	-0.0200	mg/L	0.02977	-0.0200	mg/L	0.02977	148.93%
Cd 228.802†	2.0	0.00007	mg/L	0.000086	0.00007	mg/L	0.000086	119.02%
Co 228.616†	4.3	0.00021	mg/L	0.000193	0.00021	mg/L	0.000193	93.80%
Cr 267.716†	-6.9	-0.00012	mg/L	0.000113	-0.00012	mg/L	0.000113	92.08%
Cu 327.393†	339.2	0.00149	mg/L	0.000214	0.00149	mg/L	0.000214	14.34%
Fe 239.562†	3.0	0.0147	mg/L	0.00360	0.0147	mg/L	0.00360	24.48%
Mg 279.077†	1.0	0.00298	mg/L	0.003805	0.00298	mg/L	0.003805	127.47%
Mn 257.610†	10.7	-0.00016	mg/L	0.000004	-0.00016	mg/L	0.000004	2.51%
Mo 202.031†	4.4	0.00084	mg/L	0.000223	0.00084	mg/L	0.000223	26.54%
Ni 231.604†	-13.8	-0.00028	mg/L	0.000439	-0.00028	mg/L	0.000439	157.44%
Pb 220.353†	-10.7	-0.00121	mg/L	0.002340	-0.00121	mg/L	0.002340	192.80%
Sb 206.836†	-2.9	-0.00509	mg/L	0.001017	-0.00509	mg/L	0.001017	19.96%
Se 196.026†	5.0	0.00195	mg/L	0.004019	0.00195	mg/L	0.004019	205.94%
Si 251.611†	2031.8	0.0622	mg/L	0.00085	0.0622	mg/L	0.00085	1.36%
Sn 189.927†	-4.7	-0.00046	mg/L	0.000839	-0.00046	mg/L	0.000839	182.17%
Ti 334.940†	31.9	-0.00005	mg/L	0.000256	-0.00005	mg/L	0.000256	552.29%
Tl 190.801†	-0.3	0.00067	mg/L	0.001541	0.00067	mg/L	0.001541	231.59%
V 290.880†	-63.5	0.00022	mg/L	0.000866	0.00022	mg/L	0.000866	397.09%
Zn 206.200†	28.0	0.00108	mg/L	0.000118	0.00108	mg/L	0.000118	10.95%
K 766.490†	-108.6	0.0240	mg/L	0.02184	0.0240	mg/L	0.02184	91.08%
Na 589.592†	4345.3	0.336	mg/L	0.0016	0.336	mg/L	0.0016	0.48%
Sr 407.771†	83.7	0.00019	mg/L	0.000020	0.00019	mg/L	0.000020	10.79%
Li 670.784†	-156.1	-0.00055	mg/L	0.001788	-0.00055	mg/L	0.001788	324.25%

Sequence No.: 42 **Autosampler Location: 133**
Sample ID: L1104025201 **Date Collected: 4/12/2011 8:45:55 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104025201

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104025201

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5158508.2						17257.59	0.33%
YRADIAL	335283.6						689.59	0.21%
Ga 417.206	1378836.1						11716.95	0.85%
GaRADIAL	70658.6						1686.50	2.39%

Approved: April 13, 2011

Ag 328.068†	436.7	0.00224 mg/L	0.000569	0.00224 mg/L	0.000569	25.37%
Al 396.153†	278.9	0.0594 mg/L	0.01624	0.0594 mg/L	0.01624	27.32%
As 188.979†	0.5	0.00252 mg/L	0.002540	0.00252 mg/L	0.002540	100.64%
Ba 233.527†	36.6	0.00058 mg/L	0.000034	0.00058 mg/L	0.000034	5.92%
Be 234.861†	-16.3	-0.00007 mg/L	0.000028	-0.00007 mg/L	0.000028	41.65%
B 249.677†	453.2	0.0108 mg/L	0.00016	0.0108 mg/L	0.00016	1.44%
Ca 227.546†	30.5	0.316 mg/L	0.0513	0.316 mg/L	0.0513	16.22%
Cd 228.802†	1.3	0.00001 mg/L	0.000191	0.00001 mg/L	0.000191	>999.9%
Co 228.616†	8.3	0.00044 mg/L	0.000066	0.00044 mg/L	0.000066	14.91%
Cr 267.716†	161.5	0.00138 mg/L	0.000088	0.00138 mg/L	0.000088	6.39%
Cu 327.393†	2293.8	0.0152 mg/L	0.00040	0.0152 mg/L	0.00040	2.61%
Fe 239.562†	27.5	0.0958 mg/L	0.01501	0.0958 mg/L	0.01501	15.67%
Mg 279.077†	42.6	0.0599 mg/L	0.03761	0.0599 mg/L	0.03761	62.83%
Mn 257.610†	648.2	0.00127 mg/L	0.000009	0.00127 mg/L	0.000009	0.74%
Mo 202.031†	6.4	0.00101 mg/L	0.000242	0.00101 mg/L	0.000242	23.87%
Ni 231.604†	15.9	0.00071 mg/L	0.000081	0.00071 mg/L	0.000081	11.54%
Pb 220.353†	-9.7	-0.00102 mg/L	0.000635	-0.00102 mg/L	0.000635	62.11%
Sb 206.836†	1.3	-0.00197 mg/L	0.000596	-0.00197 mg/L	0.000596	30.23%
Se 196.026†	6.1	0.00300 mg/L	0.002771	0.00300 mg/L	0.002771	92.43%
Si 251.611†	4496.3	0.138 mg/L	0.0028	0.138 mg/L	0.0028	2.05%
Sn 189.927†	0.7	0.00059 mg/L	0.000975	0.00059 mg/L	0.000975	164.99%
Ti 334.940†	1892.5	0.00256 mg/L	0.000080	0.00256 mg/L	0.000080	3.11%
Tl 190.801†	-0.9	0.00027 mg/L	0.005433	0.00027 mg/L	0.005433	>999.9%
V 290.880†	9.7	0.00073 mg/L	0.000421	0.00073 mg/L	0.000421	58.12%
Zn 206.200†	264.2	0.00919 mg/L	0.000055	0.00919 mg/L	0.000055	0.60%
K 766.490†	759.8	0.330 mg/L	0.0211	0.330 mg/L	0.0211	6.39%
Na 589.592†	5878.7	0.446 mg/L	0.0093	0.446 mg/L	0.0093	2.09%
Sr 407.771†	1285.8	0.00131 mg/L	0.000068	0.00131 mg/L	0.000068	5.15%
Li 670.784†	-100.6	0.00016 mg/L	0.000912	0.00016 mg/L	0.000912	584.83%

Sequence No.: 43 **Autosampler Location: 134**
Sample ID: L1104025201PS WG361560-01 **Date Collected: 4/12/2011 8:52:34 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104025201PS WG361560-01

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104025201PS WG361560-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4896162.2						32353.42	0.66%
YRADIAL	319599.1						4162.61	1.30%
Ga 417.206	1303121.2						8187.05	0.63%
GaRADIAL	67099.4						549.67	0.82%
Ag 328.068†	41441.1	0.206	mg/L	0.0015	0.206	mg/L	0.0015	0.72%
Al 396.153†	26543.1	5.32	mg/L	0.023	5.32	mg/L	0.023	0.43%
As 188.979†	190.9	0.204	mg/L	0.0030	0.204	mg/L	0.0030	1.47%
Ba 233.527†	26761.4	0.509	mg/L	0.0052	0.509	mg/L	0.0052	1.03%
Be 234.861†	13151.5	0.0267	mg/L	0.00014	0.0267	mg/L	0.00014	0.52%
B 249.677†	52633.0	1.03	mg/L	0.006	1.03	mg/L	0.006	0.60%
Ca 227.546†	484.7	5.46	mg/L	0.079	5.46	mg/L	0.079	1.44%
Cd 228.802†	371.9	0.0237	mg/L	0.00008	0.0237	mg/L	0.00008	0.33%
Co 228.616†	1720.8	0.102	mg/L	0.0009	0.102	mg/L	0.0009	0.90%
Cr 267.716†	28068.5	0.251	mg/L	0.0027	0.251	mg/L	0.0027	1.08%
Cu 327.393†	38951.3	0.273	mg/L	0.0012	0.273	mg/L	0.0012	0.44%
Fe 239.562†	603.7	2.01	mg/L	0.020	2.01	mg/L	0.020	1.01%
Mg 279.077†	3605.7	4.93	mg/L	0.021	4.93	mg/L	0.021	0.43%
Mn 257.610†	117160.4	0.262	mg/L	0.0025	0.262	mg/L	0.0025	0.95%
Mo 202.031†	6039.3	0.509	mg/L	0.0041	0.509	mg/L	0.0041	0.80%
Ni 231.604†	7674.9	0.254	mg/L	0.0026	0.254	mg/L	0.0026	1.02%
Pb 220.353†	1255.4	0.254	mg/L	0.0019	0.254	mg/L	0.0019	0.77%
Sb 206.836†	822.8	0.616	mg/L	0.0055	0.616	mg/L	0.0055	0.90%
Se 196.026†	240.3	0.201	mg/L	0.0053	0.201	mg/L	0.0053	2.65%
Si 251.611†	89592.2	2.74	mg/L	0.025	2.74	mg/L	0.025	0.91%
Sn 189.927†	2591.2	0.502	mg/L	0.0032	0.502	mg/L	0.0032	0.64%
Ti 334.940†	374693.9	0.524	mg/L	0.0018	0.524	mg/L	0.0018	0.34%
Tl 190.801†	385.3	0.269	mg/L	0.0043	0.269	mg/L	0.0043	1.61%

Approved: April 13, 2011

V 290.880†	73266.0	0.502	mg/L	0.0055	0.502	mg/L	0.0055 1.10%
Zn 206.200†	14713.8	0.507	mg/L	0.0067	0.507	mg/L	0.0067 1.32%
K 766.490†	65082.2	23.6	mg/L	0.18	23.6	mg/L	0.18 0.74%
Na 589.592†	328565.9	24.4	mg/L	0.20	24.4	mg/L	0.20 0.81%
Sr 407.771†	448281.6	0.423	mg/L	0.0321	0.423	mg/L	0.0321 7.59%
Li 670.784†	40875.5	0.523	mg/L	0.0022	0.523	mg/L	0.0022 0.43%

Sequence No.: 44 **Autosampler Location: 135**
Sample ID: L1104025201DL WG361560-02 **Date Collected: 4/12/2011 8:59:16 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104025201DL WG361560-02

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104025201DL WG361560-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5044165.9						63662.78	1.26%
YRADIAL	328145.8						2574.67	0.78%
Ga 417.206	1311985.5						17234.88	1.31%
GaRADIAL	68894.4						891.55	1.29%
Ag 328.068†	517.1	0.00265	mg/L	0.000750	0.00265	mg/L	0.000750	28.36%
Al 396.153†	60.5	0.0157	mg/L	0.01315	0.0157	mg/L	0.01315	83.95%
As 188.979†	1.8	0.00389	mg/L	0.001494	0.00389	mg/L	0.001494	38.45%
Ba 233.527†	5.3	-0.00002	mg/L	0.000043	-0.00002	mg/L	0.000043	279.68%
Be 234.861†	-53.6	-0.00013	mg/L	0.000031	-0.00013	mg/L	0.000031	24.26%
B 249.677†	246.0	0.00649	mg/L	0.000199	0.00649	mg/L	0.000199	3.07%
Ca 227.546†	11.6	0.109	mg/L	0.0463	0.109	mg/L	0.0463	42.54%
Cd 228.802†	1.3	0.00000	mg/L	0.000147	0.00000	mg/L	0.000147	>999.9%
Co 228.616†	5.9	0.00030	mg/L	0.000075	0.00030	mg/L	0.000075	25.02%
Cr 267.716†	8.4	0.00001	mg/L	0.000104	0.00001	mg/L	0.000104	743.45%
Cu 327.393†	687.4	0.00393	mg/L	0.001007	0.00393	mg/L	0.001007	25.63%
Fe 239.562†	4.7	0.0201	mg/L	0.00479	0.0201	mg/L	0.00479	23.82%
Mg 279.077†	0.9	0.00286	mg/L	0.003106	0.00286	mg/L	0.003106	108.42%
Mn 257.610†	128.8	0.00009	mg/L	0.000020	0.00009	mg/L	0.000020	22.32%
Mo 202.031†	5.5	0.00093	mg/L	0.000419	0.00093	mg/L	0.000419	45.06%
Ni 231.604†	-6.1	-0.00003	mg/L	0.000381	-0.00003	mg/L	0.000381	>999.9%
Pb 220.353†	-9.3	-0.00093	mg/L	0.001175	-0.00093	mg/L	0.001175	126.60%
Sb 206.836†	-1.8	-0.00428	mg/L	0.002504	-0.00428	mg/L	0.002504	58.48%
Se 196.026†	6.5	0.00323	mg/L	0.004592	0.00323	mg/L	0.004592	142.38%
Si 251.611†	1010.8	0.0308	mg/L	0.00077	0.0308	mg/L	0.00077	2.49%
Sn 189.927†	-0.6	0.00035	mg/L	0.000615	0.00035	mg/L	0.000615	177.12%
Ti 334.940†	448.0	0.00054	mg/L	0.000078	0.00054	mg/L	0.000078	14.62%
Tl 190.801†	3.4	0.00317	mg/L	0.002348	0.00317	mg/L	0.002348	74.08%
V 290.880†	-39.4	0.00038	mg/L	0.000476	0.00038	mg/L	0.000476	124.53%
Zn 206.200†	108.9	0.00385	mg/L	0.000098	0.00385	mg/L	0.000098	2.55%
K 766.490†	85.9	0.0927	mg/L	0.02417	0.0927	mg/L	0.02417	26.08%
Na 589.592†	1267.4	0.115	mg/L	0.0014	0.115	mg/L	0.0014	1.23%
Sr 407.771†	252.3	0.00035	mg/L	0.000046	0.00035	mg/L	0.000046	13.19%
Li 670.784†	-138.2	-0.00032	mg/L	0.001085	-0.00032	mg/L	0.001085	335.90%

Sequence No.: 45 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/12/2011 9:05:56 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD

Approved: April 13, 2011

Y 371.029	4750057.5					29794.30	0.63%
YRADIAL	308226.5					4035.67	1.31%
Ga 417.206	1265435.7					4617.18	0.36%
GaRADIAL	65379.3					1425.44	2.18%
Ag 328.068†	84690.4	0.421 mg/L	0.0014	0.421 mg/L		0.0014	0.33%
QC value within limits for Ag 328.068 Recovery = 105.22%							
Al 396.153†	53420.6	10.7 mg/L	0.02	10.7 mg/L		0.02	0.22%
QC value within limits for Al 396.153 Recovery = 106.94%							
As 188.979†	400.3	0.426 mg/L	0.0040	0.426 mg/L		0.0040	0.93%
QC value within limits for As 188.979 Recovery = 106.52%							
Ba 233.527†	55275.9	1.05 mg/L	0.004	1.05 mg/L		0.004	0.36%
QC value within limits for Ba 233.527 Recovery = 105.21%							
Be 234.861†	27233.0	0.0553 mg/L	0.00027	0.0553 mg/L		0.00027	0.49%
QC value greater than the upper limit for Be 234.861 Recovery = 110.68%							
B 249.677†	27070.4	0.536 mg/L	0.0042	0.536 mg/L		0.0042	0.78%
QC value within limits for B 249.677 Recovery = 107.24%							
Ca 227.546†	960.5	10.9 mg/L	0.07	10.9 mg/L		0.07	0.61%
QC value within limits for Ca 227.546 Recovery = 108.54%							
Cd 228.802†	769.6	0.0491 mg/L	0.00049	0.0491 mg/L		0.00049	1.00%
QC value within limits for Cd 228.802 Recovery = 98.23%							
Co 228.616†	3524.9	0.210 mg/L	0.0022	0.210 mg/L		0.0022	1.03%
QC value within limits for Co 228.616 Recovery = 104.76%							
Cr 267.716†	58109.2	0.520 mg/L	0.0028	0.520 mg/L		0.0028	0.55%
QC value within limits for Cr 267.716 Recovery = 103.93%							
Cu 327.393†	76876.2	0.539 mg/L	0.0021	0.539 mg/L		0.0021	0.38%
QC value within limits for Cu 327.393 Recovery = 107.80%							
Fe 239.562†	1204.8	4.00 mg/L	0.099	4.00 mg/L		0.099	2.48%
QC value within limits for Fe 239.562 Recovery = 100.12%							
Mg 279.077†	7341.6	10.0 mg/L	0.20	10.0 mg/L		0.20	1.96%
QC value within limits for Mg 279.077 Recovery = 100.33%							
Mn 257.610†	238790.7	0.534 mg/L	0.0018	0.534 mg/L		0.0018	0.34%
QC value within limits for Mn 257.610 Recovery = 106.75%							
Mo 202.031†	12506.3	1.05 mg/L	0.008	1.05 mg/L		0.008	0.80%
QC value within limits for Mo 202.031 Recovery = 105.31%							
Ni 231.604†	15792.3	0.523 mg/L	0.0024	0.523 mg/L		0.0024	0.46%
QC value within limits for Ni 231.604 Recovery = 104.68%							
Pb 220.353†	2603.0	0.525 mg/L	0.0042	0.525 mg/L		0.0042	0.79%
QC value within limits for Pb 220.353 Recovery = 104.98%							
Sb 206.836†	1697.6	1.28 mg/L	0.009	1.28 mg/L		0.009	0.69%
QC value within limits for Sb 206.836 Recovery = 106.25%							
Se 196.026†	507.7	0.428 mg/L	0.0046	0.428 mg/L		0.0046	1.08%
QC value within limits for Se 196.026 Recovery = 107.01%							
Si 251.611†	170294.8	5.22 mg/L	0.031	5.22 mg/L		0.031	0.59%
QC value within limits for Si 251.611 Recovery = 104.33%							
Sn 189.927†	5332.5	1.03 mg/L	0.007	1.03 mg/L		0.007	0.63%
QC value within limits for Sn 189.927 Recovery = 103.34%							
Ti 334.940†	771262.9	1.08 mg/L	0.004	1.08 mg/L		0.004	0.39%
QC value within limits for Ti 334.940 Recovery = 107.77%							
Tl 190.801†	791.0	0.551 mg/L	0.0041	0.551 mg/L		0.0041	0.74%
QC value greater than the upper limit for Tl 190.801 Recovery = 110.18%							
V 290.880†	152780.9	1.05 mg/L	0.005	1.05 mg/L		0.005	0.45%
QC value within limits for V 290.880 Recovery = 104.67%							
Zn 206.200†	30206.7	1.04 mg/L	0.010	1.04 mg/L		0.010	0.98%
QC value within limits for Zn 206.200 Recovery = 103.98%							
K 766.490†	132017.5	49.5 mg/L	0.32	49.5 mg/L		0.32	0.64%
QC value within limits for K 766.490 Recovery = 99.10%							
Na 589.592†	652700.7	50.3 mg/L	0.46	50.3 mg/L		0.46	0.92%
QC value within limits for Na 589.592 Recovery = 100.62%							
Sr 407.771†	911718.8	0.861 mg/L	0.0753	0.861 mg/L		0.0753	8.74%
QC value less than the lower limit for Sr 407.771 Recovery = 86.10%							
Li 670.784†	82933.1	1.06 mg/L	0.006	1.06 mg/L		0.006	0.60%
QC value within limits for Li 670.784 Recovery = 105.93%							

QC Failed. Continue with analysis.

Sequence No.: 46 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/12/2011 9:12:33 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Approved: April 13, 2011

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4963135.4						68543.77	1.38%
YRADIAL	319413.6						8428.51	2.64%
Ga 417.206	1281240.6						20444.71	1.60%
GaRADIAL	67049.8						518.78	0.77%
Ag 328.068†	405.4	0.00209	mg/L	0.000671	0.00209	mg/L	0.000671	32.09%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	41.0	0.0118	mg/L	0.00967	0.0118	mg/L	0.00967	82.21%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.1	0.00320	mg/L	0.003076	0.00320	mg/L	0.003076	96.02%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-1.8	-0.00015	mg/L	0.000057	-0.00015	mg/L	0.000057	37.69%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-62.9	-0.00014	mg/L	0.000033	-0.00014	mg/L	0.000033	23.36%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	110.9	0.00379	mg/L	0.000307	0.00379	mg/L	0.000307	8.11%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	1.0	-0.00786	mg/L	0.036971	-0.00786	mg/L	0.036971	470.64%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	0.5	-0.00005	mg/L	0.000146	-0.00005	mg/L	0.000146	322.79%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	1.8	0.00005	mg/L	0.000222	0.00005	mg/L	0.000222	424.84%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-41.9	-0.00044	mg/L	0.000098	-0.00044	mg/L	0.000098	22.55%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	232.6	0.00075	mg/L	0.000025	0.00075	mg/L	0.000025	3.39%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.0	0.00465	mg/L	0.003694	0.00465	mg/L	0.003694	79.37%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-2.8	-0.00212	mg/L	0.005173	-0.00212	mg/L	0.005173	244.36%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-44.2	-0.00030	mg/L	0.000006	-0.00030	mg/L	0.000006	2.05%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	5.2	0.00091	mg/L	0.000280	0.00091	mg/L	0.000280	30.95%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-15.1	-0.00032	mg/L	0.000190	-0.00032	mg/L	0.000190	58.91%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-14.2	-0.00192	mg/L	0.000442	-0.00192	mg/L	0.000442	23.05%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	0.3	-0.00267	mg/L	0.000324	-0.00267	mg/L	0.000324	12.10%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	5.3	0.00220	mg/L	0.003807	0.00220	mg/L	0.003807	173.38%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	41.6	0.00104	mg/L	0.000523	0.00104	mg/L	0.000523	50.53%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-0.5	0.00037	mg/L	0.000622	0.00037	mg/L	0.000622	169.39%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	49.7	-0.00002	mg/L	0.000037	-0.00002	mg/L	0.000037	173.36%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-0.3	0.00070	mg/L	0.006199	0.00070	mg/L	0.006199	890.11%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-117.2	-0.00015	mg/L	0.001180	-0.00015	mg/L	0.001180	781.39%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-8.6	-0.00018	mg/L	0.000076	-0.00018	mg/L	0.000076	41.57%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	-1.0	0.0621	mg/L	0.01020	0.0621	mg/L	0.01020	16.42%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	227.6	0.0403	mg/L	0.00556	0.0403	mg/L	0.00556	13.80%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	27.3	0.00014	mg/L	0.000080	0.00014	mg/L	0.000080	58.68%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	-71.2	0.00053	mg/L	0.001491	0.00053	mg/L	0.001491	280.81%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 47 **Autosampler Location: 136**

Approved: April 13, 2011

Sample ID: L1104022002 **Date Collected: 4/12/2011 9:20:35 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022002

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104022002

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4896198.3						51763.87	1.06%
YRADIAL	321080.1						8434.08	2.63%
Ga 417.206	1339266.5						6613.15	0.49%
GaRADIAL	69133.5						1373.06	1.99%
Ag 328.068†	557.7	0.00257	mg/L	0.000340	0.00257	mg/L	0.000340	13.22%
Al 396.153†	35075.6	7.03	mg/L	0.028	7.03	mg/L	0.028	0.40%
As 188.979†	37.1	0.0414	mg/L	0.00046	0.0414	mg/L	0.00046	1.11%
Ba 233.527†	7214.1	0.137	mg/L	0.0014	0.137	mg/L	0.0014	1.01%
Be 234.861†	666.8	0.00044	mg/L	0.000106	0.00044	mg/L	0.000106	23.91%
B 249.677†	2997.8	0.0742	mg/L	0.00064	0.0742	mg/L	0.00064	0.86%
Ca 227.546†	2152.7	23.5	mg/L	0.06	23.5	mg/L	0.06	0.24%
Cd 228.802†	4.8	-0.00003	mg/L	0.000163	-0.00003	mg/L	0.000163	599.86%
Co 228.616†	224.2	0.0132	mg/L	0.00022	0.0132	mg/L	0.00022	1.64%
Cr 267.716†	1427.8	0.0123	mg/L	0.00012	0.0123	mg/L	0.00012	0.97%
Cu 327.393†	8745.4	0.0609	mg/L	0.00046	0.0609	mg/L	0.00046	0.76%
Fe 239.562†	1421.2	4.72	mg/L	0.093	4.72	mg/L	0.093	1.97%
Mg 279.077†	2052.9	2.80	mg/L	0.058	2.80	mg/L	0.058	2.06%
Mn 257.610†	316747.0	0.709	mg/L	0.0036	0.709	mg/L	0.0036	0.51%
Mo 202.031†	40.6	0.00427	mg/L	0.000262	0.00427	mg/L	0.000262	6.12%
Ni 231.604†	464.4	0.0156	mg/L	0.00015	0.0156	mg/L	0.00015	0.97%
Pb 220.353†	-4.0	0.00117	mg/L	0.000298	0.00117	mg/L	0.000298	25.49%
Sb 206.836†	5.0	0.00083	mg/L	0.003535	0.00083	mg/L	0.003535	424.21%
Se 196.026†	-17.7	-0.0105	mg/L	0.00271	-0.0105	mg/L	0.00271	25.72%
Si 251.611†	768386.5	23.6	mg/L	0.00	23.6	mg/L	0.00	0.01%
Sn 189.927†	-2.6	-0.00005	mg/L	0.000202	-0.00005	mg/L	0.000202	437.45%
Ti 334.940†	37624.8	0.0527	mg/L	0.00035	0.0527	mg/L	0.00035	0.67%
Tl 190.801†	45.9	0.0316	mg/L	0.00444	0.0316	mg/L	0.00444	14.03%
V 290.880†	5834.3	0.0410	mg/L	0.00110	0.0410	mg/L	0.00110	2.68%
Zn 206.200†	860.4	0.0296	mg/L	0.00014	0.0296	mg/L	0.00014	0.47%
K 766.490†	8351.3	2.71	mg/L	0.040	2.71	mg/L	0.040	1.46%
Na 589.592†	2471251.4	301	mg/L	14.7	301	mg/L	14.7	4.89%
Sr 407.771†	54321.1	0.0509	mg/L	0.00442	0.0509	mg/L	0.00442	8.70%
Li 670.784†	4171.9	0.0547	mg/L	0.00087	0.0547	mg/L	0.00087	1.58%

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Sequence No.: 48 **Autosampler Location: 137**
Sample ID: L1104022004 **Date Collected: 4/12/2011 9:27:20 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022004

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104022004

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4788256.3						30091.40	0.63%
YRADIAL	327213.1						5380.50	1.64%
Ga 417.206	1291501.1						8667.33	0.67%
GaRADIAL	68688.7						734.07	1.07%
Ag 328.068†	424.0	0.00137	mg/L	0.000483	0.00137	mg/L	0.000483	35.33%
Al 396.153†	38820.6	7.78	mg/L	0.010	7.78	mg/L	0.010	0.13%
As 188.979†	94.6	0.104	mg/L	0.0031	0.104	mg/L	0.0031	2.94%
Ba 233.527†	6217.8	0.118	mg/L	0.0006	0.118	mg/L	0.0006	0.47%
Be 234.861†	1927.2	0.00069	mg/L	0.000262	0.00069	mg/L	0.000262	38.10%

Approved: April 13, 2011

B 249.677†	4222.2	0.148	mg/L	0.0002	0.148	mg/L	0.0002	0.14%
Ca 227.546†	1144.5	12.6	mg/L	0.06	12.6	mg/L	0.06	0.51%
Cd 228.802†	18.0	0.00045	mg/L	0.000165	0.00045	mg/L	0.000165	37.15%
Co 228.616†	1292.5	0.0772	mg/L	0.00058	0.0772	mg/L	0.00058	0.75%
Cr 267.716†	2798.7	0.0246	mg/L	0.00046	0.0246	mg/L	0.00046	1.89%
Cu 327.393†	33489.1	0.235	mg/L	0.0013	0.235	mg/L	0.0013	0.55%
Fe 239.562†	4712.4	15.7	mg/L	0.13	15.7	mg/L	0.13	0.84%
Mg 279.077†	1263.9	1.72	mg/L	0.013	1.72	mg/L	0.013	0.78%
Mn 257.610†	155814.5	0.354	mg/L	0.0017	0.354	mg/L	0.0017	0.49%
Mo 202.031†	225.7	0.0203	mg/L	0.00026	0.0203	mg/L	0.00026	1.30%
Ni 231.604†	1564.6	0.0521	mg/L	0.00049	0.0521	mg/L	0.00049	0.94%
Pb 220.353†	-2.1	0.00055	mg/L	0.000163	0.00055	mg/L	0.000163	29.81%
Sb 206.836†	5.4	0.00117	mg/L	0.004482	0.00117	mg/L	0.004482	384.65%
Se 196.026†	-8.7	-0.00149	mg/L	0.001021	-0.00149	mg/L	0.001021	68.46%
Si 251.611†	805005.1	24.7	mg/L	0.25	24.7	mg/L	0.25	1.01%
Sn 189.927†	5.2	0.00147	mg/L	0.000545	0.00147	mg/L	0.000545	36.96%
Ti 334.940†	49560.0	0.0693	mg/L	0.00055	0.0693	mg/L	0.00055	0.79%
Tl 190.801†	26.5	0.0189	mg/L	0.00311	0.0189	mg/L	0.00311	16.47%
V 290.880†	3975.1	0.0290	mg/L	0.00026	0.0290	mg/L	0.00026	0.90%
Zn 206.200†	876.5	0.0300	mg/L	0.00009	0.0300	mg/L	0.00009	0.31%
K 766.490†	8359.4	2.65	mg/L	0.025	2.65	mg/L	0.025	0.94%
Na 589.592†	5090159.6	367	mg/L	0.0	367	mg/L	0.0	0.00%
Sr 407.771†	117441.5	0.109	mg/L	0.0097	0.109	mg/L	0.0097	8.85%
Li 670.784†	925.1	0.0132	mg/L	0.00063	0.0132	mg/L	0.00063	4.74%

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Sequence No.: 49 **Autosampler Location: 138**
Sample ID: L1104022006 **Date Collected: 4/12/2011 9:34:05 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022006

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104022006

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4638456.1						47245.65	1.02%
YRADIAL	322105.9						8324.48	2.58%
Ga 417.206	1251521.2						15139.50	1.21%
GaRADIAL	67948.5						784.15	1.15%
Ag 328.068†	458.0	0.00157	mg/L	0.000113	0.00157	mg/L	0.000113	7.17%
Al 396.153†	19091.8	3.83	mg/L	0.084	3.83	mg/L	0.084	2.19%
As 188.979†	100.0	0.110	mg/L	0.0012	0.110	mg/L	0.0012	1.10%
Ba 233.527†	5786.9	0.110	mg/L	0.0012	0.110	mg/L	0.0012	1.07%
Be 234.861†	1882.1	0.00077	mg/L	0.000264	0.00077	mg/L	0.000264	34.21%
B 249.677†	4860.5	0.161	mg/L	0.0011	0.161	mg/L	0.0011	0.67%
Ca 227.546†	1234.6	13.6	mg/L	0.07	13.6	mg/L	0.07	0.49%
Cd 228.802†	22.0	0.00068	mg/L	0.000148	0.00068	mg/L	0.000148	21.79%
Co 228.616†	1422.3	0.0851	mg/L	0.00109	0.0851	mg/L	0.00109	1.28%
Cr 267.716†	3032.2	0.0268	mg/L	0.00073	0.0268	mg/L	0.00073	2.74%
Cu 327.393†	40623.4	0.285	mg/L	0.0041	0.285	mg/L	0.0041	1.45%
Fe 239.562†	4459.7	14.8	mg/L	0.24	14.8	mg/L	0.24	1.64%
Mg 279.077†	1105.4	1.50	mg/L	0.041	1.50	mg/L	0.041	2.71%
Mn 257.610†	147765.7	0.335	mg/L	0.0049	0.335	mg/L	0.0049	1.47%
Mo 202.031†	249.9	0.0223	mg/L	0.00023	0.0223	mg/L	0.00023	1.05%
Ni 231.604†	1722.9	0.0573	mg/L	0.00050	0.0573	mg/L	0.00050	0.88%
Pb 220.353†	-1.2	0.00064	mg/L	0.000468	0.00064	mg/L	0.000468	73.07%
Sb 206.836†	4.5	0.00054	mg/L	0.001773	0.00054	mg/L	0.001773	327.27%
Se 196.026†	-6.2	0.00093	mg/L	0.005144	0.00093	mg/L	0.005144	551.39%
Si 251.611†	582978.9	17.9	mg/L	0.21	17.9	mg/L	0.21	1.15%
Sn 189.927†	2.7	0.00099	mg/L	0.000004	0.00099	mg/L	0.000004	0.38%
Ti 334.940†	32489.2	0.0454	mg/L	0.00079	0.0454	mg/L	0.00079	1.74%
Tl 190.801†	27.4	0.0191	mg/L	0.00316	0.0191	mg/L	0.00316	16.56%
V 290.880†	3804.2	0.0278	mg/L	0.00112	0.0278	mg/L	0.00112	4.03%
Zn 206.200†	833.2	0.0286	mg/L	0.00037	0.0286	mg/L	0.00037	1.29%
K 766.490†	6569.9	2.01	mg/L	0.094	2.01	mg/L	0.094	4.66%
Na 589.592†	5524689.8	367	mg/L	0.0	367	mg/L	0.0	0.00%
Sr 407.771†	117119.7	0.109	mg/L	0.0104	0.109	mg/L	0.0104	9.55%

Approved: April 13, 2011

Li 670.784†	602.3	0.00912 mg/L	0.000337	0.00912 mg/L	0.000337	3.69%

Sequence No.: 50 **Autosampler Location: 139**
Sample ID: L1104022008 **Date Collected: 4/12/2011 9:40:50 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022008

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104022008

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4934072.2						19797.67	0.40%
YRADIAL	325793.0						1942.48	0.60%
Ga 417.206	1373596.4						4844.63	0.35%
GaRADIAL	69532.6						969.10	1.39%
Ag 328.068†	533.7	0.00266	mg/L	0.000310	0.00266	mg/L	0.000310	11.63%
Al 396.153†	6857.9	1.38	mg/L	0.023	1.38	mg/L	0.023	1.64%
As 188.979†	-0.7	0.00115	mg/L	0.004453	0.00115	mg/L	0.004453	387.92%
Ba 233.527†	2099.7	0.0397	mg/L	0.00027	0.0397	mg/L	0.00027	0.68%
Be 234.861†	156.9	0.00005	mg/L	0.000222	0.00005	mg/L	0.000222	427.36%
B 249.677†	6105.6	0.125	mg/L	0.0010	0.125	mg/L	0.0010	0.78%
Ca 227.546†	792.6	8.65	mg/L	0.012	8.65	mg/L	0.012	0.14%
Cd 228.802†	-0.2	-0.00008	mg/L	0.000244	-0.00008	mg/L	0.000244	320.70%
Co 228.616†	12.1	0.00060	mg/L	0.000353	0.00060	mg/L	0.000353	58.44%
Cr 267.716†	201.8	0.00170	mg/L	0.000064	0.00170	mg/L	0.000064	3.79%
Cu 327.393†	383.1	0.00195	mg/L	0.001284	0.00195	mg/L	0.001284	65.69%
Fe 239.562†	362.2	1.21	mg/L	0.016	1.21	mg/L	0.016	1.34%
Mg 279.077†	2237.6	3.06	mg/L	0.024	3.06	mg/L	0.024	0.79%
Mn 257.610†	10452.6	0.0248	mg/L	0.00014	0.0248	mg/L	0.00014	0.55%
Mo 202.031†	4.4	0.00091	mg/L	0.000249	0.00091	mg/L	0.000249	27.53%
Ni 231.604†	47.2	0.00173	mg/L	0.000148	0.00173	mg/L	0.000148	8.56%
Pb 220.353†	-17.2	-0.00211	mg/L	0.001021	-0.00211	mg/L	0.001021	48.40%
Sb 206.836†	0.0	-0.00289	mg/L	0.001572	-0.00289	mg/L	0.001572	54.31%
Se 196.026†	-3.5	-0.00277	mg/L	0.004246	-0.00277	mg/L	0.004246	153.07%
Si 251.611†	228351.1	7.02	mg/L	0.005	7.02	mg/L	0.005	0.07%
Sn 189.927†	-2.6	-0.00004	mg/L	0.000627	-0.00004	mg/L	0.000627	>999.9%
Ti 334.940†	9175.1	0.0128	mg/L	0.00015	0.0128	mg/L	0.00015	1.18%
Tl 190.801†	23.6	0.0164	mg/L	0.00309	0.0164	mg/L	0.00309	18.87%
V 290.880†	380.4	0.00335	mg/L	0.000734	0.00335	mg/L	0.000734	21.93%
Zn 206.200†	341.8	0.0118	mg/L	0.00011	0.0118	mg/L	0.00011	0.92%
K 766.490†	4211.6	1.50	mg/L	0.026	1.50	mg/L	0.026	1.73%
Na 589.592†	603082.7	46.2	mg/L	0.47	46.2	mg/L	0.47	1.02%
Sr 407.771†	48216.3	0.0455	mg/L	0.00347	0.0455	mg/L	0.00347	7.63%
Li 670.784†	137.4	0.00319	mg/L	0.000600	0.00319	mg/L	0.000600	18.79%

Sequence No.: 51 **Autosampler Location: 140**
Sample ID: L1104022010 **Date Collected: 4/12/2011 9:47:34 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022010

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104022010

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4732968.3						28375.89	0.60%
YRADIAL	311808.8						5732.18	1.84%
Ga 417.206	1291181.3						6241.68	0.48%
GaRADIAL	67136.9						1614.57	2.40%
Ag 328.068†	543.6	0.00247	mg/L	0.000104	0.00247	mg/L	0.000104	4.21%

Approved: April 13, 2011

Al 396.153†	29078.4	5.83	mg/L	0.014	5.83	mg/L	0.014	0.23%
As 188.979†	34.9	0.0393	mg/L	0.00150	0.0393	mg/L	0.00150	3.82%
Ba 233.527†	3698.1	0.0701	mg/L	0.00034	0.0701	mg/L	0.00034	0.48%
Be 234.861†	659.3	0.00026	mg/L	0.000031	0.00026	mg/L	0.000031	11.62%
B 249.677†	4691.4	0.112	mg/L	0.0014	0.112	mg/L	0.0014	1.26%
Ca 227.546†	1328.2	14.5	mg/L	0.22	14.5	mg/L	0.22	1.54%
Cd 228.802†	5.2	0.00002	mg/L	0.000164	0.00002	mg/L	0.000164	777.80%
Co 228.616†	301.3	0.0178	mg/L	0.00039	0.0178	mg/L	0.00039	2.18%
Cr 267.716†	1057.7	0.00905	mg/L	0.000045	0.00905	mg/L	0.000045	0.50%
Cu 327.393†	4993.1	0.0347	mg/L	0.00082	0.0347	mg/L	0.00082	2.36%
Fe 239.562†	1632.5	5.43	mg/L	0.102	5.43	mg/L	0.102	1.89%
Mg 279.077†	2271.6	3.10	mg/L	0.050	3.10	mg/L	0.050	1.61%
Mn 257.610†	225296.8	0.507	mg/L	0.0007	0.507	mg/L	0.0007	0.13%
Mo 202.031†	117.8	0.0108	mg/L	0.00038	0.0108	mg/L	0.00038	3.58%
Ni 231.604†	433.5	0.0145	mg/L	0.00021	0.0145	mg/L	0.00021	1.47%
Pb 220.353†	0.9	0.00172	mg/L	0.000958	0.00172	mg/L	0.000958	55.74%
Sb 206.836†	-0.5	-0.00324	mg/L	0.000975	-0.00324	mg/L	0.000975	30.09%
Se 196.026†	-5.8	-0.00231	mg/L	0.009388	-0.00231	mg/L	0.009388	406.47%
Si 251.611†	724395.6	22.3	mg/L	0.15	22.3	mg/L	0.15	0.67%
Sn 189.927†	-3.3	-0.00019	mg/L	0.000934	-0.00019	mg/L	0.000934	495.61%
Ti 334.940†	32542.2	0.0455	mg/L	0.00059	0.0455	mg/L	0.00059	1.29%
Tl 190.801†	27.2	0.0194	mg/L	0.00327	0.0194	mg/L	0.00327	16.87%
V 290.880†	3389.4	0.0243	mg/L	0.00072	0.0243	mg/L	0.00072	2.97%
Zn 206.200†	541.4	0.0186	mg/L	0.00006	0.0186	mg/L	0.00006	0.35%
K 766.490†	6427.0	1.96	mg/L	0.012	1.96	mg/L	0.012	0.59%
Na 589.592†	3211329.4	367	mg/L	0.0	367	mg/L	0.0	0.00%
Sr 407.771†	43552.1	0.0406	mg/L	0.00393	0.0406	mg/L	0.00393	9.68%
Li 670.784†	465.8	0.00738	mg/L	0.000675	0.00738	mg/L	0.000675	9.14%

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Sequence No.: 52 **Autosampler Location: 141**
Sample ID: L1104022012 **Date Collected: 4/12/2011 9:54:19 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022012

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104022012

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4799576.1						46516.00	0.97%
YRADIAL	316088.3						1533.77	0.49%
Ga 417.206	1331165.2						10214.16	0.77%
GaRADIAL	68050.5						1137.61	1.67%
Ag 328.068†	698.5	0.00337	mg/L	0.000534	0.00337	mg/L	0.000534	15.82%
Al 396.153†	1859.8	0.376	mg/L	0.0083	0.376	mg/L	0.0083	2.20%
As 188.979†	7.0	0.00910	mg/L	0.003752	0.00910	mg/L	0.003752	41.23%
Ba 233.527†	3023.2	0.0573	mg/L	0.00046	0.0573	mg/L	0.00046	0.80%
Be 234.861†	169.0	0.00001	mg/L	0.000071	0.00001	mg/L	0.000071	750.55%
B 249.677†	3630.4	0.0810	mg/L	0.00140	0.0810	mg/L	0.00140	1.72%
Ca 227.546†	2334.8	25.5	mg/L	0.20	25.5	mg/L	0.20	0.78%
Cd 228.802†	1.1	-0.00005	mg/L	0.000142	-0.00005	mg/L	0.000142	308.82%
Co 228.616†	154.8	0.00919	mg/L	0.000275	0.00919	mg/L	0.000275	2.99%
Cr 267.716†	187.9	0.00140	mg/L	0.000017	0.00140	mg/L	0.000017	1.19%
Cu 327.393†	1014.9	0.00643	mg/L	0.000195	0.00643	mg/L	0.000195	3.02%
Fe 239.562†	574.3	1.91	mg/L	0.023	1.91	mg/L	0.023	1.18%
Mg 279.077†	4796.0	6.55	mg/L	0.081	6.55	mg/L	0.081	1.23%
Mn 257.610†	225636.9	0.505	mg/L	0.0006	0.505	mg/L	0.0006	0.13%
Mo 202.031†	132.5	0.0118	mg/L	0.00027	0.0118	mg/L	0.00027	2.27%
Ni 231.604†	55.1	0.00199	mg/L	0.000027	0.00199	mg/L	0.000027	1.37%
Pb 220.353†	-19.5	-0.00182	mg/L	0.001982	-0.00182	mg/L	0.001982	108.70%
Sb 206.836†	3.6	-0.00012	mg/L	0.000430	-0.00012	mg/L	0.000430	344.44%
Se 196.026†	-9.4	-0.00332	mg/L	0.003229	-0.00332	mg/L	0.003229	97.22%
Si 251.611†	357446.7	11.0	mg/L	0.03	11.0	mg/L	0.03	0.29%
Sn 189.927†	-5.5	-0.00060	mg/L	0.000357	-0.00060	mg/L	0.000357	59.20%
Ti 334.940†	2907.6	0.00423	mg/L	0.000117	0.00423	mg/L	0.000117	2.76%
Tl 190.801†	50.5	0.0337	mg/L	0.00374	0.0337	mg/L	0.00374	11.09%
V 290.880†	296.7	0.00282	mg/L	0.000889	0.00282	mg/L	0.000889	31.53%

Approved: April 13, 2011

Zn 206.200†	287.4	0.00995 mg/L	0.000160	0.00995 mg/L	0.000160	1.60%
K 766.490†	6343.7	1.93 mg/L	0.026	1.93 mg/L	0.026	1.36%
Na 589.592†	3161966.1	367 mg/L	0.0	367 mg/L	0.0	0.00%
Sr 407.771†	72257.0	0.0681 mg/L	0.00513	0.0681 mg/L	0.00513	7.53%
Li 670.784†	4968.4	0.0648 mg/L	0.00130	0.0648 mg/L	0.00130	2.01%

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Sequence No.: 53 **Autosampler Location: 142**
Sample ID: L1104022016 WG361324-01 **Date Collected: 4/12/2011 10:01:03 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022016 WG361324-01

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104022016 WG361324-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4892393.2						41489.98	0.85%
YRADIAL	318686.0						4297.20	1.35%
Ga 417.206	1340323.1						18247.38	1.36%
GaRADIAL	68456.2						820.02	1.20%
Ag 328.068†	834.3	0.00388	mg/L	0.000250	0.00388	mg/L	0.000250	6.44%
Al 396.153†	-13.3	0.00086	mg/L	0.014484	0.00086	mg/L	0.014484	>999.9%
As 188.979†	4.5	0.00543	mg/L	0.003944	0.00543	mg/L	0.003944	72.61%
Ba 233.527†	9513.3	0.180	mg/L	0.0011	0.180	mg/L	0.0011	0.63%
Be 234.861†	-59.4	0.00015	mg/L	0.000030	0.00015	mg/L	0.000030	19.75%
B 249.677†	2266.3	0.0460	mg/L	0.00078	0.0460	mg/L	0.00078	1.70%
Ca 227.546†	6141.4	67.3	mg/L	0.81	67.3	mg/L	0.81	1.20%
Cd 228.802†	1.3	-0.00002	mg/L	0.000068	-0.00002	mg/L	0.000068	419.68%
Co 228.616†	19.5	0.00106	mg/L	0.000259	0.00106	mg/L	0.000259	24.28%
Cr 267.716†	237.7	0.00110	mg/L	0.000024	0.00110	mg/L	0.000024	2.21%
Cu 327.393†	61.3	-0.00045	mg/L	0.000219	-0.00045	mg/L	0.000219	48.51%
Fe 239.562†	4.9	0.0194	mg/L	0.01079	0.0194	mg/L	0.01079	55.60%
Mg 279.077†	9468.7	12.9	mg/L	0.08	12.9	mg/L	0.08	0.65%
Mn 257.610†	995901.5	2.21	mg/L	0.011	2.21	mg/L	0.011	0.48%
Mo 202.031†	20.3	0.00264	mg/L	0.000539	0.00264	mg/L	0.000539	20.43%
Ni 231.604†	19.2	0.00077	mg/L	0.000127	0.00077	mg/L	0.000127	16.48%
Pb 220.353†	-28.5	-0.00175	mg/L	0.001438	-0.00175	mg/L	0.001438	82.34%
Sb 206.836†	8.1	0.00312	mg/L	0.001253	0.00312	mg/L	0.001253	40.12%
Se 196.026†	-16.3	-0.00014	mg/L	0.002918	-0.00014	mg/L	0.002918	>999.9%
Si 251.611†	202627.9	6.23	mg/L	0.118	6.23	mg/L	0.118	1.89%
Sn 189.927†	3.8	0.00120	mg/L	0.000569	0.00120	mg/L	0.000569	47.36%
Ti 334.940†	-668.9	-0.00035	mg/L	0.000088	-0.00035	mg/L	0.000088	24.88%
Tl 190.801†	105.4	0.0698	mg/L	0.00236	0.0698	mg/L	0.00236	3.38%
V 290.880†	-494.2	-0.00274	mg/L	0.000709	-0.00274	mg/L	0.000709	25.87%
Zn 206.200†	88.7	0.00317	mg/L	0.000124	0.00317	mg/L	0.000124	3.90%
K 766.490†	6795.6	2.43	mg/L	0.045	2.43	mg/L	0.045	1.87%
Na 589.592†	383798.0	28.7	mg/L	0.18	28.7	mg/L	0.18	0.61%
Sr 407.771†	232693.7	0.220	mg/L	0.0189	0.220	mg/L	0.0189	8.61%
Li 670.784†	373.3	0.00620	mg/L	0.000791	0.00620	mg/L	0.000791	12.76%

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Sequence No.: 54 **Autosampler Location: 143**
Sample ID: L1104022016S WG361324-04 **Date Collected: 4/12/2011 10:07:48 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022016S WG361324-04

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104022016S WG361324-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4761432.8						34492.78	0.72%

Approved: April 13, 2011

YRADIAL	312128.0					770.50	0.25%
Ga 417.206	1313261.0					5288.55	0.40%
GaRADIAL	67260.5					1533.83	2.28%
Ag 328.068†	41796.6	0.207	mg/L	0.0011	0.207 mg/L	0.0011	0.53%
Al 396.153†	25977.8	5.20	mg/L	0.042	5.20 mg/L	0.042	0.82%
As 188.979†	199.3	0.212	mg/L	0.0037	0.212 mg/L	0.0037	1.76%
Ba 233.527†	36347.3	0.691	mg/L	0.0005	0.691 mg/L	0.0005	0.07%
Be 234.861†	13270.9	0.0273	mg/L	0.00014	0.0273 mg/L	0.00014	0.53%
B 249.677†	55446.6	1.09	mg/L	0.006	1.09 mg/L	0.006	0.54%
Ca 227.546†	6742.9	74.0	mg/L	0.90	74.0 mg/L	0.90	1.21%
Cd 228.802†	368.7	0.0234	mg/L	0.00018	0.0234 mg/L	0.00018	0.79%
Co 228.616†	1732.7	0.103	mg/L	0.0012	0.103 mg/L	0.0012	1.20%
Cr 267.716†	28679.2	0.255	mg/L	0.0009	0.255 mg/L	0.0009	0.36%
Cu 327.393†	36748.4	0.257	mg/L	0.0029	0.257 mg/L	0.0029	1.13%
Fe 239.562†	595.6	1.98	mg/L	0.035	1.98 mg/L	0.035	1.77%
Mg 279.077†	13153.5	18.0	mg/L	0.09	18.0 mg/L	0.09	0.48%
Mn 257.610†	1122529.6	2.49	mg/L	0.011	2.49 mg/L	0.011	0.45%
Mo 202.031†	6215.7	0.524	mg/L	0.0063	0.524 mg/L	0.0063	1.19%
Ni 231.604†	7643.2	0.253	mg/L	0.0033	0.253 mg/L	0.0033	1.30%
Pb 220.353†	1258.7	0.257	mg/L	0.0030	0.257 mg/L	0.0030	1.15%
Sb 206.836†	836.5	0.627	mg/L	0.0046	0.627 mg/L	0.0046	0.73%
Se 196.026†	218.6	0.199	mg/L	0.0056	0.199 mg/L	0.0056	2.82%
Si 251.611†	292123.9	8.97	mg/L	0.051	8.97 mg/L	0.051	0.57%
Sn 189.927†	2632.1	0.510	mg/L	0.0074	0.510 mg/L	0.0074	1.45%
Ti 334.940†	385309.0	0.539	mg/L	0.0011	0.539 mg/L	0.0011	0.21%
Tl 190.801†	473.4	0.326	mg/L	0.0026	0.326 mg/L	0.0026	0.78%
V 290.880†	75669.1	0.519	mg/L	0.0027	0.519 mg/L	0.0027	0.52%
Zn 206.200†	14411.1	0.496	mg/L	0.0019	0.496 mg/L	0.0019	0.39%
K 766.490†	72403.1	26.4	mg/L	0.31	26.4 mg/L	0.31	1.17%
Na 589.592†	708559.1	55.0	mg/L	0.15	55.0 mg/L	0.15	0.28%
Sr 407.771†	690768.8	0.652	mg/L	0.0713	0.652 mg/L	0.0713	10.94%
Li 670.784†	41424.5	0.530	mg/L	0.0068	0.530 mg/L	0.0068	1.29%

Sequence No.: 55 **Autosampler Location: 144**
Sample ID: L1104022016SD WG361324-05 **Date Collected: 4/12/2011 10:14:33 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022016SD WG361324-05

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104022016SD WG361324-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4808098.0						48909.99	1.02%
YRADIAL	316223.0						2341.94	0.74%
Ga 417.206	1322233.0						18039.18	1.36%
GaRADIAL	67916.0						1095.99	1.61%
Ag 328.068†	41411.3	0.206	mg/L	0.0024	0.206	mg/L	0.0024	1.16%
Al 396.153†	25791.4	5.16	mg/L	0.030	5.16	mg/L	0.030	0.58%
As 188.979†	197.9	0.210	mg/L	0.0010	0.210	mg/L	0.0010	0.47%
Ba 233.527†	36217.5	0.689	mg/L	0.0032	0.689	mg/L	0.0032	0.46%
Be 234.861†	13078.6	0.0269	mg/L	0.00023	0.0269	mg/L	0.00023	0.84%
B 249.677†	55054.5	1.08	mg/L	0.009	1.08	mg/L	0.009	0.84%
Ca 227.546†	6885.3	75.6	mg/L	1.00	75.6	mg/L	1.00	1.33%
Cd 228.802†	358.3	0.0227	mg/L	0.00017	0.0227	mg/L	0.00017	0.73%
Co 228.616†	1700.5	0.101	mg/L	0.0011	0.101	mg/L	0.0011	1.13%
Cr 267.716†	28304.5	0.252	mg/L	0.0010	0.252	mg/L	0.0010	0.41%
Cu 327.393†	36126.8	0.253	mg/L	0.0033	0.253	mg/L	0.0033	1.32%
Fe 239.562†	588.0	1.96	mg/L	0.021	1.96	mg/L	0.021	1.08%
Mg 279.077†	13330.5	18.2	mg/L	0.12	18.2	mg/L	0.12	0.68%
Mn 257.610†	1146925.2	2.55	mg/L	0.007	2.55	mg/L	0.007	0.28%
Mo 202.031†	6116.1	0.516	mg/L	0.0070	0.516	mg/L	0.0070	1.35%
Ni 231.604†	7505.0	0.249	mg/L	0.0026	0.249	mg/L	0.0026	1.03%
Pb 220.353†	1239.9	0.254	mg/L	0.0019	0.254	mg/L	0.0019	0.73%
Sb 206.836†	826.8	0.620	mg/L	0.0115	0.620	mg/L	0.0115	1.86%
Se 196.026†	210.5	0.193	mg/L	0.0035	0.193	mg/L	0.0035	1.82%
Si 251.611†	296229.0	9.09	mg/L	0.094	9.09	mg/L	0.094	1.04%

Approved: April 13, 2011

Sn 189.927†	2450.2	0.475	mg/L	0.0061	0.475	mg/L	0.0061 1.28%
Ti 334.940†	380632.5	0.533	mg/L	0.0030	0.533	mg/L	0.0030 0.56%
Tl 190.801†	470.0	0.324	mg/L	0.0044	0.324	mg/L	0.0044 1.37%
V 290.880†	74703.0	0.512	mg/L	0.0042	0.512	mg/L	0.0042 0.82%
Zn 206.200†	14262.3	0.491	mg/L	0.0011	0.491	mg/L	0.0011 0.22%
K 766.490†	72160.9	26.3	mg/L	0.27	26.3	mg/L	0.27 1.03%
Na 589.592†	702008.4	54.4	mg/L	1.16	54.4	mg/L	1.16 2.13%
Sr 407.771†	666218.8	0.629	mg/L	0.0544	0.629	mg/L	0.0544 8.65%
Li 670.784†	41050.7	0.525	mg/L	0.0009	0.525	mg/L	0.0009 0.17%

Sequence No.: 56 **Autosampler Location: 145**
Sample ID: L1104022018 **Date Collected: 4/12/2011 10:21:18 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022018

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104022018

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4594858.8						20766.47	0.45%
YRADIAL	308888.0						3163.62	1.02%
Ga 417.206	1261551.1						7218.39	0.57%
GaRADIAL	66733.1						956.16	1.43%
Ag 328.068†	554.6	0.00260	mg/L	0.000544	0.00260	mg/L	0.000544	20.94%
Al 396.153†	36356.2	7.29	mg/L	0.025	7.29	mg/L	0.025	0.35%
As 188.979†	9.0	0.0115	mg/L	0.00324	0.0115	mg/L	0.00324	28.08%
Ba 233.527†	3350.4	0.0635	mg/L	0.00035	0.0635	mg/L	0.00035	0.55%
Be 234.861†	585.1	0.00026	mg/L	0.000047	0.00026	mg/L	0.000047	17.84%
B 249.677†	5168.5	0.116	mg/L	0.0031	0.116	mg/L	0.0031	2.70%
Ca 227.546†	220.8	2.38	mg/L	0.017	2.38	mg/L	0.017	0.70%
Cd 228.802†	3.5	0.00010	mg/L	0.000063	0.00010	mg/L	0.000063	62.09%
Co 228.616†	122.0	0.00704	mg/L	0.000177	0.00704	mg/L	0.000177	2.51%
Cr 267.716†	809.9	0.00693	mg/L	0.000060	0.00693	mg/L	0.000060	0.86%
Cu 327.393†	4557.7	0.0316	mg/L	0.00135	0.0316	mg/L	0.00135	4.28%
Fe 239.562†	1402.4	4.66	mg/L	0.030	4.66	mg/L	0.030	0.64%
Mg 279.077†	1259.3	1.72	mg/L	0.009	1.72	mg/L	0.009	0.55%
Mn 257.610†	85233.0	0.196	mg/L	0.0024	0.196	mg/L	0.0024	1.21%
Mo 202.031†	364.5	0.0314	mg/L	0.00048	0.0314	mg/L	0.00048	1.52%
Ni 231.604†	276.6	0.00935	mg/L	0.000043	0.00935	mg/L	0.000043	0.46%
Pb 220.353†	-1.3	0.00091	mg/L	0.002629	0.00091	mg/L	0.002629	288.37%
Sb 206.836†	0.7	-0.00217	mg/L	0.001712	-0.00217	mg/L	0.001712	78.86%
Se 196.026†	-0.2	-0.00093	mg/L	0.007202	-0.00093	mg/L	0.007202	777.53%
Si 251.611†	535713.8	16.5	mg/L	0.07	16.5	mg/L	0.07	0.42%
Sn 189.927†	1.4	0.00072	mg/L	0.000799	0.00072	mg/L	0.000799	110.45%
Ti 334.940†	37101.4	0.0518	mg/L	0.00095	0.0518	mg/L	0.00095	1.84%
Tl 190.801†	4.1	0.00436	mg/L	0.001823	0.00436	mg/L	0.001823	41.87%
V 290.880†	2603.8	0.0188	mg/L	0.00076	0.0188	mg/L	0.00076	4.01%
Zn 206.200†	770.0	0.0265	mg/L	0.00028	0.0265	mg/L	0.00028	1.07%
K 766.490†	11728.6	3.84	mg/L	0.017	3.84	mg/L	0.017	0.44%
Na 589.592†	8936445.8	367	mg/L	0.0	367	mg/L	0.0	0.00%
Sr 407.771†	15948.4	0.0146	mg/L	0.00153	0.0146	mg/L	0.00153	10.49%
Li 670.784†	19472.5	0.250	mg/L	0.0005	0.250	mg/L	0.0005	0.19%

Sequence No.: 57 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/12/2011 10:28:05 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Approved: April 13, 2011

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4822721.2						40427.13	0.84%
YRADIAL	310979.4						3548.29	1.14%
Ga 417.206	1267254.0						21479.16	1.69%
GaRADIAL	65731.5						1324.87	2.02%
Ag 328.068†	83592.2	0.415	mg/L	0.0045	0.415	mg/L	0.0045	1.08%
QC value within limits for Ag 328.068 Recovery = 103.85%								
Al 396.153†	52864.9	10.6	mg/L	0.04	10.6	mg/L	0.04	0.41%
QC value within limits for Al 396.153 Recovery = 105.83%								
As 188.979†	393.3	0.419	mg/L	0.0074	0.419	mg/L	0.0074	1.76%
QC value within limits for As 188.979 Recovery = 104.67%								
Ba 233.527†	53772.8	1.02	mg/L	0.007	1.02	mg/L	0.007	0.66%
QC value within limits for Ba 233.527 Recovery = 102.34%								
Be 234.861†	26799.9	0.0545	mg/L	0.00050	0.0545	mg/L	0.00050	0.92%
QC value within limits for Be 234.861 Recovery = 108.91%								
B 249.677†	26675.3	0.528	mg/L	0.0070	0.528	mg/L	0.0070	1.33%
QC value within limits for B 249.677 Recovery = 105.63%								
Ca 227.546†	942.7	10.6	mg/L	0.22	10.6	mg/L	0.22	2.05%
QC value within limits for Ca 227.546 Recovery = 106.47%								
Cd 228.802†	762.0	0.0486	mg/L	0.00087	0.0486	mg/L	0.00087	1.79%
QC value within limits for Cd 228.802 Recovery = 97.28%								
Co 228.616†	3445.2	0.205	mg/L	0.0019	0.205	mg/L	0.0019	0.92%
QC value within limits for Co 228.616 Recovery = 102.39%								
Cr 267.716†	56543.2	0.506	mg/L	0.0038	0.506	mg/L	0.0038	0.75%
QC value within limits for Cr 267.716 Recovery = 101.13%								
Cu 327.393†	75870.8	0.532	mg/L	0.0049	0.532	mg/L	0.0049	0.92%
QC value within limits for Cu 327.393 Recovery = 106.38%								
Fe 239.562†	1174.3	3.90	mg/L	0.059	3.90	mg/L	0.059	1.50%
QC value within limits for Fe 239.562 Recovery = 97.59%								
Mg 279.077†	7137.7	9.75	mg/L	0.126	9.75	mg/L	0.126	1.29%
QC value within limits for Mg 279.077 Recovery = 97.55%								
Mn 257.610†	231939.3	0.518	mg/L	0.0021	0.518	mg/L	0.0021	0.40%
QC value within limits for Mn 257.610 Recovery = 103.70%								
Mo 202.031†	12230.6	1.03	mg/L	0.008	1.03	mg/L	0.008	0.76%
QC value within limits for Mo 202.031 Recovery = 102.99%								
Ni 231.604†	15289.7	0.507	mg/L	0.0019	0.507	mg/L	0.0019	0.37%
QC value within limits for Ni 231.604 Recovery = 101.34%								
Pb 220.353†	2554.2	0.515	mg/L	0.0030	0.515	mg/L	0.0030	0.58%
QC value within limits for Pb 220.353 Recovery = 103.02%								
Sb 206.836†	1675.1	1.26	mg/L	0.019	1.26	mg/L	0.019	1.52%
QC value within limits for Sb 206.836 Recovery = 104.84%								
Se 196.026†	502.2	0.423	mg/L	0.0110	0.423	mg/L	0.0110	2.60%
QC value within limits for Se 196.026 Recovery = 105.83%								
Si 251.611†	167677.8	5.14	mg/L	0.072	5.14	mg/L	0.072	1.41%
QC value within limits for Si 251.611 Recovery = 102.73%								
Sn 189.927†	5217.1	1.01	mg/L	0.009	1.01	mg/L	0.009	0.94%
QC value within limits for Sn 189.927 Recovery = 101.10%								
Ti 334.940†	756383.6	1.06	mg/L	0.004	1.06	mg/L	0.004	0.39%
QC value within limits for Ti 334.940 Recovery = 105.69%								
Tl 190.801†	768.3	0.535	mg/L	0.0037	0.535	mg/L	0.0037	0.69%
QC value within limits for Tl 190.801 Recovery = 107.04%								
V 290.880†	148264.9	1.02	mg/L	0.006	1.02	mg/L	0.006	0.60%
QC value within limits for V 290.880 Recovery = 101.58%								
Zn 206.200†	29391.0	1.01	mg/L	0.006	1.01	mg/L	0.006	0.56%
QC value within limits for Zn 206.200 Recovery = 101.17%								
K 766.490†	130695.6	49.0	mg/L	0.50	49.0	mg/L	0.50	1.02%
QC value within limits for K 766.490 Recovery = 98.04%								
Na 589.592†	650046.3	50.1	mg/L	0.65	50.1	mg/L	0.65	1.30%
QC value within limits for Na 589.592 Recovery = 100.18%								
Sr 407.771†	905269.2	0.855	mg/L	0.0618	0.855	mg/L	0.0618	7.23%
QC value less than the lower limit for Sr 407.771 Recovery = 85.49%								
Li 670.784†	82201.5	1.05	mg/L	0.008	1.05	mg/L	0.008	0.73%
QC value within limits for Li 670.784 Recovery = 105.00%								

QC Failed. Continue with analysis.

Sequence No.: 58
Sample ID: CCB
Analyst:
Initial Sample Wt:
Dilution:

Autosampler Location: 1
Date Collected: 4/12/2011 10:34:43 PM
Data Type: Original
Initial Sample Vol:
Sample Prep Vol:

Approved: April 13, 2011

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5038964.8						41071.91	0.82%
YRADIAL	321361.0						4726.90	1.47%
Ga 417.206	1298411.8						15853.26	1.22%
GaRADIAL	67268.0						130.38	0.19%
Ag 328.068†	533.5	0.00273	mg/L	0.000661	0.00273	mg/L	0.000661	24.24%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-3.0	0.00294	mg/L	0.017296	0.00294	mg/L	0.017296	587.53%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.5	0.00256	mg/L	0.001551	0.00256	mg/L	0.001551	60.48%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-3.0	-0.00017	mg/L	0.000021	-0.00017	mg/L	0.000021	12.12%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-61.7	-0.00014	mg/L	0.000012	-0.00014	mg/L	0.000012	8.28%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	201.6	0.00556	mg/L	0.000144	0.00556	mg/L	0.000144	2.59%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	5.8	0.0454	mg/L	0.05831	0.0454	mg/L	0.05831	128.42%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	3.2	0.00014	mg/L	0.000165	0.00014	mg/L	0.000165	116.13%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	0.9	0.00000	mg/L	0.000337	0.00000	mg/L	0.000337	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-41.5	-0.00043	mg/L	0.000097	-0.00043	mg/L	0.000097	22.32%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	167.7	0.00029	mg/L	0.000590	0.00029	mg/L	0.000590	202.57%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-0.3	0.00374	mg/L	0.003336	0.00374	mg/L	0.003336	89.12%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-2.9	-0.00227	mg/L	0.010013	-0.00227	mg/L	0.010013	440.25%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-2.8	-0.00021	mg/L	0.000043	-0.00021	mg/L	0.000043	21.00%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	8.4	0.00118	mg/L	0.000357	0.00118	mg/L	0.000357	30.35%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-6.1	-0.00003	mg/L	0.000148	-0.00003	mg/L	0.000148	586.97%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-9.6	-0.00100	mg/L	0.000439	-0.00100	mg/L	0.000439	44.10%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	1.6	-0.00173	mg/L	0.001350	-0.00173	mg/L	0.001350	77.92%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	5.5	0.00235	mg/L	0.003446	0.00235	mg/L	0.003446	146.59%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	269.1	0.00802	mg/L	0.000133	0.00802	mg/L	0.000133	1.66%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	2.0	0.00085	mg/L	0.000220	0.00085	mg/L	0.000220	25.95%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	77.6	0.00002	mg/L	0.000121	0.00002	mg/L	0.000121	663.80%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	0.4	0.00117	mg/L	0.005495	0.00117	mg/L	0.005495	469.81%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-96.1	-0.00001	mg/L	0.000878	-0.00001	mg/L	0.000878	>999.9%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-7.6	-0.00015	mg/L	0.000355	-0.00015	mg/L	0.000355	236.80%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	36.8	0.0753	mg/L	0.03023	0.0753	mg/L	0.03023	40.14%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	2444.9	0.199	mg/L	0.0066	0.199	mg/L	0.0066	3.32%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	97.9	0.00020	mg/L	0.000072	0.00020	mg/L	0.000072	35.60%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	-85.2	0.00035	mg/L	0.001548	0.00035	mg/L	0.001548	438.83%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Approved: April 13, 2011

Sequence No.: 59 **Autosampler Location: 146**
Sample ID: L1104022020 **Date Collected: 4/12/2011 10:41:19 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022020

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104022020

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4732981.6						30672.49	0.65%
YRADIAL	317722.4						2964.83	0.93%
Ga 417.206	1297888.2						4531.07	0.35%
GaRADIAL	67890.0						881.21	1.30%
Ag 328.068†	532.5	0.00230	mg/L	0.000371	0.00230	mg/L	0.000371	16.13%
Al 396.153†	54689.1	11.0	mg/L	0.04	11.0	mg/L	0.04	0.39%
As 188.979†	37.1	0.0418	mg/L	0.00107	0.0418	mg/L	0.00107	2.56%
Ba 233.527†	5739.1	0.109	mg/L	0.0009	0.109	mg/L	0.0009	0.81%
Be 234.861†	1000.8	0.00068	mg/L	0.000089	0.00068	mg/L	0.000089	12.95%
B 249.677†	2809.1	0.0772	mg/L	0.00172	0.0772	mg/L	0.00172	2.22%
Ca 227.546†	533.4	5.75	mg/L	0.049	5.75	mg/L	0.049	0.85%
Cd 228.802†	10.8	0.00038	mg/L	0.000102	0.00038	mg/L	0.000102	26.83%
Co 228.616†	283.1	0.0166	mg/L	0.00012	0.0166	mg/L	0.00012	0.72%
Cr 267.716†	1863.0	0.0158	mg/L	0.00019	0.0158	mg/L	0.00019	1.22%
Cu 327.393†	7216.0	0.0505	mg/L	0.00099	0.0505	mg/L	0.00099	1.96%
Fe 239.562†	2141.9	7.12	mg/L	0.044	7.12	mg/L	0.044	0.62%
Mg 279.077†	932.9	1.27	mg/L	0.002	1.27	mg/L	0.002	0.17%
Mn 257.610†	550354.6	1.23	mg/L	0.004	1.23	mg/L	0.004	0.37%
Mo 202.031†	40.5	0.00450	mg/L	0.000112	0.00450	mg/L	0.000112	2.49%
Ni 231.604†	599.8	0.0201	mg/L	0.00009	0.0201	mg/L	0.00009	0.43%
Pb 220.353†	11.4	0.00337	mg/L	0.001055	0.00337	mg/L	0.001055	31.34%
Sb 206.836†	1.4	-0.00195	mg/L	0.002031	-0.00195	mg/L	0.002031	103.89%
Se 196.026†	-1.2	-0.00081	mg/L	0.005619	-0.00081	mg/L	0.005619	695.85%
Si 251.611†	1398881.3	43.0	mg/L	0.13	43.0	mg/L	0.13	0.31%
Sn 189.927†	7.2	0.00186	mg/L	0.000954	0.00186	mg/L	0.000954	51.22%
Ti 334.940†	61672.9	0.0862	mg/L	0.00177	0.0862	mg/L	0.00177	2.06%
Tl 190.801†	14.3	0.0130	mg/L	0.00082	0.0130	mg/L	0.00082	6.29%
V 290.880†	8288.3	0.0580	mg/L	0.00122	0.0580	mg/L	0.00122	2.10%
Zn 206.200†	955.8	0.0329	mg/L	0.00025	0.0329	mg/L	0.00025	0.75%
K 766.490†	9107.7	2.91	mg/L	0.043	2.91	mg/L	0.043	1.47%
Na 589.592†	3298546.5	367	mg/L	0.0	367	mg/L	0.0	0.00%
Sr 407.771†	19948.7	0.0181	mg/L	0.00157	0.0181	mg/L	0.00157	8.67%
Li 670.784†	2118.4	0.0285	mg/L	0.00056	0.0285	mg/L	0.00056	1.98%

Sequence No.: 60 **Autosampler Location: 147**
Sample ID: L1104022022 **Date Collected: 4/12/2011 10:48:04 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022022

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104022022

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4874436.1						24452.50	0.50%
YRADIAL	327273.4						2482.38	0.76%
Ga 417.206	1357938.1						4186.20	0.31%
GaRADIAL	69323.3						591.16	0.85%
Ag 328.068†	567.2	0.00251	mg/L	0.000435	0.00251	mg/L	0.000435	17.30%
Al 396.153†	16276.8	3.27	mg/L	0.001	3.27	mg/L	0.001	0.04%

Approved: April 13, 2011

As 188.979†	14.0	0.0167 mg/L	0.00177	0.0167 mg/L	0.00177	10.58%
Ba 233.527†	14395.7	0.273 mg/L	0.0053	0.273 mg/L	0.0053	1.95%
Be 234.861†	555.9	0.00027 mg/L	0.000099	0.00027 mg/L	0.000099	37.23%
B 249.677†	925.5	0.0372 mg/L	0.00042	0.0372 mg/L	0.00042	1.13%
Ca 227.546†	3048.3	33.4 mg/L	0.15	33.4 mg/L	0.15	0.45%
Cd 228.802†	3.4	0.00006 mg/L	0.000245	0.00006 mg/L	0.000245	442.64%
Co 228.616†	212.9	0.0125 mg/L	0.00027	0.0125 mg/L	0.00027	2.18%
Cr 267.716†	506.5	0.00403 mg/L	0.000045	0.00403 mg/L	0.000045	1.11%
Cu 327.393†	3422.9	0.0236 mg/L	0.00076	0.0236 mg/L	0.00076	3.24%
Fe 239.562†	1374.0	4.57 mg/L	0.039	4.57 mg/L	0.039	0.86%
Mg 279.077†	5926.8	8.10 mg/L	0.037	8.10 mg/L	0.037	0.45%
Mn 257.610†	375208.9	0.835 mg/L	0.0053	0.835 mg/L	0.0053	0.63%
Mo 202.031†	29.0	0.00331 mg/L	0.000212	0.00331 mg/L	0.000212	6.40%
Ni 231.604†	104.4	0.00362 mg/L	0.000012	0.00362 mg/L	0.000012	0.33%
Pb 220.353†	-6.3	0.00107 mg/L	0.000262	0.00107 mg/L	0.000262	24.42%
Sb 206.836†	3.9	0.00000 mg/L	0.002799	0.00000 mg/L	0.002799	>999.9%
Se 196.026†	-14.3	-0.00499 mg/L	0.003482	-0.00499 mg/L	0.003482	69.81%
Si 251.611†	491659.9	15.1 mg/L	0.14	15.1 mg/L	0.14	0.92%
Sn 189.927†	-1.4	0.00019 mg/L	0.000663	0.00019 mg/L	0.000663	357.43%
Ti 334.940†	17599.2	0.0248 mg/L	0.00046	0.0248 mg/L	0.00046	1.87%
Tl 190.801†	64.4	0.0432 mg/L	0.00400	0.0432 mg/L	0.00400	9.26%
V 290.880†	703.8	0.00581 mg/L	0.000142	0.00581 mg/L	0.000142	2.44%
Zn 206.200†	371.1	0.0128 mg/L	0.00012	0.0128 mg/L	0.00012	0.97%
K 766.490†	3950.5	1.40 mg/L	0.006	1.40 mg/L	0.006	0.43%
Na 589.592†	754010.9	58.9 mg/L	0.31	58.9 mg/L	0.31	0.52%
Sr 407.771†	278935.8	0.263 mg/L	0.0227	0.263 mg/L	0.0227	8.63%
Li 670.784†	1364.7	0.0188 mg/L	0.00091	0.0188 mg/L	0.00091	4.83%

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Sequence No.: 61 **Autosampler Location: 148**
Sample ID: L1104022024 **Date Collected: 4/12/2011 10:55:42 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022024

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104022024

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4859503.9						32577.62	0.67%
YRADIAL	327918.3						5083.77	1.55%
Ga 417.206	1344789.6						15791.68	1.17%
GaRADIAL	69117.4						950.60	1.38%
Ag 328.068†	872.9	0.00378	mg/L	0.001204	0.00378	mg/L	0.001204	31.82%
Al 396.153†	88884.1	17.8	mg/L	0.02	17.8	mg/L	0.02	0.09%
As 188.979†	12.3	0.0152	mg/L	0.00163	0.0152	mg/L	0.00163	10.72%
Ba 233.527†	9579.0	0.182	mg/L	0.0004	0.182	mg/L	0.0004	0.20%
Be 234.861†	1623.0	0.00076	mg/L	0.000038	0.00076	mg/L	0.000038	5.09%
B 249.677†	4578.7	0.128	mg/L	0.0006	0.128	mg/L	0.0006	0.45%
Ca 227.546†	1912.7	20.9	mg/L	0.17	20.9	mg/L	0.17	0.82%
Cd 228.802†	3.5	0.00008	mg/L	0.000321	0.00008	mg/L	0.000321	403.00%
Co 228.616†	72.8	0.00355	mg/L	0.000216	0.00355	mg/L	0.000216	6.08%
Cr 267.716†	1526.3	0.0130	mg/L	0.00012	0.0130	mg/L	0.00012	0.94%
Cu 327.393†	2510.4	0.0183	mg/L	0.00131	0.0183	mg/L	0.00131	7.15%
Fe 239.562†	3671.7	12.2	mg/L	0.12	12.2	mg/L	0.12	0.95%
Mg 279.077†	4024.6	5.49	mg/L	0.108	5.49	mg/L	0.108	1.98%
Mn 257.610†	124161.3	0.282	mg/L	0.0004	0.282	mg/L	0.0004	0.15%
Mo 202.031†	21.0	0.00290	mg/L	0.000333	0.00290	mg/L	0.000333	11.50%
Ni 231.604†	365.3	0.0123	mg/L	0.00040	0.0123	mg/L	0.00040	3.24%
Pb 220.353†	-2.8	0.00138	mg/L	0.001643	0.00138	mg/L	0.001643	118.91%
Sb 206.836†	0.5	-0.00258	mg/L	0.001861	-0.00258	mg/L	0.001861	72.15%
Se 196.026†	-19.0	-0.0104	mg/L	0.00389	-0.0104	mg/L	0.00389	37.38%
Si 251.611†	1029508.8	31.6	mg/L	0.33	31.6	mg/L	0.33	1.04%
Sn 189.927†	-4.1	-0.00033	mg/L	0.000349	-0.00033	mg/L	0.000349	106.34%
Ti 334.940†	128847.2	0.180	mg/L	0.0020	0.180	mg/L	0.0020	1.10%
Tl 190.801†	43.2	0.0310	mg/L	0.00424	0.0310	mg/L	0.00424	13.68%
V 290.880†	3117.1	0.0229	mg/L	0.00050	0.0229	mg/L	0.00050	2.20%
Zn 206.200†	1429.9	0.0490	mg/L	0.00047	0.0490	mg/L	0.00047	0.96%

Approved: April 13, 2011

K 766.490†	10007.6	3.56 mg/L	0.064	3.56 mg/L	0.064	1.81%
Na 589.592†	516870.3	39.2 mg/L	0.03	39.2 mg/L	0.03	0.07%
Sr 407.771†	88037.0	0.0818 mg/L	0.00202	0.0818 mg/L	0.00202	2.47%
Li 670.784†	1628.2	0.0222 mg/L	0.00170	0.0222 mg/L	0.00170	7.67%

Sequence No.: 62 **Autosampler Location: 149**
Sample ID: L1104022026 **Date Collected: 4/12/2011 11:01:26 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022026

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104022026

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4899724.6						26580.19	0.54%
YRADIAL	327440.7						1960.56	0.60%
Ga 417.206	1362012.5						7599.14	0.56%
GaRADIAL	69900.2						1148.38	1.64%
Ag 328.068†	723.0	0.00360	mg/L	0.000198	0.00360	mg/L	0.000198	5.49%
Al 396.153†	4257.8	0.857	mg/L	0.0205	0.857	mg/L	0.0205	2.39%
As 188.979†	4.6	0.00647	mg/L	0.000309	0.00647	mg/L	0.000309	4.78%
Ba 233.527†	663.2	0.0125	mg/L	0.00014	0.0125	mg/L	0.00014	1.10%
Be 234.861†	95.6	0.00000	mg/L	0.000151	0.00000	mg/L	0.000151	>999.9%
B 249.677†	1598.7	0.0363	mg/L	0.00068	0.0363	mg/L	0.00068	1.87%
Ca 227.546†	2287.6	25.0	mg/L	0.18	25.0	mg/L	0.18	0.74%
Cd 228.802†	1.1	-0.00003	mg/L	0.000169	-0.00003	mg/L	0.000169	617.99%
Co 228.616†	102.3	0.00606	mg/L	0.000240	0.00606	mg/L	0.000240	3.96%
Cr 267.716†	379.9	0.00324	mg/L	0.000074	0.00324	mg/L	0.000074	2.29%
Cu 327.393†	1404.5	0.00907	mg/L	0.000754	0.00907	mg/L	0.000754	8.31%
Fe 239.562†	288.7	0.963	mg/L	0.0045	0.963	mg/L	0.0045	0.47%
Mg 279.077†	1529.6	2.09	mg/L	0.022	2.09	mg/L	0.022	1.05%
Mn 257.610†	78270.8	0.177	mg/L	0.0022	0.177	mg/L	0.0022	1.27%
Mo 202.031†	25.3	0.00268	mg/L	0.000368	0.00268	mg/L	0.000368	13.70%
Ni 231.604†	73.4	0.00259	mg/L	0.000262	0.00259	mg/L	0.000262	10.12%
Pb 220.353†	-14.9	-0.00087	mg/L	0.001023	-0.00087	mg/L	0.001023	117.18%
Sb 206.836†	4.3	0.00028	mg/L	0.001333	0.00028	mg/L	0.001333	483.12%
Se 196.026†	-12.2	-0.00608	mg/L	0.005383	-0.00608	mg/L	0.005383	88.57%
Si 251.611†	442962.0	13.6	mg/L	0.02	13.6	mg/L	0.02	0.15%
Sn 189.927†	5.7	0.00157	mg/L	0.000941	0.00157	mg/L	0.000941	60.06%
Ti 334.940†	5366.4	0.00766	mg/L	0.000179	0.00766	mg/L	0.000179	2.34%
Tl 190.801†	56.4	0.0373	mg/L	0.00474	0.0373	mg/L	0.00474	12.70%
V 290.880†	656.9	0.00522	mg/L	0.001179	0.00522	mg/L	0.001179	22.57%
Zn 206.200†	310.1	0.0108	mg/L	0.00011	0.0108	mg/L	0.00011	1.00%
K 766.490†	3460.6	1.19	mg/L	0.051	1.19	mg/L	0.051	4.30%
Na 589.592†	1086473.2	88.7	mg/L	1.12	88.7	mg/L	1.12	1.26%
Sr 407.771†	19735.5	0.0186	mg/L	0.00197	0.0186	mg/L	0.00197	10.55%
Li 670.784†	793.7	0.0116	mg/L	0.00062	0.0116	mg/L	0.00062	5.40%

Sequence No.: 63 **Autosampler Location: 150**
Sample ID: L1104022028 **Date Collected: 4/12/2011 11:08:11 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022028

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104022028

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4886056.4						79682.51	1.63%
YRADIAL	328427.2						1196.75	0.36%

Approved: April 13, 2011

Ga 417.206	1376356.9					26402.47	1.92%
GaRADIAL	69764.5					1317.70	1.89%
Ag 328.068†	687.4	0.00342	mg/L	0.000804	0.00342 mg/L	0.000804	23.54%
Al 396.153†	5061.2	1.02	mg/L	0.016	1.02 mg/L	0.016	1.62%
As 188.979†	4.8	0.00670	mg/L	0.003234	0.00670 mg/L	0.003234	48.27%
Ba 233.527†	804.4	0.0152	mg/L	0.00023	0.0152 mg/L	0.00023	1.52%
Be 234.861†	89.0	-0.00003	mg/L	0.000052	-0.00003 mg/L	0.000052	178.16%
B 249.677†	1607.1	0.0368	mg/L	0.00083	0.0368 mg/L	0.00083	2.26%
Ca 227.546†	2311.6	25.3	mg/L	0.48	25.3 mg/L	0.48	1.90%
Cd 228.802†	1.3	-0.00002	mg/L	0.000162	-0.00002 mg/L	0.000162	>999.9%
Co 228.616†	116.8	0.00693	mg/L	0.000385	0.00693 mg/L	0.000385	5.55%
Cr 267.716†	182.0	0.00147	mg/L	0.000034	0.00147 mg/L	0.000034	2.35%
Cu 327.393†	1253.0	0.00802	mg/L	0.000332	0.00802 mg/L	0.000332	4.14%
Fe 239.562†	317.5	1.06	mg/L	0.007	1.06 mg/L	0.007	0.70%
Mg 279.077†	1564.4	2.14	mg/L	0.004	2.14 mg/L	0.004	0.19%
Mn 257.610†	82115.1	0.185	mg/L	0.0022	0.185 mg/L	0.0022	1.20%
Mo 202.031†	29.7	0.00306	mg/L	0.000155	0.00306 mg/L	0.000155	5.05%
Ni 231.604†	67.0	0.00238	mg/L	0.000255	0.00238 mg/L	0.000255	10.70%
Pb 220.353†	-20.0	-0.00189	mg/L	0.000743	-0.00189 mg/L	0.000743	39.33%
Sb 206.836†	2.4	-0.00109	mg/L	0.002995	-0.00109 mg/L	0.002995	275.23%
Se 196.026†	-14.4	-0.00782	mg/L	0.002392	-0.00782 mg/L	0.002392	30.60%
Si 251.611†	461143.5	14.2	mg/L	0.12	14.2 mg/L	0.12	0.87%
Sn 189.927†	-0.7	0.00033	mg/L	0.000478	0.00033 mg/L	0.000478	145.68%
Ti 334.940†	6128.5	0.00873	mg/L	0.000130	0.00873 mg/L	0.000130	1.49%
Tl 190.801†	49.8	0.0328	mg/L	0.00335	0.0328 mg/L	0.00335	10.22%
V 290.880†	535.0	0.00439	mg/L	0.000557	0.00439 mg/L	0.000557	12.69%
Zn 206.200†	353.7	0.0122	mg/L	0.00025	0.0122 mg/L	0.00025	2.01%
K 766.490†	3706.9	1.28	mg/L	0.009	1.28 mg/L	0.009	0.67%
Na 589.592†	1098516.6	89.9	mg/L	1.44	89.9 mg/L	1.44	1.60%
Sr 407.771†	21021.5	0.0198	mg/L	0.00135	0.0198 mg/L	0.00135	6.82%
Li 670.784†	864.2	0.0125	mg/L	0.00105	0.0125 mg/L	0.00105	8.42%

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Sequence No.: 64 **Autosampler Location: 151**
Sample ID: L1104022030 **Date Collected: 4/12/2011 11:14:56 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022030

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104022030

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4774085.0						47915.88	1.00%
YRADIAL	321065.4						4454.13	1.39%
Ga 417.206	1308363.3						17975.64	1.37%
GaRADIAL	68839.8						350.79	0.51%
Ag 328.068†	623.2	0.00276	mg/L	0.000954	0.00276	mg/L	0.000954	34.52%
Al 396.153†	52969.9	10.6	mg/L	0.04	10.6	mg/L	0.04	0.40%
As 188.979†	28.2	0.0324	mg/L	0.00094	0.0324	mg/L	0.00094	2.90%
Ba 233.527†	5797.2	0.110	mg/L	0.0013	0.110	mg/L	0.0013	1.18%
Be 234.861†	1007.4	0.00068	mg/L	0.000055	0.00068	mg/L	0.000055	8.06%
B 249.677†	2156.6	0.0648	mg/L	0.00181	0.0648	mg/L	0.00181	2.79%
Ca 227.546†	404.8	4.33	mg/L	0.077	4.33	mg/L	0.077	1.77%
Cd 228.802†	6.3	0.00015	mg/L	0.000180	0.00015	mg/L	0.000180	123.78%
Co 228.616†	225.6	0.0131	mg/L	0.00026	0.0131	mg/L	0.00026	2.02%
Cr 267.716†	1722.5	0.0146	mg/L	0.00015	0.0146	mg/L	0.00015	1.04%
Cu 327.393†	5469.7	0.0383	mg/L	0.00056	0.0383	mg/L	0.00056	1.45%
Fe 239.562†	2134.4	7.09	mg/L	0.058	7.09	mg/L	0.058	0.82%
Mg 279.077†	823.1	1.12	mg/L	0.012	1.12	mg/L	0.012	1.03%
Mn 257.610†	494176.5	1.11	mg/L	0.002	1.11	mg/L	0.002	0.15%
Mo 202.031†	25.4	0.00320	mg/L	0.000536	0.00320	mg/L	0.000536	16.77%
Ni 231.604†	459.7	0.0154	mg/L	0.00018	0.0154	mg/L	0.00018	1.17%
Pb 220.353†	6.2	0.00227	mg/L	0.001161	0.00227	mg/L	0.001161	51.12%
Sb 206.836†	0.7	-0.00243	mg/L	0.002248	-0.00243	mg/L	0.002248	92.38%
Se 196.026†	-0.4	-0.00043	mg/L	0.002618	-0.00043	mg/L	0.002618	606.38%
Si 251.611†	1443316.5	44.3	mg/L	0.43	44.3	mg/L	0.43	0.98%
Sn 189.927†	4.1	0.00124	mg/L	0.000434	0.00124	mg/L	0.000434	34.83%

Approved: April 13, 2011

Ti 334.940†	59832.1	0.0836 mg/L	0.00081	0.0836 mg/L	0.00081	0.97%
Tl 190.801†	2.6	0.00496 mg/L	0.002545	0.00496 mg/L	0.002545	51.28%
V 290.880†	8054.9	0.0564 mg/L	0.00062	0.0564 mg/L	0.00062	1.10%
Zn 206.200†	888.9	0.0305 mg/L	0.00046	0.0305 mg/L	0.00046	1.50%
K 766.490†	8131.9	2.57 mg/L	0.040	2.57 mg/L	0.040	1.56%
Na 589.592†	3008178.6	367 mg/L	0.0	367 mg/L	0.0	0.00%
Sr 407.771†	17048.2	0.0154 mg/L	0.00128	0.0154 mg/L	0.00128	8.30%
Li 670.784†	1034.2	0.0146 mg/L	0.00206	0.0146 mg/L	0.00206	14.06%

Sequence No.: 65 **Autosampler Location: 152**
Sample ID: L1104022032 **Date Collected: 4/12/2011 11:21:41 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022032

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104022032

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5097426.0						46615.62	0.91%
YRADIAL	336155.6						7406.26	2.20%
Ga 417.206	1351210.7						7224.13	0.53%
GaRADIAL	70644.4						435.39	0.62%
Ag 328.068†	419.8	0.00216	mg/L	0.000151	0.00216	mg/L	0.000151	7.00%
Al 396.153†	9.6	0.00548	mg/L	0.006240	0.00548	mg/L	0.006240	113.85%
As 188.979†	-1.3	0.00059	mg/L	0.002099	0.00059	mg/L	0.002099	354.79%
Ba 233.527†	-1.3	-0.00014	mg/L	0.000060	-0.00014	mg/L	0.000060	42.45%
Be 234.861†	-54.3	-0.00013	mg/L	0.000022	-0.00013	mg/L	0.000022	17.06%
B 249.677†	-77.5	0.00013	mg/L	0.000165	0.00013	mg/L	0.000165	123.27%
Ca 227.546†	5.4	0.0405	mg/L	0.03979	0.0405	mg/L	0.03979	98.31%
Cd 228.802†	1.7	0.00006	mg/L	0.000107	0.00006	mg/L	0.000107	194.86%
Co 228.616†	7.2	0.00038	mg/L	0.000132	0.00038	mg/L	0.000132	34.63%
Cr 267.716†	64.8	0.00052	mg/L	0.000020	0.00052	mg/L	0.000020	3.80%
Cu 327.393†	241.5	0.00081	mg/L	0.000614	0.00081	mg/L	0.000614	75.85%
Fe 239.562†	1.8	0.0105	mg/L	0.00280	0.0105	mg/L	0.00280	26.55%
Mg 279.077†	1.2	0.00328	mg/L	0.009001	0.00328	mg/L	0.009001	274.54%
Mn 257.610†	127.0	0.00008	mg/L	0.000015	0.00008	mg/L	0.000015	18.50%
Mo 202.031†	2.3	0.00066	mg/L	0.000171	0.00066	mg/L	0.000171	25.83%
Ni 231.604†	-3.9	0.00005	mg/L	0.000302	0.00005	mg/L	0.000302	624.05%
Pb 220.353†	-13.7	-0.00181	mg/L	0.000959	-0.00181	mg/L	0.000959	53.09%
Sb 206.836†	-2.1	-0.00450	mg/L	0.001091	-0.00450	mg/L	0.001091	24.24%
Se 196.026†	6.0	0.00280	mg/L	0.003822	0.00280	mg/L	0.003822	136.60%
Si 251.611†	788.3	0.0240	mg/L	0.00218	0.0240	mg/L	0.00218	9.08%
Sn 189.927†	-4.6	-0.00042	mg/L	0.000970	-0.00042	mg/L	0.000970	228.57%
Ti 334.940†	91.3	0.00004	mg/L	0.000063	0.00004	mg/L	0.000063	169.45%
Tl 190.801†	-0.3	0.00066	mg/L	0.002457	0.00066	mg/L	0.002457	374.47%
V 290.880†	-52.5	0.00029	mg/L	0.000590	0.00029	mg/L	0.000590	201.25%
Zn 206.200†	257.4	0.00895	mg/L	0.000167	0.00895	mg/L	0.000167	1.87%
K 766.490†	-88.2	0.0314	mg/L	0.00359	0.0314	mg/L	0.00359	11.44%
Na 589.592†	1843.2	0.156	mg/L	0.0079	0.156	mg/L	0.0079	5.06%
Sr 407.771†	87.7	0.00019	mg/L	0.000028	0.00019	mg/L	0.000028	14.47%
Li 670.784†	-217.3	-0.00133	mg/L	0.001615	-0.00133	mg/L	0.001615	121.24%

Sequence No.: 66 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/12/2011 11:28:22 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: CCV

Approved: April 13, 2011

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4813303.6						35241.55	0.73%
YRADIAL	315388.8						7317.86	2.32%
Ga 417.206	1263356.4						10163.33	0.80%
GaRADIAL	66907.9						584.56	0.87%
Ag 328.068†	84894.7	0.422	mg/L	0.0044	0.422	mg/L	0.0044	1.05%
QC value within limits for Ag 328.068 Recovery = 105.47%								
Al 396.153†	53070.3	10.6	mg/L	0.10	10.6	mg/L	0.10	0.94%
QC value within limits for Al 396.153 Recovery = 106.24%								
As 188.979†	399.0	0.425	mg/L	0.0038	0.425	mg/L	0.0038	0.90%
QC value within limits for As 188.979 Recovery = 106.18%								
Ba 233.527†	54497.0	1.04	mg/L	0.008	1.04	mg/L	0.008	0.81%
QC value within limits for Ba 233.527 Recovery = 103.72%								
Be 234.861†	27140.6	0.0552	mg/L	0.00057	0.0552	mg/L	0.00057	1.04%
QC value greater than the upper limit for Be 234.861 Recovery = 110.30%								
B 249.677†	27116.7	0.537	mg/L	0.0068	0.537	mg/L	0.0068	1.27%
QC value within limits for B 249.677 Recovery = 107.33%								
Ca 227.546†	960.5	10.8	mg/L	0.06	10.8	mg/L	0.06	0.51%
QC value within limits for Ca 227.546 Recovery = 108.46%								
Cd 228.802†	772.2	0.0493	mg/L	0.00044	0.0493	mg/L	0.00044	0.89%
QC value within limits for Cd 228.802 Recovery = 98.59%								
Co 228.616†	3460.1	0.206	mg/L	0.0023	0.206	mg/L	0.0023	1.10%
QC value within limits for Co 228.616 Recovery = 102.84%								
Cr 267.716†	57123.4	0.511	mg/L	0.0055	0.511	mg/L	0.0055	1.07%
QC value within limits for Cr 267.716 Recovery = 102.17%								
Cu 327.393†	77505.4	0.543	mg/L	0.0061	0.543	mg/L	0.0061	1.13%
QC value within limits for Cu 327.393 Recovery = 108.67%								
Fe 239.562†	1171.8	3.90	mg/L	0.026	3.90	mg/L	0.026	0.66%
QC value within limits for Fe 239.562 Recovery = 97.38%								
Mg 279.077†	7126.5	9.74	mg/L	0.121	9.74	mg/L	0.121	1.25%
QC value within limits for Mg 279.077 Recovery = 97.39%								
Mn 257.610†	234907.7	0.525	mg/L	0.0049	0.525	mg/L	0.0049	0.93%
QC value within limits for Mn 257.610 Recovery = 105.02%								
Mo 202.031†	12305.0	1.04	mg/L	0.010	1.04	mg/L	0.010	0.99%
QC value within limits for Mo 202.031 Recovery = 103.61%								
Ni 231.604†	15459.8	0.512	mg/L	0.0040	0.512	mg/L	0.0040	0.78%
QC value within limits for Ni 231.604 Recovery = 102.47%								
Pb 220.353†	2567.4	0.518	mg/L	0.0035	0.518	mg/L	0.0035	0.67%
QC value within limits for Pb 220.353 Recovery = 103.55%								
Sb 206.836†	1696.6	1.27	mg/L	0.005	1.27	mg/L	0.005	0.41%
QC value within limits for Sb 206.836 Recovery = 106.18%								
Se 196.026†	497.6	0.419	mg/L	0.0073	0.419	mg/L	0.0073	1.73%
QC value within limits for Se 196.026 Recovery = 104.87%								
Si 251.611†	171045.3	5.24	mg/L	0.049	5.24	mg/L	0.049	0.94%
QC value within limits for Si 251.611 Recovery = 104.80%								
Sn 189.927†	5245.2	1.02	mg/L	0.011	1.02	mg/L	0.011	1.10%
QC value within limits for Sn 189.927 Recovery = 101.65%								
Ti 334.940†	756652.1	1.06	mg/L	0.004	1.06	mg/L	0.004	0.36%
QC value within limits for Ti 334.940 Recovery = 105.73%								
Tl 190.801†	773.9	0.539	mg/L	0.0058	0.539	mg/L	0.0058	1.07%
QC value within limits for Tl 190.801 Recovery = 107.82%								
V 290.880†	150592.4	1.03	mg/L	0.011	1.03	mg/L	0.011	1.03%
QC value within limits for V 290.880 Recovery = 103.17%								
Zn 206.200†	29509.2	1.02	mg/L	0.009	1.02	mg/L	0.009	0.85%
QC value within limits for Zn 206.200 Recovery = 101.58%								
K 766.490†	130622.7	49.0	mg/L	0.88	49.0	mg/L	0.88	1.79%
QC value within limits for K 766.490 Recovery = 97.98%								
Na 589.592†	651556.0	50.2	mg/L	0.36	50.2	mg/L	0.36	0.72%
QC value within limits for Na 589.592 Recovery = 100.43%								
Sr 407.771†	926056.5	0.875	mg/L	0.0732	0.875	mg/L	0.0732	8.37%
QC value less than the lower limit for Sr 407.771 Recovery = 87.45%								
Li 670.784†	82977.9	1.06	mg/L	0.009	1.06	mg/L	0.009	0.87%
QC value within limits for Li 670.784 Recovery = 105.99%								

QC Failed. Continue with analysis.

Sequence No.: 67 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/12/2011 11:35:00 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 13, 2011

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4928539.3						60758.03	1.23%
YRADIAL	314239.8						7820.08	2.49%
Ga 417.206	1275112.3						22463.38	1.76%
GaRADIAL	66129.6						1004.99	1.52%
Ag 328.068†	511.8	0.00262	mg/L	0.000230	0.00262	mg/L	0.000230	8.76%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-52.4	-0.00695	mg/L	0.008949	-0.00695	mg/L	0.008949	128.81%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.2	0.00073	mg/L	0.002603	0.00073	mg/L	0.002603	356.38%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-2.0	-0.00015	mg/L	0.000077	-0.00015	mg/L	0.000077	50.26%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	-75.0	-0.00017	mg/L	0.000069	-0.00017	mg/L	0.000069	41.12%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	31.2	0.00224	mg/L	0.000177	0.00224	mg/L	0.000177	7.87%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	3.2	0.0164	mg/L	0.04985	0.0164	mg/L	0.04985	303.55%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	0.6	-0.00002	mg/L	0.000095	-0.00002	mg/L	0.000095	522.26%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	7.7	0.00041	mg/L	0.000198	0.00041	mg/L	0.000198	48.52%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	-33.8	-0.00036	mg/L	0.000065	-0.00036	mg/L	0.000065	17.97%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	168.5	0.00030	mg/L	0.000544	0.00030	mg/L	0.000544	182.76%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-0.1	0.00440	mg/L	0.001776	0.00440	mg/L	0.001776	40.35%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-3.2	-0.00267	mg/L	0.003660	-0.00267	mg/L	0.003660	137.12%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	-21.4	-0.00025	mg/L	0.000015	-0.00025	mg/L	0.000015	5.87%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	1.7	0.00061	mg/L	0.000060	0.00061	mg/L	0.000060	9.75%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-6.2	-0.00003	mg/L	0.000153	-0.00003	mg/L	0.000153	524.93%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-10.3	-0.00115	mg/L	0.000296	-0.00115	mg/L	0.000296	25.86%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	-2.8	-0.00503	mg/L	0.001959	-0.00503	mg/L	0.001959	38.93%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	3.3	0.00051	mg/L	0.005416	0.00051	mg/L	0.005416	>999.9%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	270.4	0.00807	mg/L	0.001184	0.00807	mg/L	0.001184	14.67%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	0.3	0.00051	mg/L	0.000858	0.00051	mg/L	0.000858	166.53%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	43.8	-0.00003	mg/L	0.000113	-0.00003	mg/L	0.000113	384.18%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	3.2	0.00304	mg/L	0.001140	0.00304	mg/L	0.001140	37.48%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-1.9	0.00064	mg/L	0.000957	0.00064	mg/L	0.000957	149.61%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-5.4	-0.00007	mg/L	0.000170	-0.00007	mg/L	0.000170	234.01%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	-105.2	0.0255	mg/L	0.00721	0.0255	mg/L	0.00721	28.33%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	736.9	0.0768	mg/L	0.00916	0.0768	mg/L	0.00916	11.93%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	60.8	0.00017	mg/L	0.000056	0.00017	mg/L	0.000056	33.34%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	-201.7	-0.00113	mg/L	0.001205	-0.00113	mg/L	0.001205	106.40%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Approved: April 13, 2011

Nebulizer Parameters: S0

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: S0

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4919742.2	64834.97	1.32%		
YRADIAL	300989.8	4154.97	1.38%		
Ga 417.206	1271948.7	24395.62	1.92%		
GaRADIAL	64772.9	364.94	0.56%		
Ag 328.068†	-944.4	57.50	6.09%	[0.00]	mg/L
Al 396.153†	-205.4	44.01	21.43%	[0.00]	mg/L
As 188.979†	-0.1	1.89	>999.9%	[0.00]	mg/L
Ba 233.527†	-38.4	10.09	26.31%	[0.00]	mg/L
Be 234.861†	-551.9	15.15	2.75%	[0.00]	mg/L
B 249.677†	385.7	13.17	3.41%	[0.00]	mg/L
Ca 227.546†	-24.4	4.28	17.53%	[0.00]	mg/L
Cd 228.802†	18.9	2.10	11.11%	[0.00]	mg/L
Co 228.616†	-13.2	1.12	8.45%	[0.00]	mg/L
Cr 267.716†	-73.6	11.18	15.19%	[0.00]	mg/L
Cu 327.393†	-1390.5	54.48	3.92%	[0.00]	mg/L
Fe 239.562†	0.4	1.98	511.89%	[0.00]	mg/L
Mg 279.077†	-5.4	1.85	34.43%	[0.00]	mg/L
Mn 257.610†	118.3	4.37	3.69%	[0.00]	mg/L
Mo 202.031†	-20.7	5.45	26.37%	[0.00]	mg/L
Ni 231.604†	-7.3	1.28	17.47%	[0.00]	mg/L
Pb 220.353†	32.1	4.19	13.07%	[0.00]	mg/L
Sb 206.836†	10.6	2.53	23.97%	[0.00]	mg/L
Se 196.026†	3.0	3.55	116.89%	[0.00]	mg/L
Si 251.611†	653.9	23.64	3.62%	[0.00]	mg/L
Sn 189.927†	29.7	3.09	10.41%	[0.00]	mg/L
Ti 334.940†	-586.4	29.47	5.03%	[0.00]	mg/L
Tl 190.801†	-30.4	2.01	6.59%	[0.00]	mg/L
V 290.880†	3964.7	132.34	3.34%	[0.00]	mg/L
Zn 206.200†	19.0	4.79	25.26%	[0.00]	mg/L
K 766.490†	56.4	74.79	132.61%	[0.00]	mg/L
Na 589.592†	70.3	170.82	242.99%	[0.00]	mg/L
Sr 407.771†	-696.4	73.13	10.50%	[0.00]	mg/L
Li 670.784†	254.6	29.11	11.43%	[0.00]	mg/L

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Sequence No.: 2 **Autosampler Location: 2**
Sample ID: S1 **Date Collected: 4/15/2011 11:00:03 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S1

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: S1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4919091.7	22040.43	0.45%		
YRADIAL	299674.3	7471.04	2.49%		
Ga 417.206	1276035.0	17948.23	1.41%		
GaRADIAL	64256.6	679.50	1.06%		
Ag 328.068†	712.8	146.29	20.52%	[0.0040]	mg/L
Al 396.153†	549.5	92.58	16.85%	[0.10]	mg/L
Ba 233.527†	556.6	2.51	0.45%	[0.010]	mg/L
Be 234.861†	271.9	9.08	3.34%	[0.0005]	mg/L
Cd 228.802†	8.1	1.13	13.85%	[0.00050]	mg/L
Co 228.616†	29.8	3.17	10.67%	[0.0020]	mg/L
Cr 267.716†	611.3	14.15	2.31%	[0.0050]	mg/L
Cu 327.393†	824.7	92.07	11.16%	[0.0050]	mg/L
Fe 239.562†	13.6	2.10	15.43%	[0.040]	mg/L

Approved: April 18, 2011

Mg 279.077†	74.1	4.68	6.31%	[0.10]	mg/L
Mn 257.610†	2450.2	12.89	0.53%	[0.0050]	mg/L
Mo 202.031†	120.1	6.36	5.30%	[0.010]	mg/L
Ni 231.604†	167.2	3.72	2.22%	[0.0050]	mg/L
Pb 220.353†	20.4	4.72	23.08%	[0.0050]	mg/L
Sb 206.836†	22.2	2.18	9.79%	[0.012]	mg/L
Si 251.611†	1710.5	31.69	1.85%	[0.050]	mg/L
Sn 189.927†	51.7	1.28	2.48%	[0.010]	mg/L
Ti 334.940†	7552.4	213.19	2.82%	[0.010]	mg/L
V 290.880†	1513.5	81.96	5.42%	[0.010]	mg/L
Zn 206.200†	304.4	4.33	1.42%	[0.010]	mg/L
K 766.490†	1423.6	94.85	6.66%	[0.50]	mg/L
Na 589.592†	6935.2	57.25	0.83%	[0.50]	mg/L
Sr 407.771†	15157.8	43.61	0.29%	[0.010]	mg/L
Li 670.784†	873.1	120.76	13.83%	[0.010]	mg/L

Sequence No.: 3 **Autosampler Location: 3**
Sample ID: S2 **Date Collected: 4/15/2011 11:06:40 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S2

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: S2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	5011051.2	61645.85	1.23%		
YRADIAL	298320.8	8651.63	2.90%		
Ga 417.206	1301549.1	10076.99	0.77%		
GaRADIAL	64106.0	544.51	0.85%		
Ag 328.068†	1474.7	113.46	7.69%	[0.0080]	mg/L
Al 396.153†	1122.3	19.16	1.71%	[0.20]	mg/L
As 188.979†	5.0	2.02	40.25%	[0.0080]	mg/L
Ba 233.527†	1099.0	14.38	1.31%	[0.020]	mg/L
Be 234.861†	541.3	21.60	3.99%	[0.0010]	mg/L
B 249.677†	484.3	5.80	1.20%	[0.010]	mg/L
Ca 227.546†	17.0	8.42	49.55%	[0.20]	mg/L
Cd 228.802†	14.6	1.79	12.27%	[0.0010]	mg/L
Co 228.616†	65.3	4.07	6.23%	[0.0040]	mg/L
Cr 267.716†	1221.2	8.85	0.72%	[0.010]	mg/L
Cu 327.393†	1574.1	22.18	1.41%	[0.010]	mg/L
Fe 239.562†	25.4	0.34	1.33%	[0.080]	mg/L
Mg 279.077†	147.2	1.55	1.05%	[0.20]	mg/L
Mn 257.610†	4738.9	31.89	0.67%	[0.010]	mg/L
Mo 202.031†	234.2	3.07	1.31%	[0.020]	mg/L
Ni 231.604†	313.9	4.36	1.39%	[0.010]	mg/L
Pb 220.353†	48.5	1.51	3.11%	[0.010]	mg/L
Sb 206.836†	34.8	3.09	8.86%	[0.024]	mg/L
Se 196.026†	14.1	5.13	36.44%	[0.0080]	mg/L
Si 251.611†	3284.2	195.91	5.97%	[0.10]	mg/L
Sn 189.927†	105.0	9.37	8.92%	[0.020]	mg/L
Ti 334.940†	14625.8	201.90	1.38%	[0.020]	mg/L
Tl 190.801†	19.6	1.70	8.70%	[0.010]	mg/L
V 290.880†	2958.2	152.95	5.17%	[0.020]	mg/L
Zn 206.200†	615.6	11.18	1.82%	[0.020]	mg/L
K 766.490†	2694.6	97.21	3.61%	[1.00]	mg/L
Na 589.592†	13664.5	73.08	0.53%	[1.00]	mg/L
Sr 407.771†	30131.1	475.62	1.58%	[0.020]	mg/L
Li 670.784†	1664.4	151.16	9.08%	[0.020]	mg/L

Sequence No.: 4 **Autosampler Location: 4**
Sample ID: S3 **Date Collected: 4/15/2011 11:13:17 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 18, 2011

Nebulizer Parameters: S3

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: S3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4691887.0	27035.64	0.58%		
YRADIAL	291331.1	1609.49	0.55%		
Ga 417.206	1235167.6	6396.21	0.52%		
GaRADIAL	63448.7	1058.65	1.67%		
Ag 328.068†	84924.9	1536.02	1.81%	[0.40]	mg/L
Al 396.153†	51959.0	85.49	0.16%	[10.00]	mg/L
As 188.979†	226.7	1.41	0.62%	[0.40]	mg/L
Ba 233.527†	56437.0	863.29	1.53%	[1.00]	mg/L
Be 234.861†	27258.3	363.15	1.33%	[0.05]	mg/L
B 249.677†	27217.3	543.21	2.00%	[0.50]	mg/L
Ca 227.546†	942.4	3.54	0.38%	[10.00]	mg/L
Cd 228.802†	790.2	4.77	0.60%	[0.05]	mg/L
Co 228.616†	3610.4	12.32	0.34%	[0.20]	mg/L
Cr 267.716†	60010.3	858.59	1.43%	[0.50]	mg/L
Cu 327.393†	76716.9	1665.69	2.17%	[0.50]	mg/L
Fe 239.562†	1200.1	24.33	2.03%	[4.00]	mg/L
Mg 279.077†	7343.5	115.54	1.57%	[10.00]	mg/L
Mn 257.610†	244009.9	4087.27	1.68%	[0.50]	mg/L
Mo 202.031†	12729.7	44.56	0.35%	[1.00]	mg/L
Ni 231.604†	16216.7	170.04	1.05%	[0.50]	mg/L
Pb 220.353†	2649.7	17.85	0.67%	[0.50]	mg/L
Sb 206.836†	1715.4	5.97	0.35%	[1.20]	mg/L
Se 196.026†	513.6	9.91	1.93%	[0.40]	mg/L
Si 251.611†	173348.4	2665.28	1.54%	[5.00]	mg/L
Sn 189.927†	5548.4	28.59	0.52%	[1.00]	mg/L
Ti 334.940†	756794.5	2332.72	0.31%	[1.00]	mg/L
Tl 190.801†	793.4	6.85	0.86%	[0.50]	mg/L
V 290.880†	155856.7	2825.85	1.81%	[1.00]	mg/L
Zn 206.200†	31613.8	488.18	1.54%	[1.00]	mg/L
K 766.490†	134799.1	284.20	0.21%	[50.00]	mg/L
Na 589.592†	666646.7	14761.65	2.21%	[50.00]	mg/L
Sr 407.771†	1526300.9	17477.29	1.15%	[1.00]	mg/L
Li 670.784†	82186.8	631.90	0.77%	[1.00]	mg/L

Sequence No.: 5 **Autosampler Location: 5**
Sample ID: S4 **Date Collected: 4/15/2011 11:20:00 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: S4

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: S4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
Y 371.029	4639795.7	65404.93	1.41%		
YRADIAL	291338.1	949.23	0.33%		
Ga 417.206	1235358.8	11944.18	0.97%		
GaRADIAL	64468.1	1492.03	2.31%		
Ag 328.068†	167121.6	1883.74	1.13%	[0.80]	mg/L
Al 396.153†	100727.6	858.40	0.85%	[20.00]	mg/L
As 188.979†	441.3	9.90	2.24%	[0.80]	mg/L
Ba 233.527†	110897.2	1728.40	1.56%	[2.00]	mg/L
Be 234.861†	53069.3	607.60	1.14%	[0.10]	mg/L
B 249.677†	53602.5	616.58	1.15%	[1.00]	mg/L
Ca 227.546†	1855.1	26.73	1.44%	[20.00]	mg/L
Cd 228.802†	1540.9	20.78	1.35%	[0.10]	mg/L
Co 228.616†	7087.6	92.67	1.31%	[0.40]	mg/L
Cr 267.716†	118028.0	1723.40	1.46%	[1.00]	mg/L

Approved: April 18, 2011

Cu 327.393†	150811.2	2324.78	1.54%	[1.00]	mg/L
Fe 239.562†	2348.9	45.48	1.94%	[8.00]	mg/L
Mg 279.077†	14341.0	173.46	1.21%	[20.00]	mg/L
Mn 257.610†	470264.8	1344.80	0.29%	[1.00]	mg/L
Mo 202.031†	24777.6	429.11	1.73%	[2.00]	mg/L
Ni 231.604†	31817.6	490.56	1.54%	[1.00]	mg/L
Pb 220.353†	5193.5	84.87	1.63%	[1.00]	mg/L
Sb 206.836†	3346.6	35.37	1.06%	[2.40]	mg/L
Se 196.026†	991.4	12.60	1.27%	[0.80]	mg/L
Si 251.611†	343011.9	3834.11	1.12%	[10.00]	mg/L
Sn 189.927†	10889.4	171.22	1.57%	[2.00]	mg/L
Ti 334.940†	1489710.2	6110.71	0.41%	[2.00]	mg/L
Tl 190.801†	1525.5	16.25	1.06%	[1.00]	mg/L
V 290.880†	310974.7	5037.05	1.62%	[2.00]	mg/L
Zn 206.200†	62132.8	850.55	1.37%	[2.00]	mg/L
K 766.490†	263445.0	1668.61	0.63%	[100.00]	mg/L
Na 589.592†	1280025.0	52571.52	4.11%	[100.00]	mg/L
Sr 407.771†	2985105.0	69891.63	2.34%	[2.00]	mg/L
Li 670.784†	159853.6	2321.78	1.45%	[2.00]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	4	Wt. Lin	-137.8	209000	0.00000	0.999566	
Al 396.153	4	Wt. Lin	43.7	5169	0.00000	0.999299	
As 188.979	3	Wt. Lin	0.6	558.1	0.00000	0.999914	
Ba 233.527	4	Wt. Lin	-4.3	55790	0.00000	0.999924	
Be 234.861	4	Wt. Lin	3.0	537900	0.00000	0.999917	
B 249.677	3	Wt. Lin	-56.7	54100	0.00000	0.999965	
Ca 227.546	3	Wt. Lin	-1.7	93.62	0.00000	0.999964	
Cd 228.802	4	Wt. Lin	0.2	15350	0.00000	0.998618	
Co 228.616	4	Wt. Lin	-6.1	17890	0.00000	0.999953	
Cr 267.716	4	Wt. Lin	17.7	119300	0.00000	0.999942	
Cu 327.393	4	Wt. Lin	63.7	151800	0.00000	0.999959	
Fe 239.562	4	Wt. Lin	1.7	296.4	0.00000	0.999949	
Mg 279.077	4	Wt. Lin	1.6	726.0	0.00000	0.999933	
Mn 257.610	4	Wt. Lin	45.6	477100	0.00000	0.999757	
Mo 202.031	4	Wt. Lin	-6.6	12460	0.00000	0.999551	
Ni 231.604	4	Wt. Lin	5.4	31860	0.00000	0.999638	
Pb 220.353	4	Wt. Lin	-5.7	5288	0.00000	0.999753	
Sb 206.836	4	Wt. Lin	5.0	1376	0.00000	0.997083	
Se 196.026	3	Wt. Lin	4.0	1254	0.00000	0.999871	
Si 251.611	4	Wt. Lin	-27.3	34210	0.00000	0.999660	
Sn 189.927	4	Wt. Lin	-3.4	5483	0.00000	0.999916	
Ti 334.940	4	Wt. Lin	6.0	746800	0.00000	0.999828	
Tl 190.801	3	Wt. Lin	4.1	1550	0.00000	0.999824	
V 290.880	4	Wt. Lin	-53.6	154700	0.00000	0.999777	
Zn 206.200	4	Wt. Lin	-9.2	31330	0.00000	0.999962	
K 766.490	4	Non Lin, Calc Int	-5.2	2758	-1.23110	1.000000	
Na 589.592	4	Non Lin, Calc Int	-61.7	13870	-10.66427	1.000000	
Sr 407.771	4	Wt. Lin	54.4	1508000	0.00000	0.999940	
Li 670.784	4	Wt. Lin	61.4	80840	0.00000	0.999889	

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Sequence No.: 6 **Autosampler Location: 9**
Sample ID: ICV 2nd Vendor **Date Collected: 4/15/2011 11:26:44 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICV 2nd Vendor

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: ICV 2nd Vendor

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4773740.7						56306.10	1.18%
YRADIAL	287669.3						2173.81	0.76%
Ga 417.206	1280077.0						8329.23	0.65%

Approved: April 18, 2011

GaRADIAL	63122.5				403.62	0.64%
Ag 328.068†	80567.7	0.387 mg/L	0.0047	0.387 mg/L	0.0047	1.22%
QC value within limits for Ag 328.068 Recovery = 96.79%						
Al 396.153†	51773.0	9.99 mg/L	0.028	9.99 mg/L	0.028	0.28%
QC value within limits for Al 396.153 Recovery = 99.95%						
As 188.979†	214.8	0.380 mg/L	0.0117	0.380 mg/L	0.0117	3.07%
QC value within limits for As 188.979 Recovery = 95.03%						
Ba 233.527†	55070.1	0.990 mg/L	0.0158	0.990 mg/L	0.0158	1.60%
QC value within limits for Ba 233.527 Recovery = 98.98%						
Be 234.861†	25500.7	0.0481 mg/L	0.00113	0.0481 mg/L	0.00113	2.34%
QC value within limits for Be 234.861 Recovery = 96.25%						
B 249.677†	25984.0	0.488 mg/L	0.0038	0.488 mg/L	0.0038	0.78%
QC value within limits for B 249.677 Recovery = 97.65%						
Ca 227.546†	914.2	10.1 mg/L	0.06	10.1 mg/L	0.06	0.59%
QC value within limits for Ca 227.546 Recovery = 101.17%						
Cd 228.802†	757.8	0.0483 mg/L	0.00028	0.0483 mg/L	0.00028	0.57%
QC value within limits for Cd 228.802 Recovery = 96.64%						
Co 228.616†	3540.5	0.196 mg/L	0.0027	0.196 mg/L	0.0027	1.36%
QC value within limits for Co 228.616 Recovery = 97.85%						
Cr 267.716†	58282.2	0.489 mg/L	0.0057	0.489 mg/L	0.0057	1.17%
QC value within limits for Cr 267.716 Recovery = 97.73%						
Cu 327.393†	73404.0	0.485 mg/L	0.0041	0.485 mg/L	0.0041	0.84%
QC value within limits for Cu 327.393 Recovery = 96.99%						
Fe 239.562†	1213.8	4.09 mg/L	0.031	4.09 mg/L	0.031	0.75%
QC value within limits for Fe 239.562 Recovery = 102.21%						
Mg 279.077†	7461.1	10.3 mg/L	0.04	10.3 mg/L	0.04	0.43%
QC value within limits for Mg 279.077 Recovery = 102.77%						
Mn 257.610†	238797.3	0.505 mg/L	0.0073	0.505 mg/L	0.0073	1.44%
QC value within limits for Mn 257.610 Recovery = 101.02%						
Mo 202.031†	12128.9	0.975 mg/L	0.0111	0.975 mg/L	0.0111	1.14%
QC value within limits for Mo 202.031 Recovery = 97.46%						
Ni 231.604†	15739.0	0.494 mg/L	0.0058	0.494 mg/L	0.0058	1.18%
QC value within limits for Ni 231.604 Recovery = 98.74%						
Pb 220.353†	2613.2	0.500 mg/L	0.0064	0.500 mg/L	0.0064	1.28%
QC value within limits for Pb 220.353 Recovery = 100.05%						
Sb 206.836†	1695.8	1.23 mg/L	0.011	1.23 mg/L	0.011	0.88%
QC value within limits for Sb 206.836 Recovery = 102.80%						
Se 196.026†	489.4	0.390 mg/L	0.0013	0.390 mg/L	0.0013	0.34%
QC value within limits for Se 196.026 Recovery = 97.56%						
Si 251.611†	165678.9	4.83 mg/L	0.077	4.83 mg/L	0.077	1.59%
QC value within limits for Si 251.611 Recovery = 96.58%						
Sn 189.927†	5517.9	1.01 mg/L	0.012	1.01 mg/L	0.012	1.18%
QC value within limits for Sn 189.927 Recovery = 100.69%						
Ti 334.940†	758945.6	1.02 mg/L	0.006	1.02 mg/L	0.006	0.63%
QC value within limits for Ti 334.940 Recovery = 101.62%						
Tl 190.801†	782.6	0.514 mg/L	0.0084	0.514 mg/L	0.0084	1.64%
QC value within limits for Tl 190.801 Recovery = 102.78%						
V 290.880†	148352.5	0.959 mg/L	0.0117	0.959 mg/L	0.0117	1.22%
QC value within limits for V 290.880 Recovery = 95.91%						
Zn 206.200†	30763.6	0.985 mg/L	0.0141	0.985 mg/L	0.0141	1.43%
QC value within limits for Zn 206.200 Recovery = 98.46%						
K 766.490†	134623.6	49.9 mg/L	0.34	49.9 mg/L	0.34	0.68%
QC value within limits for K 766.490 Recovery = 99.77%						
Na 589.592†	642863.8	48.1 mg/L	0.88	48.1 mg/L	0.88	1.83%
QC value within limits for Na 589.592 Recovery = 96.29%						
Sr 407.771†	1522995.2	1.01 mg/L	0.012	1.01 mg/L	0.012	1.24%
QC value within limits for Sr 407.771 Recovery = 100.88%						
Li 670.784†	81887.5	1.01 mg/L	0.007	1.01 mg/L	0.007	0.72%
QC value within limits for Li 670.784 Recovery = 101.23%						

All analyte(s) passed QC.

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Sequence No.: 7 **Autosampler Location: 1**
Sample ID: ICB **Date Collected: 4/15/2011 11:33:26 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICB

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Approved: April 18, 2011

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4983950.5						50810.74	1.02%
YRADIAL	301226.0						5285.78	1.75%
Ga 417.206	1295638.3						13247.02	1.02%
GaRADIAL	64651.8						1151.65	1.78%
Ag 328.068†	-196.2	-0.00028	mg/L	0.000348	-0.00028	mg/L	0.000348	124.68%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	57.2	0.00259	mg/L	0.007789	0.00259	mg/L	0.007789	300.21%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.9	0.00056	mg/L	0.005251	0.00056	mg/L	0.005251	933.44%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	7.2	0.00021	mg/L	0.000099	0.00021	mg/L	0.000099	47.46%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	36.4	0.00006	mg/L	0.000029	0.00006	mg/L	0.000029	45.68%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	255.3	0.00577	mg/L	0.000439	0.00577	mg/L	0.000439	7.61%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	0.9	0.0275	mg/L	0.05014	0.0275	mg/L	0.05014	182.38%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	0.1	-0.00001	mg/L	0.000160	-0.00001	mg/L	0.000160	>999.9%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-4.8	0.00007	mg/L	0.000151	0.00007	mg/L	0.000151	206.39%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	17.7	0.00000	mg/L	0.000096	0.00000	mg/L	0.000096	>999.9%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	39.0	-0.00016	mg/L	0.000313	-0.00016	mg/L	0.000313	192.87%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	1.8	0.00031	mg/L	0.008535	0.00031	mg/L	0.008535	>999.9%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	4.2	0.00359	mg/L	0.005182	0.00359	mg/L	0.005182	144.47%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	21.7	-0.00005	mg/L	0.000015	-0.00005	mg/L	0.000015	33.47%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	3.8	0.00083	mg/L	0.000182	0.00083	mg/L	0.000182	21.88%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	2.1	-0.00010	mg/L	0.000152	-0.00010	mg/L	0.000152	149.37%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	7.7	0.00254	mg/L	0.001071	0.00254	mg/L	0.001071	42.12%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	5.3	0.00026	mg/L	0.002645	0.00026	mg/L	0.002645	999.49%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-0.8	-0.00385	mg/L	0.000921	-0.00385	mg/L	0.000921	23.92%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	70.2	0.00284	mg/L	0.000541	0.00284	mg/L	0.000541	19.07%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	8.9	0.00225	mg/L	0.000645	0.00225	mg/L	0.000645	28.69%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	102.3	0.00013	mg/L	0.000096	0.00013	mg/L	0.000096	74.57%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.2	-0.00344	mg/L	0.004472	-0.00344	mg/L	0.004472	130.09%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-40.9	0.00008	mg/L	0.000629	0.00008	mg/L	0.000629	768.48%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	4.9	0.00045	mg/L	0.000067	0.00045	mg/L	0.000067	14.84%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	255.8	0.0946	mg/L	0.01684	0.0946	mg/L	0.01684	17.80%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	426.8	0.0352	mg/L	0.00672	0.0352	mg/L	0.00672	19.07%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	249.7	0.00013	mg/L	0.000037	0.00013	mg/L	0.000037	28.83%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	134.8	0.00091	mg/L	0.000456	0.00091	mg/L	0.000456	50.25%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 8 **Autosampler Location: 38**
Sample ID: LLICV **Date Collected: 4/15/2011 11:40:03 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**

Approved: April 18, 2011

Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLICV

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5019793.9						22091.30	0.44%
YRADIAL	300797.9						2643.37	0.88%
Ga 417.206	1304116.0						13285.64	1.02%
GaRADIAL	64924.2						1254.97	1.93%
Ag 328.068†	1986.0	0.0102	mg/L	0.00053	0.0102	mg/L	0.00053	5.25%
Al 396.153†	32.7	-0.00213	mg/L	0.008671	-0.00213	mg/L	0.008671	407.43%
As 188.979†	4.5	0.00721	mg/L	0.002938	0.00721	mg/L	0.002938	40.76%
Ba 233.527†	616.7	0.0111	mg/L	0.00006	0.0111	mg/L	0.00006	0.53%
Be 234.861†	27.4	0.00005	mg/L	0.000032	0.00005	mg/L	0.000032	67.51%
B 249.677†	118.4	0.00293	mg/L	0.000048	0.00293	mg/L	0.000048	1.63%
Ca 227.546†	-0.8	0.0102	mg/L	0.04576	0.0102	mg/L	0.04576	447.84%
Cd 228.802†	164.2	0.0107	mg/L	0.00002	0.0107	mg/L	0.00002	0.19%
Co 228.616†	-3.7	0.00013	mg/L	0.000274	0.00013	mg/L	0.000274	204.54%
Cr 267.716†	2505.6	0.0209	mg/L	0.00012	0.0209	mg/L	0.00012	0.60%
Cu 327.393†	93.7	0.00020	mg/L	0.000722	0.00020	mg/L	0.000722	369.11%
Fe 239.562†	0.6	-0.00384	mg/L	0.008618	-0.00384	mg/L	0.008618	224.64%
Mg 279.077†	2.5	0.00125	mg/L	0.002472	0.00125	mg/L	0.002472	197.69%
Mn 257.610†	24.6	-0.00003	mg/L	0.000018	-0.00003	mg/L	0.000018	71.88%
Mo 202.031†	-3.9	0.00022	mg/L	0.000360	0.00022	mg/L	0.000360	164.33%
Ni 231.604†	4.9	-0.00001	mg/L	0.000213	-0.00001	mg/L	0.000213	>999.9%
Pb 220.353†	32.9	0.00729	mg/L	0.000795	0.00729	mg/L	0.000795	10.91%
Sb 206.836†	4.5	-0.00044	mg/L	0.004496	-0.00044	mg/L	0.004496	>999.9%
Se 196.026†	13.4	0.00750	mg/L	0.001898	0.00750	mg/L	0.001898	25.30%
Si 251.611†	27.0	0.00158	mg/L	0.000312	0.00158	mg/L	0.000312	19.70%
Sn 189.927†	1.6	0.00092	mg/L	0.000381	0.00092	mg/L	0.000381	41.64%
Ti 334.940†	51.1	0.00005	mg/L	0.000053	0.00005	mg/L	0.000053	97.93%
Tl 190.801†	0.2	-0.00249	mg/L	0.002911	-0.00249	mg/L	0.002911	117.08%
V 290.880†	4.8	0.00038	mg/L	0.000052	0.00038	mg/L	0.000052	13.97%
Zn 206.200†	45.3	0.00182	mg/L	0.000215	0.00182	mg/L	0.000215	11.83%
K 766.490†	192.7	0.0718	mg/L	0.03500	0.0718	mg/L	0.03500	48.78%
Na 589.592†	87.0	0.0107	mg/L	0.00750	0.0107	mg/L	0.00750	69.98%
Sr 407.771†	-26.2	-0.00005	mg/L	0.000029	-0.00005	mg/L	0.000029	55.30%
Li 670.784†	81.3	0.00025	mg/L	0.000820	0.00025	mg/L	0.000820	333.77%

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Sequence No.: 9 **Autosampler Location: 39**
Sample ID: LLICV **Date Collected: 4/15/2011 11:46:40 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLICV

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: LLICV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5026739.9						2302.32	0.05%
YRADIAL	305268.5						4067.61	1.33%
Ga 417.206	1325134.2						15309.11	1.16%
GaRADIAL	65422.0						891.41	1.36%
Ag 328.068†	1338.9	0.00709	mg/L	0.000727	0.00709	mg/L	0.000727	10.26%
Al 396.153†	1032.0	0.191	mg/L	0.0031	0.191	mg/L	0.0031	1.62%
As 188.979†	4.9	0.00770	mg/L	0.001067	0.00770	mg/L	0.001067	13.86%
Ba 233.527†	1090.6	0.0197	mg/L	0.00007	0.0197	mg/L	0.00007	0.38%
Be 234.861†	554.9	0.00104	mg/L	0.000019	0.00104	mg/L	0.000019	1.84%
B 249.677†	595.5	0.0122	mg/L	0.00013	0.0122	mg/L	0.00013	1.07%
Ca 227.546†	23.0	0.271	mg/L	0.0176	0.271	mg/L	0.0176	6.49%
Cd 228.802†	11.7	0.00073	mg/L	0.000095	0.00073	mg/L	0.000095	12.99%

Approved: April 18, 2011

Co 228.616†	63.0	0.00381 mg/L	0.000212	0.00381 mg/L	0.000212	5.55%
Cr 267.716†	1213.1	0.0100 mg/L	0.00016	0.0100 mg/L	0.00016	1.63%
Cu 327.393†	1547.6	0.00981 mg/L	0.000283	0.00981 mg/L	0.000283	2.88%
Fe 239.562†	24.3	0.0761 mg/L	0.00535	0.0761 mg/L	0.00535	7.04%
Mg 279.077†	141.4	0.193 mg/L	0.0045	0.193 mg/L	0.0045	2.36%
Mn 257.610†	4767.6	0.00999 mg/L	0.000188	0.00999 mg/L	0.000188	1.88%
Mo 202.031†	236.4	0.0195 mg/L	0.00035	0.0195 mg/L	0.00035	1.80%
Ni 231.604†	310.3	0.00957 mg/L	0.000288	0.00957 mg/L	0.000288	3.01%
Pb 220.353†	48.2	0.0103 mg/L	0.00109	0.0103 mg/L	0.00109	10.57%
Sb 206.836†	35.1	0.0220 mg/L	0.00111	0.0220 mg/L	0.00111	5.03%
Se 196.026†	12.4	0.00676 mg/L	0.004551	0.00676 mg/L	0.004551	67.33%
Si 251.611†	3231.9	0.0950 mg/L	0.00319	0.0950 mg/L	0.00319	3.35%
Sn 189.927†	106.6	0.0201 mg/L	0.00074	0.0201 mg/L	0.00074	3.69%
Ti 334.940†	14394.4	0.0193 mg/L	0.00045	0.0193 mg/L	0.00045	2.31%
Tl 190.801†	14.9	0.00717 mg/L	0.003303	0.00717 mg/L	0.003303	46.09%
V 290.880†	2877.3	0.0189 mg/L	0.00105	0.0189 mg/L	0.00105	5.56%
Zn 206.200†	654.3	0.0212 mg/L	0.00011	0.0212 mg/L	0.00011	0.53%
K 766.490†	2820.2	1.02 mg/L	0.023	1.02 mg/L	0.023	2.26%
Na 589.592†	13589.4	0.985 mg/L	0.0163	0.985 mg/L	0.0163	1.66%
Sr 407.771†	29455.0	0.0195 mg/L	0.00008	0.0195 mg/L	0.00008	0.43%
Li 670.784†	1745.6	0.0208 mg/L	0.00031	0.0208 mg/L	0.00031	1.50%

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Sequence No.: 10 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 4/15/2011 11:53:17 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4475730.7						9902.50	0.22%
YRADIAL	279653.6						4451.86	1.59%
Ga 417.206	1212937.3						14190.38	1.17%
GaRADIAL	61969.6						1428.20	2.30%
Ag 328.068†	505.9	-0.00194	mg/L	0.001072	-0.00194	mg/L	0.001072	55.33%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1283564.7	248	mg/L	8.5	248	mg/L	8.5	3.43%
QC value within limits for Al 396.153 Recovery = 99.33%								
As 188.979†	17.9	0.00442	mg/L	0.004674	0.00442	mg/L	0.004674	105.85%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	121.1	-0.00008	mg/L	0.000130	-0.00008	mg/L	0.000130	164.32%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	10702.0	-0.00083	mg/L	0.000094	-0.00083	mg/L	0.000094	11.29%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	-8823.7	0.0282	mg/L	0.00741	0.0282	mg/L	0.00741	26.27%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	25606.7	274	mg/L	1.9	274	mg/L	1.9	0.69%
QC value within limits for Ca 227.546 Recovery = 109.58%								
Cd 228.802†	1.4	0.00001	mg/L	0.000097	0.00001	mg/L	0.000097	810.86%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	15.3	-0.00143	mg/L	0.000650	-0.00143	mg/L	0.000650	45.43%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	604.3	-0.00121	mg/L	0.000094	-0.00121	mg/L	0.000094	7.72%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1506.1	0.00121	mg/L	0.000352	0.00121	mg/L	0.000352	29.04%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	29792.0	101	mg/L	0.4	101	mg/L	0.4	0.39%
QC value within limits for Fe 239.562 Recovery = 100.50%								
Mg 279.077†	186522.7	257	mg/L	1.4	257	mg/L	1.4	0.53%
QC value within limits for Mg 279.077 Recovery = 102.74%								
Mn 257.610†	-204.1	0.00033	mg/L	0.000122	0.00033	mg/L	0.000122	36.93%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-13.2	0.00443	mg/L	0.000599	0.00443	mg/L	0.000599	13.52%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	-61.5	-0.00216	mg/L	0.000687	-0.00216	mg/L	0.000687	31.84%

Approved: April 18, 2011

QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† -92.2 0.00056 mg/L 0.001525 0.00056 mg/L 0.001525 270.69%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 26.0 0.0153 mg/L 0.00330 0.0153 mg/L 0.00330 21.61%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -104.0 -0.00138 mg/L 0.013677 -0.00138 mg/L 0.013677 991.80%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 9008.0 0.264 mg/L 0.0035 0.264 mg/L 0.0035 1.33%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -27.4 -0.00437 mg/L 0.000248 -0.00437 mg/L 0.000248 5.68%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -2082.5 -0.00006 mg/L 0.000140 -0.00006 mg/L 0.000140 223.41%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 148.0 0.0682 mg/L 0.01206 0.0682 mg/L 0.01206 17.68%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† -922.6 0.00210 mg/L 0.001484 0.00210 mg/L 0.001484 70.84%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† 38.2 -0.00078 mg/L 0.000464 -0.00078 mg/L 0.000464 59.65%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 201.4 0.0749 mg/L 0.02222 0.0749 mg/L 0.02222 29.67%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 702.4 0.0551 mg/L 0.00655 0.0551 mg/L 0.00655 11.88%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† 21703.8 -0.00786 mg/L 0.000126 -0.00786 mg/L 0.000126 1.60%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 239.2 0.00220 mg/L 0.001085 0.00220 mg/L 0.001085 49.35%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 11 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 4/15/2011 11:58:58 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4445685.1						38058.99	0.86%
YRADIAL	282318.9						2327.34	0.82%
Ga 417.206	1212096.9						20840.95	1.72%
GaRADIAL	62832.0						704.36	1.12%
Ag 328.068†	107784.5	0.512	mg/L	0.0083	0.512	mg/L	0.0083	1.62%
QC value within limits for Ag 328.068 Recovery = 102.34%								
Al 396.153†	1273636.8	246	mg/L	4.3	246	mg/L	4.3	1.76%
QC value within limits for Al 396.153 Recovery = 98.56%								
As 188.979†	137.3	0.220	mg/L	0.0108	0.220	mg/L	0.0108	4.92%
QC value within limits for As 188.979 Recovery = 88.01%								
Ba 233.527†	13746.1	0.245	mg/L	0.0023	0.245	mg/L	0.0023	0.96%
QC value within limits for Ba 233.527 Recovery = 97.89%								
Be 234.861†	146420.4	0.251	mg/L	0.0058	0.251	mg/L	0.0058	2.32%
QC value within limits for Be 234.861 Recovery = 100.55%								
B 249.677†	-10083.5	-0.00241	mg/L	0.003629	-0.00241	mg/L	0.003629	150.44%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	26456.5	283	mg/L	3.4	283	mg/L	3.4	1.22%
QC value within limits for Ca 227.546 Recovery = 113.35%								
Cd 228.802†	7135.8	0.464	mg/L	0.0086	0.464	mg/L	0.0086	1.85%
QC value within limits for Cd 228.802 Recovery = 92.84%								
Co 228.616†	4139.6	0.229	mg/L	0.0020	0.229	mg/L	0.0020	0.87%
QC value within limits for Co 228.616 Recovery = 91.59%								
Cr 267.716†	29703.6	0.243	mg/L	0.0022	0.243	mg/L	0.0022	0.92%
QC value within limits for Cr 267.716 Recovery = 97.15%								
Cu 327.393†	36221.1	0.250	mg/L	0.0040	0.250	mg/L	0.0040	1.61%
QC value within limits for Cu 327.393 Recovery = 99.87%								
Fe 239.562†	30011.8	101	mg/L	0.2	101	mg/L	0.2	0.24%
QC value within limits for Fe 239.562 Recovery = 101.24%								

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Mg 279.077†	186336.1	257 mg/L	0.6	257 mg/L	0.6	0.24%	
QC value within limits for Mg 279.077 Recovery = 102.64%							
Mn 257.610†	117371.6	0.248 mg/L	0.0017	0.248 mg/L	0.0017	0.68%	
QC value within limits for Mn 257.610 Recovery = 99.16%							
Mo 202.031†	-3.7	0.00530 mg/L	0.000377	0.00530 mg/L	0.000377	7.11%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	14684.1	0.461 mg/L	0.0035	0.461 mg/L	0.0035	0.77%	
QC value within limits for Ni 231.604 Recovery = 92.10%							
Pb 220.353†	2436.1	0.479 mg/L	0.0042	0.479 mg/L	0.0042	0.87%	
QC value within limits for Pb 220.353 Recovery = 95.75%							
Sb 206.836†	725.0	0.522 mg/L	0.0040	0.522 mg/L	0.0040	0.77%	
QC value within limits for Sb 206.836 Recovery = 104.39%							
Se 196.026†	201.5	0.245 mg/L	0.0060	0.245 mg/L	0.0060	2.44%	
QC value within limits for Se 196.026 Recovery = 98.06%							
Si 251.611†	288.7	0.00923 mg/L	0.001200	0.00923 mg/L	0.001200	13.00%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-36.5	-0.00603 mg/L	0.002260	-0.00603 mg/L	0.002260	37.49%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-2512.6	-0.00062 mg/L	0.000213	-0.00062 mg/L	0.000213	34.31%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	894.9	0.549 mg/L	0.0079	0.549 mg/L	0.0079	1.44%	
QC value within limits for Tl 190.801 Recovery = 109.83%							
V 290.880†	37174.8	0.248 mg/L	0.0019	0.248 mg/L	0.0019	0.78%	
QC value within limits for V 290.880 Recovery = 99.36%							
Zn 206.200†	14544.3	0.464 mg/L	0.0041	0.464 mg/L	0.0041	0.89%	
QC value within limits for Zn 206.200 Recovery = 92.71%							
K 766.490†	14101.1	5.12 mg/L	0.024	5.12 mg/L	0.024	0.47%	
QC value within limits for K 766.490 Recovery = 102.44%							
Na 589.592†	69651.7	5.05 mg/L	0.031	5.05 mg/L	0.031	0.62%	
QC value within limits for Na 589.592 Recovery = 100.94%							
Sr 407.771†	44092.3	0.00682 mg/L	0.000179	0.00682 mg/L	0.000179	2.63%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	168.1	0.00132 mg/L	0.001880	0.00132 mg/L	0.001880	142.37%	
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

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Sequence No.: 12 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/15/2011 12:04:36 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4775831.0						36028.12	0.75%
YRADIAL	289351.3						990.90	0.34%
Ga 417.206	1266374.5						11073.30	0.87%
GaRADIAL	63375.5						959.71	1.51%
Ag 328.068†	83080.6	0.399	mg/L	0.0017	0.399	mg/L	0.0017	0.43%
QC value within limits for Ag 328.068 Recovery = 99.81%								
Al 396.153†	52073.2	10.1	mg/L	0.01	10.1	mg/L	0.01	0.10%
QC value within limits for Al 396.153 Recovery = 100.52%								
As 188.979†	229.1	0.406	mg/L	0.0099	0.406	mg/L	0.0099	2.45%
QC value within limits for As 188.979 Recovery = 101.39%								
Ba 233.527†	55763.4	1.00	mg/L	0.003	1.00	mg/L	0.003	0.30%
QC value within limits for Ba 233.527 Recovery = 100.24%								
Be 234.861†	26619.1	0.0502	mg/L	0.00020	0.0502	mg/L	0.00020	0.40%
QC value within limits for Be 234.861 Recovery = 100.50%								
B 249.677†	26753.5	0.502	mg/L	0.0037	0.502	mg/L	0.0037	0.74%
QC value within limits for B 249.677 Recovery = 100.48%								
Ca 227.546†	934.8	10.3	mg/L	0.09	10.3	mg/L	0.09	0.83%
QC value within limits for Ca 227.546 Recovery = 103.43%								
Cd 228.802†	785.4	0.0500	mg/L	0.00040	0.0500	mg/L	0.00040	0.79%
QC value within limits for Cd 228.802 Recovery = 100.08%								
Co 228.616†	3580.2	0.198	mg/L	0.0020	0.198	mg/L	0.0020	1.00%

Approved: April 18, 2011

QC value within limits for Co 228.616 Recovery = 98.97%
Cr 267.716† 58928.2 0.494 mg/L 0.0017 0.494 mg/L 0.0017 0.34%
QC value within limits for Cr 267.716 Recovery = 98.81%
Cu 327.393† 74649.1 0.493 mg/L 0.0020 0.493 mg/L 0.0020 0.41%
QC value within limits for Cu 327.393 Recovery = 98.63%
Fe 239.562† 1214.7 4.09 mg/L 0.038 4.09 mg/L 0.038 0.93%
QC value within limits for Fe 239.562 Recovery = 102.28%
Mg 279.077† 7471.9 10.3 mg/L 0.08 10.3 mg/L 0.08 0.76%
QC value within limits for Mg 279.077 Recovery = 102.92%
Mn 257.610† 240289.8 0.508 mg/L 0.0014 0.508 mg/L 0.0014 0.27%
QC value within limits for Mn 257.610 Recovery = 101.66%
Mo 202.031† 12510.9 1.01 mg/L 0.007 1.01 mg/L 0.007 0.71%
QC value within limits for Mo 202.031 Recovery = 100.53%
Ni 231.604† 16046.2 0.503 mg/L 0.0033 0.503 mg/L 0.0033 0.66%
QC value within limits for Ni 231.604 Recovery = 100.66%
Pb 220.353† 2638.5 0.505 mg/L 0.0023 0.505 mg/L 0.0023 0.46%
QC value within limits for Pb 220.353 Recovery = 101.04%
Sb 206.836† 1686.7 1.23 mg/L 0.010 1.23 mg/L 0.010 0.83%
QC value within limits for Sb 206.836 Recovery = 102.27%
Se 196.026† 513.1 0.409 mg/L 0.0062 0.409 mg/L 0.0062 1.51%
QC value within limits for Se 196.026 Recovery = 102.30%
Si 251.611† 169515.6 4.94 mg/L 0.026 4.94 mg/L 0.026 0.52%
QC value within limits for Si 251.611 Recovery = 98.81%
Sn 189.927† 5486.4 1.00 mg/L 0.007 1.00 mg/L 0.007 0.75%
QC value within limits for Sn 189.927 Recovery = 100.12%
Ti 334.940† 754203.0 1.01 mg/L 0.006 1.01 mg/L 0.006 0.64%
QC value within limits for Ti 334.940 Recovery = 100.98%
Tl 190.801† 783.5 0.514 mg/L 0.0019 0.514 mg/L 0.0019 0.36%
QC value within limits for Tl 190.801 Recovery = 102.87%
V 290.880† 153494.1 0.992 mg/L 0.0029 0.992 mg/L 0.0029 0.29%
QC value within limits for V 290.880 Recovery = 99.23%
Zn 206.200† 31461.4 1.01 mg/L 0.007 1.01 mg/L 0.007 0.67%
QC value within limits for Zn 206.200 Recovery = 100.69%
K 766.490† 136415.2 50.6 mg/L 0.15 50.6 mg/L 0.15 0.29%
QC value within limits for K 766.490 Recovery = 101.13%
Na 589.592† 670846.4 50.3 mg/L 1.22 50.3 mg/L 1.22 2.42%
QC value within limits for Na 589.592 Recovery = 100.66%
Sr 407.771† 1542327.8 1.02 mg/L 0.013 1.02 mg/L 0.013 1.28%
QC value within limits for Sr 407.771 Recovery = 102.17%
Li 670.784† 82731.2 1.02 mg/L 0.004 1.02 mg/L 0.004 0.36%
QC value within limits for Li 670.784 Recovery = 102.27%
All analyte(s) passed QC.

Sequence No.: 13 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/15/2011 12:11:17 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	5056498.2						33745.65	0.67%
YRADIAL	305381.0						6675.87	2.19%
Ga 417.206	1306054.5						7524.28	0.58%
GaRADIAL	65739.6						302.30	0.46%
Ag 328.068†	-469.6	-0.00159	mg/L	0.000272	-0.00159	mg/L	0.000272	17.16%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	85.2	0.00802	mg/L	0.008209	0.00802	mg/L	0.008209	102.35%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.8	0.00038	mg/L	0.003576	0.00038	mg/L	0.003576	936.61%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	2.1	0.00012	mg/L	0.000059	0.00012	mg/L	0.000059	51.25%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	45.3	0.00008	mg/L	0.000043	0.00008	mg/L	0.000043	53.85%
QC value within limits for Be 234.861 Recovery = Not calculated								

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B 249.677†	130.5	0.00344 mg/L	0.000087	0.00344 mg/L	0.000087	2.53%	
QC value within limits for B 249.677 Recovery = Not calculated							
Ca 227.546†	-0.1	0.0179 mg/L	0.02373	0.0179 mg/L	0.02373	132.43%	
QC value within limits for Ca 227.546 Recovery = Not calculated							
Cd 228.802†	-0.7	-0.00006 mg/L	0.000205	-0.00006 mg/L	0.000205	320.30%	
QC value within limits for Cd 228.802 Recovery = Not calculated							
Co 228.616†	-6.5	-0.00002 mg/L	0.000240	-0.00002 mg/L	0.000240	>999.9%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	30.1	0.00010 mg/L	0.000033	0.00010 mg/L	0.000033	31.62%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 327.393†	-48.3	-0.00074 mg/L	0.000751	-0.00074 mg/L	0.000751	101.94%	
QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe 239.562†	1.2	-0.00198 mg/L	0.006838	-0.00198 mg/L	0.006838	344.90%	
QC value within limits for Fe 239.562 Recovery = Not calculated							
Mg 279.077†	0.6	-0.00143 mg/L	0.002769	-0.00143 mg/L	0.002769	193.23%	
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	8.6	-0.00008 mg/L	0.000020	-0.00008 mg/L	0.000020	26.07%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-4.9	0.00013 mg/L	0.000265	0.00013 mg/L	0.000265	199.39%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	5.9	0.00002 mg/L	0.000049	0.00002 mg/L	0.000049	306.68%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	-4.2	0.00028 mg/L	0.000515	0.00028 mg/L	0.000515	184.98%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	2.1	-0.00206 mg/L	0.002180	-0.00206 mg/L	0.002180	105.73%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-0.1	-0.00329 mg/L	0.002492	-0.00329 mg/L	0.002492	75.65%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	16.7	0.00129 mg/L	0.000330	0.00129 mg/L	0.000330	25.66%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	0.8	0.00078 mg/L	0.000602	0.00078 mg/L	0.000602	76.86%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	108.6	0.00014 mg/L	0.000098	0.00014 mg/L	0.000098	71.46%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-0.9	-0.00321 mg/L	0.004100	-0.00321 mg/L	0.004100	127.80%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	19.1	0.00047 mg/L	0.000442	0.00047 mg/L	0.000442	93.94%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	1.7	0.00035 mg/L	0.000190	0.00035 mg/L	0.000190	54.55%	
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	250.7	0.0928 mg/L	0.01594	0.0928 mg/L	0.01594	17.18%	
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	191.3	0.0182 mg/L	0.00799	0.0182 mg/L	0.00799	43.81%	
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	-23.4	-0.00005 mg/L	0.000024	-0.00005 mg/L	0.000024	47.03%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	42.1	-0.00024 mg/L	0.001313	-0.00024 mg/L	0.001313	549.54%	
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

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Sequence No.: 14 **Autosampler Location: 40**
Sample ID: PBW 4A WG361865-01 **Date Collected: 4/15/2011 12:17:52 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 4A WG361865-01

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: PBW 4A WG361865-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4925891.9						17732.04	0.36%
YRADIAL	303315.7						8890.49	2.93%
Ga 417.206	1328812.7						6216.70	0.47%
GaRADIAL	65642.8						1967.35	3.00%
Ag 328.068†	-470.6	-0.00159	mg/L	0.000125	-0.00159	mg/L	0.000125	7.84%
Al 396.153†	58.2	0.00279	mg/L	0.014071	0.00279	mg/L	0.014071	504.52%
As 188.979†	0.6	0.00004	mg/L	0.003919	0.00004	mg/L	0.003919	>999.9%

Approved: April 18, 2011

Ba 233.527†	0.0	0.00008 mg/L	0.000051	0.00008 mg/L	0.000051	62.63%
Be 234.861†	53.9	0.00009 mg/L	0.000012	0.00009 mg/L	0.000012	12.86%
B 249.677†	27.6	0.00159 mg/L	0.000241	0.00159 mg/L	0.000241	15.16%
Ca 227.546†	-1.4	0.00314 mg/L	0.036672	0.00314 mg/L	0.036672	>999.9%
Cd 228.802†	0.9	0.00004 mg/L	0.000074	0.00004 mg/L	0.000074	181.00%
Co 228.616†	-2.6	0.00019 mg/L	0.000138	0.00019 mg/L	0.000138	71.74%
Cr 267.716†	48.4	0.00026 mg/L	0.000029	0.00026 mg/L	0.000029	11.24%
Cu 327.393†	-38.0	-0.00067 mg/L	0.000784	-0.00067 mg/L	0.000784	117.28%
Fe 239.562†	3.9	0.00711 mg/L	0.002246	0.00711 mg/L	0.002246	31.57%
Mg 279.077†	-4.4	-0.00830 mg/L	0.006201	-0.00830 mg/L	0.006201	74.67%
Mn 257.610†	62.9	0.00004 mg/L	0.000015	0.00004 mg/L	0.000015	37.53%
Mo 202.031†	-1.6	0.00040 mg/L	0.000320	0.00040 mg/L	0.000320	80.39%
Ni 231.604†	4.9	-0.00002 mg/L	0.000066	-0.00002 mg/L	0.000066	418.48%
Pb 220.353†	2.0	0.00145 mg/L	0.001018	0.00145 mg/L	0.001018	70.30%
Sb 206.836†	5.4	0.00031 mg/L	0.002046	0.00031 mg/L	0.002046	661.14%
Se 196.026†	4.7	0.00054 mg/L	0.005851	0.00054 mg/L	0.005851	>999.9%
Si 251.611†	273.7	0.00879 mg/L	0.000251	0.00879 mg/L	0.000251	2.86%
Sn 189.927†	-4.9	-0.00027 mg/L	0.000990	-0.00027 mg/L	0.000990	370.81%
Ti 334.940†	39.1	0.00004 mg/L	0.000176	0.00004 mg/L	0.000176	395.86%
Tl 190.801†	-1.9	-0.00384 mg/L	0.002484	-0.00384 mg/L	0.002484	64.77%
V 290.880†	136.8	0.00123 mg/L	0.000932	0.00123 mg/L	0.000932	75.65%
Zn 206.200†	34.9	0.00141 mg/L	0.000008	0.00141 mg/L	0.000008	0.60%
K 766.490†	158.5	0.0594 mg/L	0.02476	0.0594 mg/L	0.02476	41.69%
Na 589.592†	83.0	0.0104 mg/L	0.00802	0.0104 mg/L	0.00802	76.85%
Sr 407.771†	-34.3	-0.00006 mg/L	0.000062	-0.00006 mg/L	0.000062	102.00%
Li 670.784†	135.3	0.00091 mg/L	0.000642	0.00091 mg/L	0.000642	70.15%

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Sequence No.: 15 **Autosampler Location: 41**
Sample ID: LCSW 4A WG361865-02 **Date Collected: 4/15/2011 12:24:30 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 4A WG361865-02

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: LCSW 4A WG361865-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4832953.1						37790.83	0.78%
YRADIAL	293858.9						5266.27	1.79%
Ga 417.206	1301484.6						5395.24	0.41%
GaRADIAL	63657.3						811.53	1.27%
Ag 328.068†	40399.6	0.194	mg/L	0.0026	0.194	mg/L	0.0026	1.35%
Al 396.153†	26372.9	5.09	mg/L	0.083	5.09	mg/L	0.083	1.63%
As 188.979†	112.5	0.199	mg/L	0.0039	0.199	mg/L	0.0039	1.98%
Ba 233.527†	27538.6	0.495	mg/L	0.0095	0.495	mg/L	0.0095	1.92%
Be 234.861†	12814.3	0.0242	mg/L	0.00042	0.0242	mg/L	0.00042	1.73%
B 249.677†	52300.9	0.971	mg/L	0.0128	0.971	mg/L	0.0128	1.32%
Ca 227.546†	455.5	5.05	mg/L	0.014	5.05	mg/L	0.014	0.27%
Cd 228.802†	381.6	0.0243	mg/L	0.00021	0.0243	mg/L	0.00021	0.88%
Co 228.616†	1780.8	0.0986	mg/L	0.00072	0.0986	mg/L	0.00072	0.73%
Cr 267.716†	28916.0	0.242	mg/L	0.0037	0.242	mg/L	0.0037	1.55%
Cu 327.393†	36201.2	0.239	mg/L	0.0033	0.239	mg/L	0.0033	1.38%
Fe 239.562†	597.9	2.01	mg/L	0.031	2.01	mg/L	0.031	1.55%
Mg 279.077†	3733.3	5.14	mg/L	0.070	5.14	mg/L	0.070	1.36%
Mn 257.610†	119574.5	0.253	mg/L	0.0042	0.253	mg/L	0.0042	1.66%
Mo 202.031†	6051.9	0.487	mg/L	0.0085	0.487	mg/L	0.0085	1.75%
Ni 231.604†	7881.2	0.247	mg/L	0.0047	0.247	mg/L	0.0047	1.90%
Pb 220.353†	1309.8	0.251	mg/L	0.0027	0.251	mg/L	0.0027	1.07%
Sb 206.836†	831.7	0.603	mg/L	0.0021	0.603	mg/L	0.0021	0.35%
Se 196.026†	255.6	0.202	mg/L	0.0016	0.202	mg/L	0.0016	0.80%
Si 251.611†	84965.1	2.48	mg/L	0.035	2.48	mg/L	0.035	1.41%
Sn 189.927†	2723.4	0.497	mg/L	0.0047	0.497	mg/L	0.0047	0.95%
Ti 334.940†	369937.6	0.495	mg/L	0.0040	0.495	mg/L	0.0040	0.80%
Tl 190.801†	396.1	0.259	mg/L	0.0029	0.259	mg/L	0.0029	1.12%
V 290.880†	75124.9	0.486	mg/L	0.0090	0.486	mg/L	0.0090	1.85%
Zn 206.200†	15207.8	0.487	mg/L	0.0081	0.487	mg/L	0.0081	1.66%
K 766.490†	68701.3	25.2	mg/L	0.37	25.2	mg/L	0.37	1.47%

Approved: April 18, 2011

Na 589.592†	337335.9	24.8	mg/L	0.26	24.8	mg/L	0.26	1.04%
Sr 407.771†	761446.7	0.504	mg/L	0.0030	0.504	mg/L	0.0030	0.60%
Li 670.784†	42343.9	0.523	mg/L	0.0096	0.523	mg/L	0.0096	1.84%

Sequence No.: 16 **Autosampler Location: 42**
Sample ID: LCSW 4A WG361865-03 **Date Collected: 4/15/2011 12:31:11 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 4A WG361865-03

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: LCSW 4A WG361865-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4857748.6						34424.86	0.71%
YRADIAL	301407.7						3525.53	1.17%
Ga 417.206	1311391.4						16009.43	1.22%
GaRADIAL	64771.7						919.84	1.42%
Ag 328.068†	40675.5	0.196	mg/L	0.0011	0.196	mg/L	0.0011	0.57%
Al 396.153†	26280.8	5.07	mg/L	0.063	5.07	mg/L	0.063	1.25%
As 188.979†	113.8	0.201	mg/L	0.0018	0.201	mg/L	0.0018	0.90%
Ba 233.527†	27736.0	0.499	mg/L	0.0021	0.499	mg/L	0.0021	0.43%
Be 234.861†	13049.6	0.0246	mg/L	0.00019	0.0246	mg/L	0.00019	0.76%
B 249.677†	52981.3	0.983	mg/L	0.0034	0.983	mg/L	0.0034	0.34%
Ca 227.546†	455.7	5.06	mg/L	0.136	5.06	mg/L	0.136	2.69%
Cd 228.802†	380.5	0.0242	mg/L	0.00044	0.0242	mg/L	0.00044	1.82%
Co 228.616†	1775.9	0.0984	mg/L	0.00104	0.0984	mg/L	0.00104	1.06%
Cr 267.716†	29228.8	0.245	mg/L	0.0011	0.245	mg/L	0.0011	0.45%
Cu 327.393†	36492.1	0.241	mg/L	0.0009	0.241	mg/L	0.0009	0.37%
Fe 239.562†	587.7	1.98	mg/L	0.044	1.98	mg/L	0.044	2.21%
Mg 279.077†	3655.7	5.03	mg/L	0.059	5.03	mg/L	0.059	1.17%
Mn 257.610†	121207.0	0.256	mg/L	0.0012	0.256	mg/L	0.0012	0.46%
Mo 202.031†	6102.9	0.491	mg/L	0.0029	0.491	mg/L	0.0029	0.59%
Ni 231.604†	8046.5	0.252	mg/L	0.0020	0.252	mg/L	0.0020	0.79%
Pb 220.353†	1291.8	0.248	mg/L	0.0016	0.248	mg/L	0.0016	0.66%
Sb 206.836†	815.3	0.591	mg/L	0.0095	0.591	mg/L	0.0095	1.61%
Se 196.026†	246.5	0.195	mg/L	0.0027	0.195	mg/L	0.0027	1.37%
Si 251.611†	85822.6	2.50	mg/L	0.014	2.50	mg/L	0.014	0.54%
Sn 189.927†	2704.6	0.494	mg/L	0.0050	0.494	mg/L	0.0050	1.01%
Ti 334.940†	369445.0	0.495	mg/L	0.0028	0.495	mg/L	0.0028	0.56%
Tl 190.801†	386.4	0.252	mg/L	0.0014	0.252	mg/L	0.0014	0.55%
V 290.880†	76054.9	0.492	mg/L	0.0041	0.492	mg/L	0.0041	0.84%
Zn 206.200†	15408.3	0.493	mg/L	0.0020	0.493	mg/L	0.0020	0.41%
K 766.490†	67384.3	24.7	mg/L	0.09	24.7	mg/L	0.09	0.38%
Na 589.592†	335854.4	24.7	mg/L	0.46	24.7	mg/L	0.46	1.87%
Sr 407.771†	749861.0	0.497	mg/L	0.0028	0.497	mg/L	0.0028	0.56%
Li 670.784†	41722.7	0.515	mg/L	0.0076	0.515	mg/L	0.0076	1.47%

Sequence No.: 17 **Autosampler Location: 43**
Sample ID: L1104046301 **Date Collected: 4/15/2011 12:37:49 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104046301

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: L1104046301

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4956032.4						50230.08	1.01%
YRADIAL	301292.2						7039.37	2.34%
Ga 417.206	1374742.6						15437.18	1.12%

Approved: April 18, 2011

GaRADIAL	66653.1					613.56	0.92%
Ag 328.068†	-355.0	-0.00107	mg/L	0.000598	-0.00107 mg/L	0.000598	56.18%
Al 396.153†	3982.3	0.762	mg/L	0.0085	0.762 mg/L	0.0085	1.11%
As 188.979†	512.0	0.916	mg/L	0.0177	0.916 mg/L	0.0177	1.94%
Ba 233.527†	1374.9	0.0247	mg/L	0.00018	0.0247 mg/L	0.00018	0.71%
Be 234.861†	125.2	0.00016	mg/L	0.000001	0.00016 mg/L	0.000001	0.86%
B 249.677†	2330.4	0.0447	mg/L	0.00086	0.0447 mg/L	0.00086	1.92%
Ca 227.546†	2304.8	24.6	mg/L	0.25	24.6 mg/L	0.25	1.03%
Cd 228.802†	28.4	-0.00091	mg/L	0.000242	-0.00091 mg/L	0.000242	26.48%
Co 228.616†	-3.2	0.00010	mg/L	0.000180	0.00010 mg/L	0.000180	179.93%
Cr 267.716†	372.5	0.00295	mg/L	0.000057	0.00295 mg/L	0.000057	1.92%
Cu 327.393†	79.6	0.00017	mg/L	0.000832	0.00017 mg/L	0.000832	497.71%
Fe 239.562†	97.4	0.323	mg/L	0.0036	0.323 mg/L	0.0036	1.10%
Mg 279.077†	1685.5	2.32	mg/L	0.030	2.32 mg/L	0.030	1.29%
Mn 257.610†	9891.5	0.0214	mg/L	0.00024	0.0214 mg/L	0.00024	1.14%
Mo 202.031†	4.1	0.00088	mg/L	0.000420	0.00088 mg/L	0.000420	47.61%
Ni 231.604†	15.9	0.00031	mg/L	0.000148	0.00031 mg/L	0.000148	47.39%
Pb 220.353†	0.4	0.00234	mg/L	0.000628	0.00234 mg/L	0.000628	26.81%
Sb 206.836†	109.2	0.0764	mg/L	0.00259	0.0764 mg/L	0.00259	3.40%
Se 196.026†	-4.9	-0.00093	mg/L	0.006339	-0.00093 mg/L	0.006339	682.11%
Si 251.611†	90042.9	2.63	mg/L	0.029	2.63 mg/L	0.029	1.10%
Sn 189.927†	-2.4	0.00019	mg/L	0.001283	0.00019 mg/L	0.001283	681.26%
Ti 334.940†	15790.2	0.0214	mg/L	0.00207	0.0214 mg/L	0.00207	9.67%
Tl 190.801†	49.7	0.0275	mg/L	0.00249	0.0275 mg/L	0.00249	9.07%
V 290.880†	371.1	0.00259	mg/L	0.000671	0.00259 mg/L	0.000671	25.96%
Zn 206.200†	261.8	0.00868	mg/L	0.000118	0.00868 mg/L	0.000118	1.36%
K 766.490†	2939.1	1.07	mg/L	0.038	1.07 mg/L	0.038	3.52%
Na 589.592†	13838.7	1.00	mg/L	0.008	1.00 mg/L	0.008	0.75%
Sr 407.771†	89693.3	0.0594	mg/L	0.00009	0.0594 mg/L	0.00009	0.16%
Li 670.784†	45.5	-0.00020	mg/L	0.000825	-0.00020 mg/L	0.000825	418.45%

Sequence No.: 18 **Autosampler Location: 44**
Sample ID: L1104046301PS WG361903-01 **Date Collected: 4/15/2011 12:44:26 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104046301PS WG361903-01

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: L1104046301PS WG361903-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4834387.4						9223.30	0.19%
YRADIAL	300898.7						6954.14	2.31%
Ga 417.206	1346830.2						5004.29	0.37%
GaRADIAL	66901.8						1904.31	2.85%
Ag 328.068†	39222.0	0.189	mg/L	0.0025	0.189	mg/L	0.0025	1.34%
Al 396.153†	28468.9	5.49	mg/L	0.004	5.49	mg/L	0.004	0.08%
As 188.979†	579.4	1.03	mg/L	0.015	1.03	mg/L	0.015	1.44%
Ba 233.527†	28201.8	0.507	mg/L	0.0048	0.507	mg/L	0.0048	0.95%
Be 234.861†	12529.8	0.0236	mg/L	0.00033	0.0236	mg/L	0.00033	1.38%
B 249.677†	53317.8	0.990	mg/L	0.0135	0.990	mg/L	0.0135	1.36%
Ca 227.546†	2550.0	27.4	mg/L	0.19	27.4	mg/L	0.19	0.69%
Cd 228.802†	391.7	0.0224	mg/L	0.00014	0.0224	mg/L	0.00014	0.64%
Co 228.616†	1746.5	0.0967	mg/L	0.00040	0.0967	mg/L	0.00040	0.41%
Cr 267.716†	28998.5	0.243	mg/L	0.0015	0.243	mg/L	0.0015	0.62%
Cu 327.393†	34940.5	0.231	mg/L	0.0040	0.231	mg/L	0.0040	1.75%
Fe 239.562†	666.9	2.24	mg/L	0.051	2.24	mg/L	0.051	2.29%
Mg 279.077†	5067.4	6.98	mg/L	0.158	6.98	mg/L	0.158	2.27%
Mn 257.610†	126669.5	0.268	mg/L	0.0023	0.268	mg/L	0.0023	0.86%
Mo 202.031†	6108.6	0.491	mg/L	0.0022	0.491	mg/L	0.0022	0.44%
Ni 231.604†	7822.9	0.245	mg/L	0.0014	0.245	mg/L	0.0014	0.59%
Pb 220.353†	1276.8	0.246	mg/L	0.0019	0.246	mg/L	0.0019	0.77%
Sb 206.836†	893.1	0.649	mg/L	0.0015	0.649	mg/L	0.0015	0.24%
Se 196.026†	240.8	0.196	mg/L	0.0027	0.196	mg/L	0.0027	1.39%
Si 251.611†	164890.5	4.81	mg/L	0.083	4.81	mg/L	0.083	1.73%
Sn 189.927†	-17.9	-0.00263	mg/L	0.000663	-0.00263	mg/L	0.000663	25.21%
Ti 334.940†	380295.6	0.509	mg/L	0.0046	0.509	mg/L	0.0046	0.91%

Approved: April 18, 2011

Tl 190.801†	435.4	0.282	mg/L	0.0020	0.282	mg/L	0.0020	0.70%
V 290.880†	75682.9	0.489	mg/L	0.0046	0.489	mg/L	0.0046	0.93%
Zn 206.200†	15131.0	0.484	mg/L	0.0014	0.484	mg/L	0.0014	0.29%
K 766.490†	68133.7	25.0	mg/L	0.04	25.0	mg/L	0.04	0.15%
Na 589.592†	339984.7	25.0	mg/L	1.07	25.0	mg/L	1.07	4.30%
Sr 407.771†	834839.1	0.553	mg/L	0.0199	0.553	mg/L	0.0199	3.60%
Li 670.784†	40326.2	0.498	mg/L	0.0029	0.498	mg/L	0.0029	0.58%

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Sequence No.: 19 **Autosampler Location: 45**
Sample ID: L1104046301DL WG361903-02 **Date Collected: 4/15/2011 12:51:08 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104046301DL WG361903-02

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104046301DL WG361903-02

	Mean Corrected		Calib.			Sample		
Analyte	**Intensity**	**Conc.**	**Units**	**Std.Dev.**	**Conc.**	**Units**	**Std.Dev.**	**RSD**
Y 371.029	4854109.9						58775.74	1.21%
YRADIAL	296421.6						7411.71	2.50%
Ga 417.206	1317169.3						24906.31	1.89%
GaRADIAL	65052.9						800.21	1.23%
Ag 328.068†	-577.1	-0.00210	mg/L	0.000313	-0.00210	mg/L	0.000313	14.86%
Al 396.153†	829.9	0.152	mg/L	0.0106	0.152	mg/L	0.0106	6.95%
As 188.979†	110.5	0.197	mg/L	0.0023	0.197	mg/L	0.0023	1.17%
Ba 233.527†	285.3	0.00520	mg/L	0.000013	0.00520	mg/L	0.000013	0.26%
Be 234.861†	68.5	0.00011	mg/L	0.000004	0.00011	mg/L	0.000004	3.80%
B 249.677†	766.4	0.0154	mg/L	0.00019	0.0154	mg/L	0.00019	1.24%
Ca 227.546†	478.1	5.12	mg/L	0.098	5.12	mg/L	0.098	1.91%
Cd 228.802†	2.4	-0.00045	mg/L	0.000280	-0.00045	mg/L	0.000280	62.32%
Co 228.616†	-9.4	-0.00020	mg/L	0.000058	-0.00020	mg/L	0.000058	29.10%
Cr 267.716†	99.0	0.00068	mg/L	0.000114	0.00068	mg/L	0.000114	16.78%
Cu 327.393†	10.2	-0.00034	mg/L	0.000366	-0.00034	mg/L	0.000366	108.65%
Fe 239.562†	21.9	0.0680	mg/L	0.00888	0.0680	mg/L	0.00888	13.07%
Mg 279.077†	345.6	0.474	mg/L	0.0176	0.474	mg/L	0.0176	3.71%
Mn 257.610†	2154.2	0.00458	mg/L	0.000072	0.00458	mg/L	0.000072	1.57%
Mo 202.031†	-4.3	0.00019	mg/L	0.000783	0.00019	mg/L	0.000783	419.94%
Ni 231.604†	15.4	0.00031	mg/L	0.000329	0.00031	mg/L	0.000329	106.02%
Pb 220.353†	-2.4	0.00087	mg/L	0.001170	0.00087	mg/L	0.001170	135.17%
Sb 206.836†	26.1	0.0155	mg/L	0.00158	0.0155	mg/L	0.00158	10.16%
Se 196.026†	-2.0	-0.00356	mg/L	0.005181	-0.00356	mg/L	0.005181	145.51%
Si 251.611†	19207.3	0.562	mg/L	0.0038	0.562	mg/L	0.0038	0.68%
Sn 189.927†	7.2	0.00194	mg/L	0.000526	0.00194	mg/L	0.000526	27.06%
Ti 334.940†	3831.2	0.00517	mg/L	0.002093	0.00517	mg/L	0.002093	40.46%
Tl 190.801†	10.4	0.00366	mg/L	0.002881	0.00366	mg/L	0.002881	78.79%
V 290.880†	283.9	0.00215	mg/L	0.000477	0.00215	mg/L	0.000477	22.21%
Zn 206.200†	104.7	0.00364	mg/L	0.000124	0.00364	mg/L	0.000124	3.39%
K 766.490†	787.1	0.287	mg/L	0.0173	0.287	mg/L	0.0173	6.04%
Na 589.592†	3013.6	0.222	mg/L	0.0013	0.222	mg/L	0.0013	0.58%
Sr 407.771†	18426.4	0.0122	mg/L	0.00022	0.0122	mg/L	0.00022	1.82%
Li 670.784†	94.2	0.00041	mg/L	0.000617	0.00041	mg/L	0.000617	152.15%

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Sequence No.: 20 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/15/2011 12:57:46 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: CCV

	Mean Corrected		Calib.			Sample		

Approved: April 18, 2011

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	4857787.0						16423.21	0.34%
YRADIAL	303698.1						1590.33	0.52%
Ga 417.206	1294978.5						9503.16	0.73%
GaRADIAL	66477.9						812.73	1.22%
Ag 328.068†	80304.3	0.386	mg/L	0.0005	0.386	mg/L	0.0005	0.12%
QC value within limits for Ag 328.068 Recovery = 96.49%								
Al 396.153†	50104.5	9.67	mg/L	0.030	9.67	mg/L	0.030	0.31%
QC value within limits for Al 396.153 Recovery = 96.72%								
As 188.979†	236.0	0.418	mg/L	0.0094	0.418	mg/L	0.0094	2.24%
QC value within limits for As 188.979 Recovery = 104.51%								
Ba 233.527†	53918.6	0.969	mg/L	0.0089	0.969	mg/L	0.0089	0.91%
QC value within limits for Ba 233.527 Recovery = 96.92%								
Be 234.861†	25469.3	0.0481	mg/L	0.00020	0.0481	mg/L	0.00020	0.42%
QC value within limits for Be 234.861 Recovery = 96.22%								
B 249.677†	26188.7	0.491	mg/L	0.0017	0.491	mg/L	0.0017	0.35%
QC value within limits for B 249.677 Recovery = 98.28%								
Ca 227.546†	916.0	10.1	mg/L	0.10	10.1	mg/L	0.10	0.94%
QC value within limits for Ca 227.546 Recovery = 101.32%								
Cd 228.802†	760.9	0.0484	mg/L	0.00049	0.0484	mg/L	0.00049	1.01%
QC value within limits for Cd 228.802 Recovery = 96.81%								
Co 228.616†	3489.4	0.193	mg/L	0.0011	0.193	mg/L	0.0011	0.57%
QC value within limits for Co 228.616 Recovery = 96.49%								
Cr 267.716†	57276.3	0.480	mg/L	0.0037	0.480	mg/L	0.0037	0.78%
QC value within limits for Cr 267.716 Recovery = 96.04%								
Cu 327.393†	72334.4	0.478	mg/L	0.0004	0.478	mg/L	0.0004	0.08%
QC value within limits for Cu 327.393 Recovery = 95.56%								
Fe 239.562†	1149.5	3.87	mg/L	0.048	3.87	mg/L	0.048	1.23%
QC value within limits for Fe 239.562 Recovery = 96.78%								
Mg 279.077†	7031.9	9.69	mg/L	0.055	9.69	mg/L	0.055	0.56%
QC value within limits for Mg 279.077 Recovery = 96.86%								
Mn 257.610†	232515.7	0.492	mg/L	0.0044	0.492	mg/L	0.0044	0.90%
QC value within limits for Mn 257.610 Recovery = 98.37%								
Mo 202.031†	12149.8	0.976	mg/L	0.0055	0.976	mg/L	0.0055	0.56%
QC value within limits for Mo 202.031 Recovery = 97.63%								
Ni 231.604†	15647.8	0.491	mg/L	0.0055	0.491	mg/L	0.0055	1.13%
QC value within limits for Ni 231.604 Recovery = 98.16%								
Pb 220.353†	2558.2	0.490	mg/L	0.0032	0.490	mg/L	0.0032	0.64%
QC value within limits for Pb 220.353 Recovery = 97.98%								
Sb 206.836†	1633.0	1.19	mg/L	0.007	1.19	mg/L	0.007	0.57%
QC value within limits for Sb 206.836 Recovery = 99.00%								
Se 196.026†	506.5	0.404	mg/L	0.0061	0.404	mg/L	0.0061	1.52%
QC value within limits for Se 196.026 Recovery = 100.96%								
Si 251.611†	164242.2	4.79	mg/L	0.014	4.79	mg/L	0.014	0.29%
QC value within limits for Si 251.611 Recovery = 95.74%								
Sn 189.927†	5339.2	0.974	mg/L	0.0043	0.974	mg/L	0.0043	0.44%
QC value within limits for Sn 189.927 Recovery = 97.43%								
Ti 334.940†	720542.9	0.965	mg/L	0.0078	0.965	mg/L	0.0078	0.81%
QC value within limits for Ti 334.940 Recovery = 96.48%								
Tl 190.801†	758.7	0.498	mg/L	0.0029	0.498	mg/L	0.0029	0.58%
QC value within limits for Tl 190.801 Recovery = 99.56%								
V 290.880†	149150.5	0.964	mg/L	0.0090	0.964	mg/L	0.0090	0.93%
QC value within limits for V 290.880 Recovery = 96.42%								
Zn 206.200†	30316.9	0.970	mg/L	0.0072	0.970	mg/L	0.0072	0.74%
QC value within limits for Zn 206.200 Recovery = 97.03%								
K 766.490†	131512.9	48.7	mg/L	0.32	48.7	mg/L	0.32	0.65%
QC value within limits for K 766.490 Recovery = 97.41%								
Na 589.592†	631340.8	47.2	mg/L	1.12	47.2	mg/L	1.12	2.36%
QC value within limits for Na 589.592 Recovery = 94.50%								
Sr 407.771†	1443072.3	0.956	mg/L	0.0091	0.956	mg/L	0.0091	0.95%
QC value within limits for Sr 407.771 Recovery = 95.59%								
Li 670.784†	80174.6	0.991	mg/L	0.0018	0.991	mg/L	0.0018	0.18%
QC value within limits for Li 670.784 Recovery = 99.11%								

All analyte(s) passed QC.

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Sequence No.: 21 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/15/2011 1:04:26 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 18, 2011

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5062116.6						9376.99	0.19%
YRADIAL	309019.6						3107.28	1.01%
Ga 417.206	1337229.7						12876.63	0.96%
GaRADIAL	66647.7						1058.83	1.59%
Ag 328.068†	-644.1	-0.00242	mg/L	0.000935	-0.00242	mg/L	0.000935	38.63%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	-1.8	-0.00881	mg/L	0.021384	-0.00881	mg/L	0.021384	242.60%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.3	-0.00158	mg/L	0.001689	-0.00158	mg/L	0.001689	106.69%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	7.6	0.00022	mg/L	0.000041	0.00022	mg/L	0.000041	18.85%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	78.7	0.00014	mg/L	0.000021	0.00014	mg/L	0.000021	14.54%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	299.1	0.00656	mg/L	0.000445	0.00656	mg/L	0.000445	6.78%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-4.3	-0.0276	mg/L	0.02205	-0.0276	mg/L	0.02205	79.74%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-0.7	-0.00006	mg/L	0.000014	-0.00006	mg/L	0.000014	24.26%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-6.6	-0.00003	mg/L	0.000120	-0.00003	mg/L	0.000120	450.95%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	35.1	0.00015	mg/L	0.000027	0.00015	mg/L	0.000027	18.57%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	23.0	-0.00027	mg/L	0.000171	-0.00027	mg/L	0.000171	63.97%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.2	-0.00519	mg/L	0.008037	-0.00519	mg/L	0.008037	154.75%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	2.8	0.00154	mg/L	0.006957	0.00154	mg/L	0.006957	452.16%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	26.7	-0.00004	mg/L	0.000022	-0.00004	mg/L	0.000022	56.74%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-6.9	-0.00003	mg/L	0.000382	-0.00003	mg/L	0.000382	>999.9%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	8.3	0.00009	mg/L	0.000019	0.00009	mg/L	0.000019	20.90%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.7	0.00075	mg/L	0.000417	0.00075	mg/L	0.000417	55.55%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	3.1	-0.00138	mg/L	0.004954	-0.00138	mg/L	0.004954	359.14%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-5.3	-0.00747	mg/L	0.000681	-0.00747	mg/L	0.000681	9.13%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	12.5	0.00117	mg/L	0.000081	0.00117	mg/L	0.000081	6.93%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	2.7	0.00113	mg/L	0.001225	0.00113	mg/L	0.001225	108.82%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-24.9	-0.00004	mg/L	0.000027	-0.00004	mg/L	0.000027	64.53%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.1	-0.00192	mg/L	0.002116	-0.00192	mg/L	0.002116	109.98%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	35.5	0.00058	mg/L	0.000402	0.00058	mg/L	0.000402	69.71%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	-0.6	0.00028	mg/L	0.000074	0.00028	mg/L	0.000074	26.67%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	245.7	0.0910	mg/L	0.01257	0.0910	mg/L	0.01257	13.82%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	349.5	0.0297	mg/L	0.00837	0.0297	mg/L	0.00837	28.22%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	97.2	0.00003	mg/L	0.000033	0.00003	mg/L	0.000033	111.40%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	72.9	0.00014	mg/L	0.001008	0.00014	mg/L	0.001008	711.40%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

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Approved: April 18, 2011

Sequence No.: 22 **Autosampler Location: 46**
Sample ID: LLCCV **Date Collected: 4/15/2011 1:11:03 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLCCV

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5035947.8						52460.77	1.04%
YRADIAL	303622.5						3853.12	1.27%
Ga 417.206	1329048.4						15324.61	1.15%
GaRADIAL	65602.5						600.46	0.92%
Ag 328.068†	1574.6	0.00820	mg/L	0.000545	0.00820	mg/L	0.000545	6.65%
Al 396.153†	126.3	0.0160	mg/L	0.00260	0.0160	mg/L	0.00260	16.28%
As 188.979†	5.9	0.00972	mg/L	0.003238	0.00972	mg/L	0.003238	33.31%
Ba 233.527†	607.2	0.0110	mg/L	0.00010	0.0110	mg/L	0.00010	0.95%
Be 234.861†	73.9	0.00013	mg/L	0.000027	0.00013	mg/L	0.000027	20.11%
B 249.677†	199.3	0.00441	mg/L	0.000074	0.00441	mg/L	0.000074	1.69%
Ca 227.546†	0.7	0.0264	mg/L	0.05456	0.0264	mg/L	0.05456	206.84%
Cd 228.802†	165.8	0.0108	mg/L	0.00005	0.0108	mg/L	0.00005	0.47%
Co 228.616†	-9.5	-0.00019	mg/L	0.000266	-0.00019	mg/L	0.000266	138.65%
Cr 267.716†	2484.6	0.0207	mg/L	0.00030	0.0207	mg/L	0.00030	1.46%
Cu 327.393†	-83.6	-0.00097	mg/L	0.000341	-0.00097	mg/L	0.000341	35.15%
Fe 239.562†	1.1	-0.00218	mg/L	0.007864	-0.00218	mg/L	0.007864	360.66%
Mg 279.077†	-1.1	-0.00378	mg/L	0.008099	-0.00378	mg/L	0.008099	214.26%
Mn 257.610†	20.9	-0.00003	mg/L	0.000004	-0.00003	mg/L	0.000004	11.69%
Mo 202.031†	-4.8	0.00014	mg/L	0.000291	0.00014	mg/L	0.000291	202.09%
Ni 231.604†	11.2	0.00018	mg/L	0.000160	0.00018	mg/L	0.000160	87.26%
Pb 220.353†	31.6	0.00706	mg/L	0.001749	0.00706	mg/L	0.001749	24.78%
Sb 206.836†	3.7	-0.00105	mg/L	0.001763	-0.00105	mg/L	0.001763	168.15%
Se 196.026†	10.0	0.00479	mg/L	0.004055	0.00479	mg/L	0.004055	84.68%
Si 251.611†	-24.0	0.00009	mg/L	0.000383	0.00009	mg/L	0.000383	406.86%
Sn 189.927†	0.9	0.00080	mg/L	0.000845	0.00080	mg/L	0.000845	106.21%
Ti 334.940†	159.2	0.00020	mg/L	0.000145	0.00020	mg/L	0.000145	72.99%
Tl 190.801†	-4.1	-0.00525	mg/L	0.002421	-0.00525	mg/L	0.002421	46.13%
V 290.880†	108.1	0.00104	mg/L	0.000545	0.00104	mg/L	0.000545	52.22%
Zn 206.200†	43.9	0.00177	mg/L	0.000239	0.00177	mg/L	0.000239	13.51%
K 766.490†	152.5	0.0572	mg/L	0.03099	0.0572	mg/L	0.03099	54.19%
Na 589.592†	33.2	0.00684	mg/L	0.015488	0.00684	mg/L	0.015488	226.37%
Sr 407.771†	-117.4	-0.00011	mg/L	0.000074	-0.00011	mg/L	0.000074	64.99%
Li 670.784†	-41.3	-0.00127	mg/L	0.001336	-0.00127	mg/L	0.001336	105.17%

User canceled analysis.

Approved: April 18, 2011

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Analysis Begun

Start Time: 4/15/2011 1:18:14 PM **Plasma On Time: 4/15/2011 7:52:51 AM**
Logged In Analyst: peicp2 **Technique: ICP Continuous**
Spectrometer Model: Optima 4300 DV, S/N 077N4011401 **Autosampler Model: AS-93plus**

Sample Information File: C:\pe\peicp2\Sample Information\THURSDAY2.sif
Batch ID:
Results Data Set: 041511H2
Results Library: C:\pe\peicp2\Results\Results.mdb

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Method Loaded
Method Name: 200.7-6010 PE-ICP2.1 **Method Last Saved: 4/15/2011 10:51:45 AM**
IEC File: CA227_LiBeMOD.iec **MSF File:**
Method Description: STANDARD

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Sequence No.: 1 **Autosampler Location: 47**
Sample ID: PBW 4R WG361324-02 **Date Collected: 4/15/2011 1:18:16 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 4R WG361324-02

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: PBW 4R WG361324-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5092005.1						35072.70	0.69%
YRADIAL	314809.8						4121.08	1.31%
Ga 417.206	1357380.1						11964.96	0.88%
GaRADIAL	68124.8						1957.66	2.87%
Ag 328.068†	-506.0	-0.00176	mg/L	0.000380	-0.00176	mg/L	0.000380	21.53%
Al 396.153†	31.6	-0.00234	mg/L	0.015578	-0.00234	mg/L	0.015578	666.68%
As 188.979†	0.6	0.00014	mg/L	0.000683	0.00014	mg/L	0.000683	488.82%
Ba 233.527†	8.2	0.00023	mg/L	0.000016	0.00023	mg/L	0.000016	6.87%
Be 234.861†	101.8	0.00017	mg/L	0.000010	0.00017	mg/L	0.000010	5.67%
B 249.677†	133.7	0.00388	mg/L	0.000247	0.00388	mg/L	0.000247	6.37%
Ca 227.546†	-1.3	0.00513	mg/L	0.056950	0.00513	mg/L	0.056950	>999.9%
Cd 228.802†	-1.3	-0.00010	mg/L	0.000132	-0.00010	mg/L	0.000132	132.42%
Co 228.616†	-7.5	-0.00008	mg/L	0.000103	-0.00008	mg/L	0.000103	130.81%
Cr 267.716†	35.0	0.00015	mg/L	0.000081	0.00015	mg/L	0.000081	55.72%
Cu 327.393†	-160.3	-0.00147	mg/L	0.000272	-0.00147	mg/L	0.000272	18.59%
Fe 239.562†	24.1	0.0753	mg/L	0.00360	0.0753	mg/L	0.00360	4.78%
Mg 279.077†	-2.7	-0.00604	mg/L	0.003705	-0.00604	mg/L	0.003705	61.37%
Mn 257.610†	95.0	0.00011	mg/L	0.000013	0.00011	mg/L	0.000013	11.76%
Mo 202.031†	-6.9	-0.00002	mg/L	0.000011	-0.00002	mg/L	0.000011	55.30%
Ni 231.604†	10.5	0.00016	mg/L	0.000154	0.00016	mg/L	0.000154	95.94%
Pb 220.353†	3.5	0.00173	mg/L	0.001622	0.00173	mg/L	0.001622	94.02%
Sb 206.836†	1.8	-0.00229	mg/L	0.001101	-0.00229	mg/L	0.001101	48.14%
Se 196.026†	-1.8	-0.00460	mg/L	0.001498	-0.00460	mg/L	0.001498	32.59%
Si 251.611†	567.4	0.0174	mg/L	0.00041	0.0174	mg/L	0.00041	2.34%
Sn 189.927†	-9.0	-0.00101	mg/L	0.000330	-0.00101	mg/L	0.000330	32.80%
Ti 334.940†	108.7	0.00014	mg/L	0.000124	0.00014	mg/L	0.000124	89.83%
Tl 190.801†	1.4	-0.00175	mg/L	0.001057	-0.00175	mg/L	0.001057	60.23%
V 290.880†	58.1	0.00073	mg/L	0.000648	0.00073	mg/L	0.000648	89.02%
Zn 206.200†	43.5	0.00168	mg/L	0.000078	0.00168	mg/L	0.000078	4.64%
K 766.490†	435.0	0.160	mg/L	0.0249	0.160	mg/L	0.0249	15.61%
Na 589.592†	41.3	0.00742	mg/L	0.007945	0.00742	mg/L	0.007945	107.01%
Sr 407.771†	-9.6	-0.00006	mg/L	0.000003	-0.00006	mg/L	0.000003	5.50%
Li 670.784†	39.6	-0.00027	mg/L	0.001140	-0.00027	mg/L	0.001140	421.65%

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Sequence No.: 2 **Autosampler Location: 48**
Sample ID: LCSW 4R WG361324-03 **Date Collected: 4/15/2011 1:24:54 PM**
Analyst: KHR **Data Type: Original**

Approved: April 18, 2011

Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 4R WG361324-03

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: LCSW 4R WG361324-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4861928.1						20430.84	0.42%
YRADIAL	304227.2						4094.51	1.35%
Ga 417.206	1320608.0						11652.54	0.88%
GaRADIAL	66333.2						1365.79	2.06%
Ag 328.068†	40013.1	0.193	mg/L	0.0024	0.193	mg/L	0.0024	1.23%
Al 396.153†	25714.6	4.96	mg/L	0.025	4.96	mg/L	0.025	0.51%
As 188.979†	118.4	0.209	mg/L	0.0041	0.209	mg/L	0.0041	1.95%
Ba 233.527†	27315.3	0.491	mg/L	0.0044	0.491	mg/L	0.0044	0.89%
Be 234.861†	12708.7	0.0240	mg/L	0.00028	0.0240	mg/L	0.00028	1.15%
B 249.677†	52328.7	0.971	mg/L	0.0099	0.971	mg/L	0.0099	1.02%
Ca 227.546†	460.4	5.10	mg/L	0.012	5.10	mg/L	0.012	0.24%
Cd 228.802†	379.2	0.0241	mg/L	0.00043	0.0241	mg/L	0.00043	1.77%
Co 228.616†	1778.9	0.0986	mg/L	0.00073	0.0986	mg/L	0.00073	0.74%
Cr 267.716†	28790.2	0.241	mg/L	0.0024	0.241	mg/L	0.0024	0.98%
Cu 327.393†	35969.4	0.237	mg/L	0.0040	0.237	mg/L	0.0040	1.67%
Fe 239.562†	585.3	1.97	mg/L	0.056	1.97	mg/L	0.056	2.82%
Mg 279.077†	3648.9	5.02	mg/L	0.110	5.02	mg/L	0.110	2.20%
Mn 257.610†	119369.8	0.253	mg/L	0.0020	0.253	mg/L	0.0020	0.78%
Mo 202.031†	6171.4	0.496	mg/L	0.0044	0.496	mg/L	0.0044	0.89%
Ni 231.604†	7858.0	0.246	mg/L	0.0038	0.246	mg/L	0.0038	1.55%
Pb 220.353†	1299.8	0.249	mg/L	0.0004	0.249	mg/L	0.0004	0.17%
Sb 206.836†	819.5	0.594	mg/L	0.0045	0.594	mg/L	0.0045	0.76%
Se 196.026†	252.6	0.200	mg/L	0.0050	0.200	mg/L	0.0050	2.50%
Si 251.611†	84878.0	2.47	mg/L	0.028	2.47	mg/L	0.028	1.11%
Sn 189.927†	2519.1	0.460	mg/L	0.0018	0.460	mg/L	0.0018	0.39%
Ti 334.940†	363726.7	0.487	mg/L	0.0010	0.487	mg/L	0.0010	0.21%
Tl 190.801†	393.7	0.257	mg/L	0.0030	0.257	mg/L	0.0030	1.19%
V 290.880†	75288.7	0.487	mg/L	0.0046	0.487	mg/L	0.0046	0.94%
Zn 206.200†	15132.0	0.484	mg/L	0.0042	0.484	mg/L	0.0042	0.87%
K 766.490†	67259.3	24.6	mg/L	0.08	24.6	mg/L	0.08	0.30%
Na 589.592†	330949.9	24.3	mg/L	0.53	24.3	mg/L	0.53	2.19%
Sr 407.771†	753514.8	0.499	mg/L	0.0074	0.499	mg/L	0.0074	1.48%
Li 670.784†	41769.6	0.516	mg/L	0.0034	0.516	mg/L	0.0034	0.66%

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Sequence No.: 3 **Autosampler Location: 49**
Sample ID: L1104022016 WG361324-01 **Date Collected: 4/15/2011 1:31:37 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022016 WG361324-01

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104022016 WG361324-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4795126.8						47663.11	0.99%
YRADIAL	301503.8						3782.19	1.25%
Ga 417.206	1355480.1						13876.39	1.02%
GaRADIAL	66149.0						790.21	1.19%
Ag 328.068†	-295.4	-0.00109	mg/L	0.000402	-0.00109	mg/L	0.000402	36.96%
Al 396.153†	70.1	0.00508	mg/L	0.015095	0.00508	mg/L	0.015095	297.12%
As 188.979†	13.6	0.0221	mg/L	0.00557	0.0221	mg/L	0.00557	25.24%
Ba 233.527†	9672.6	0.173	mg/L	0.0034	0.173	mg/L	0.0034	1.96%
Be 234.861†	94.2	0.00045	mg/L	0.000013	0.00045	mg/L	0.000013	2.98%
B 249.677†	2593.6	0.0491	mg/L	0.00179	0.0491	mg/L	0.00179	3.66%
Ca 227.546†	6108.7	65.3	mg/L	0.76	65.3	mg/L	0.76	1.16%

Approved: April 18, 2011

Cd 228.802†	-2.1	-0.00022	mg/L	0.000021	-0.00022	mg/L	0.000021	9.22%
Co 228.616†	3.0	0.00045	mg/L	0.000066	0.00045	mg/L	0.000066	14.62%
Cr 267.716†	314.6	0.00156	mg/L	0.000097	0.00156	mg/L	0.000097	6.19%
Cu 327.393†	-309.0	-0.00245	mg/L	0.000647	-0.00245	mg/L	0.000647	26.41%
Fe 239.562†	8.1	0.0200	mg/L	0.00930	0.0200	mg/L	0.00930	46.47%
Mg 279.077†	9710.0	13.4	mg/L	0.15	13.4	mg/L	0.15	1.13%
Mn 257.610†	1022083.7	2.14	mg/L	0.003	2.14	mg/L	0.003	0.12%
Mo 202.031†	14.0	0.00210	mg/L	0.000410	0.00210	mg/L	0.000410	19.50%
Ni 231.604†	48.6	0.00132	mg/L	0.000156	0.00132	mg/L	0.000156	11.80%
Pb 220.353†	-13.9	0.00138	mg/L	0.001347	0.00138	mg/L	0.001347	97.65%
Sb 206.836†	16.7	0.00857	mg/L	0.000791	0.00857	mg/L	0.000791	9.23%
Se 196.026†	-22.6	-0.00587	mg/L	0.003135	-0.00587	mg/L	0.003135	53.38%
Si 251.611†	200881.5	5.87	mg/L	0.102	5.87	mg/L	0.102	1.73%
Sn 189.927†	-5.5	-0.00038	mg/L	0.000169	-0.00038	mg/L	0.000169	44.77%
Ti 334.940†	-696.4	-0.00029	mg/L	0.000067	-0.00029	mg/L	0.000067	23.36%
Tl 190.801†	86.4	0.0504	mg/L	0.00413	0.0504	mg/L	0.00413	8.19%
V 290.880†	-336.5	-0.00184	mg/L	0.000327	-0.00184	mg/L	0.000327	17.79%
Zn 206.200†	197.6	0.00661	mg/L	0.000138	0.00661	mg/L	0.000138	2.08%
K 766.490†	7367.6	2.65	mg/L	0.011	2.65	mg/L	0.011	0.41%
Na 589.592†	395274.0	29.2	mg/L	0.57	29.2	mg/L	0.57	1.95%
Sr 407.771†	387106.6	0.257	mg/L	0.0021	0.257	mg/L	0.0021	0.84%
Li 670.784†	548.3	0.00602	mg/L	0.001035	0.00602	mg/L	0.001035	17.18%

Sequence No.: 4 **Autosampler Location: 50**
Sample ID: L1104022016S WG361324-04 **Date Collected: 4/15/2011 1:38:21 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022016S WG361324-04

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104022016S WG361324-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4786808.2						17140.38	0.36%
YRADIAL	301952.2						1555.08	0.52%
Ga 417.206	1323805.8						3485.88	0.26%
GaRADIAL	66955.5						410.67	0.61%
Ag 328.068†	39917.6	0.192	mg/L	0.0005	0.192	mg/L	0.0005	0.24%
Al 396.153†	25409.9	4.90	mg/L	0.044	4.90	mg/L	0.044	0.90%
As 188.979†	129.4	0.228	mg/L	0.0009	0.228	mg/L	0.0009	0.40%
Ba 233.527†	36291.6	0.652	mg/L	0.0022	0.652	mg/L	0.0022	0.33%
Be 234.861†	12768.5	0.0244	mg/L	0.00038	0.0244	mg/L	0.00038	1.55%
B 249.677†	55020.0	1.02	mg/L	0.004	1.02	mg/L	0.004	0.36%
Ca 227.546†	6619.4	70.9	mg/L	0.76	70.9	mg/L	0.76	1.08%
Cd 228.802†	370.9	0.0235	mg/L	0.00043	0.0235	mg/L	0.00043	1.82%
Co 228.616†	1753.9	0.0971	mg/L	0.00079	0.0971	mg/L	0.00079	0.81%
Cr 267.716†	28966.9	0.242	mg/L	0.0009	0.242	mg/L	0.0009	0.37%
Cu 327.393†	34935.3	0.231	mg/L	0.0017	0.231	mg/L	0.0017	0.73%
Fe 239.562†	596.0	2.00	mg/L	0.018	2.00	mg/L	0.018	0.92%
Mg 279.077†	13107.2	18.1	mg/L	0.11	18.1	mg/L	0.11	0.59%
Mn 257.610†	1128391.7	2.37	mg/L	0.012	2.37	mg/L	0.012	0.49%
Mo 202.031†	6172.9	0.497	mg/L	0.0038	0.497	mg/L	0.0038	0.77%
Ni 231.604†	7779.4	0.244	mg/L	0.0015	0.244	mg/L	0.0015	0.61%
Pb 220.353†	1268.4	0.246	mg/L	0.0008	0.246	mg/L	0.0008	0.31%
Sb 206.836†	836.0	0.606	mg/L	0.0044	0.606	mg/L	0.0044	0.73%
Se 196.026†	229.5	0.197	mg/L	0.0063	0.197	mg/L	0.0063	3.21%
Si 251.611†	288974.5	8.44	mg/L	0.023	8.44	mg/L	0.023	0.27%
Sn 189.927†	2714.0	0.496	mg/L	0.0041	0.496	mg/L	0.0041	0.84%
Ti 334.940†	373957.3	0.501	mg/L	0.0013	0.501	mg/L	0.0013	0.27%
Tl 190.801†	462.7	0.299	mg/L	0.0078	0.299	mg/L	0.0078	2.61%
V 290.880†	75850.7	0.491	mg/L	0.0023	0.491	mg/L	0.0023	0.47%
Zn 206.200†	14852.1	0.476	mg/L	0.0023	0.476	mg/L	0.0023	0.48%
K 766.490†	74455.6	27.3	mg/L	0.25	27.3	mg/L	0.25	0.90%
Na 589.592†	716515.8	53.9	mg/L	0.38	53.9	mg/L	0.38	0.70%
Sr 407.771†	1145283.0	0.759	mg/L	0.0027	0.759	mg/L	0.0027	0.35%
Li 670.784†	41699.3	0.515	mg/L	0.0020	0.515	mg/L	0.0020	0.39%

Approved: April 18, 2011

Sequence No.: 5 **Autosampler Location: 51**
Sample ID: L1104022016SD WG361324-05 **Date Collected: 4/15/2011 1:45:03 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022016SD WG361324-05

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104022016SD WG361324-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4798703.4						75551.66	1.57%
YRADIAL	304024.2						7063.76	2.32%
Ga 417.206	1328159.4						24819.41	1.87%
GaRADIAL	67129.9						1514.05	2.26%
Ag 328.068†	39944.5	0.192	mg/L	0.0032	0.192	mg/L	0.0032	1.67%
Al 396.153†	25200.7	4.86	mg/L	0.003	4.86	mg/L	0.003	0.07%
As 188.979†	132.4	0.233	mg/L	0.0069	0.233	mg/L	0.0069	2.97%
Ba 233.527†	36600.3	0.657	mg/L	0.0098	0.657	mg/L	0.0098	1.49%
Be 234.861†	12673.1	0.0242	mg/L	0.00052	0.0242	mg/L	0.00052	2.14%
B 249.677†	55514.8	1.03	mg/L	0.016	1.03	mg/L	0.016	1.60%
Ca 227.546†	6769.1	72.5	mg/L	1.05	72.5	mg/L	1.05	1.44%
Cd 228.802†	367.2	0.0233	mg/L	0.00048	0.0233	mg/L	0.00048	2.08%
Co 228.616†	1732.3	0.0959	mg/L	0.00126	0.0959	mg/L	0.00126	1.31%
Cr 267.716†	28935.2	0.242	mg/L	0.0029	0.242	mg/L	0.0029	1.21%
Cu 327.393†	35135.2	0.232	mg/L	0.0041	0.232	mg/L	0.0041	1.78%
Fe 239.562†	586.2	1.97	mg/L	0.037	1.97	mg/L	0.037	1.86%
Mg 279.077†	13312.1	18.3	mg/L	0.38	18.3	mg/L	0.38	2.08%
Mn 257.610†	1142049.1	2.40	mg/L	0.011	2.40	mg/L	0.011	0.46%
Mo 202.031†	6095.8	0.491	mg/L	0.0069	0.491	mg/L	0.0069	1.41%
Ni 231.604†	7660.9	0.240	mg/L	0.0031	0.240	mg/L	0.0031	1.29%
Pb 220.353†	1244.9	0.242	mg/L	0.0045	0.242	mg/L	0.0045	1.87%
Sb 206.836†	822.3	0.596	mg/L	0.0097	0.596	mg/L	0.0097	1.62%
Se 196.026†	220.8	0.190	mg/L	0.0022	0.190	mg/L	0.0022	1.15%
Si 251.611†	296353.3	8.66	mg/L	0.151	8.66	mg/L	0.151	1.75%
Sn 189.927†	2524.0	0.461	mg/L	0.0071	0.461	mg/L	0.0071	1.55%
Ti 334.940†	372810.7	0.500	mg/L	0.0097	0.500	mg/L	0.0097	1.94%
Tl 190.801†	463.0	0.299	mg/L	0.0044	0.299	mg/L	0.0044	1.46%
V 290.880†	75747.1	0.490	mg/L	0.0072	0.490	mg/L	0.0072	1.46%
Zn 206.200†	14745.2	0.472	mg/L	0.0070	0.472	mg/L	0.0070	1.49%
K 766.490†	73803.0	27.0	mg/L	0.20	27.0	mg/L	0.20	0.72%
Na 589.592†	715984.2	53.9	mg/L	0.74	53.9	mg/L	0.74	1.37%
Sr 407.771†	1126540.7	0.746	mg/L	0.0156	0.746	mg/L	0.0156	2.09%
Li 670.784†	41063.5	0.507	mg/L	0.0019	0.507	mg/L	0.0019	0.38%

Sequence No.: 6 **Autosampler Location: 52**
Sample ID: L1104030601 **Date Collected: 4/15/2011 1:51:45 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030601

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104030601

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4903867.2						5930.62	0.12%
YRADIAL	315943.6						3281.91	1.04%
Ga 417.206	1314153.9						12156.51	0.93%
GaRADIAL	67340.1						927.26	1.38%
Ag 328.068†	-976.0	-0.00854	mg/L	0.001753	-0.00854	mg/L	0.001753	20.52%
Al 396.153†	393008.2	76.0	mg/L	0.39	76.0	mg/L	0.39	0.51%
As 188.979†	10.1	0.0188	mg/L	0.00603	0.0188	mg/L	0.00603	32.13%

Approved: April 18, 2011

Ba 233.527†	13436.8	0.241	mg/L	0.0016	0.241	mg/L	0.0016	0.66%
Be 234.861†	10931.3	0.00223	mg/L	0.000361	0.00223	mg/L	0.000361	16.20%
B 249.677†	-5272.1	0.235	mg/L	0.0045	0.235	mg/L	0.0045	1.91%
Ca 227.546†	2513.3	27.1	mg/L	0.15	27.1	mg/L	0.15	0.55%
Cd 228.802†	237.7	0.0155	mg/L	0.00009	0.0155	mg/L	0.00009	0.61%
Co 228.616†	655.8	0.0322	mg/L	0.00022	0.0322	mg/L	0.00022	0.68%
Cr 267.716†	11561.8	0.0940	mg/L	0.00113	0.0940	mg/L	0.00113	1.21%
Cu 327.393†	15971.9	0.116	mg/L	0.0024	0.116	mg/L	0.0024	2.04%
Fe 239.562†	26523.3	89.5	mg/L	0.49	89.5	mg/L	0.49	0.55%
Mg 279.077†	5293.2	7.24	mg/L	0.034	7.24	mg/L	0.034	0.46%
Mn 257.610†	1224563.2	2.58	mg/L	0.006	2.58	mg/L	0.006	0.23%
Mo 202.031†	148.6	0.0175	mg/L	0.00094	0.0175	mg/L	0.00094	5.41%
Ni 231.604†	1747.2	0.0547	mg/L	0.00035	0.0547	mg/L	0.00035	0.64%
Pb 220.353†	278.5	0.0533	mg/L	0.00279	0.0533	mg/L	0.00279	5.24%
Sb 206.836†	52.5	0.0341	mg/L	0.00312	0.0341	mg/L	0.00312	9.15%
Se 196.026†	-60.8	-0.0191	mg/L	0.00443	-0.0191	mg/L	0.00443	23.16%
Si 251.611†	2157677.6	63.1	mg/L	0.58	63.1	mg/L	0.58	0.91%
Sn 189.927†	-28.7	-0.00460	mg/L	0.001136	-0.00460	mg/L	0.001136	24.70%
Ti 334.940†	822066.1	1.10	mg/L	0.010	1.10	mg/L	0.010	0.88%
Tl 190.801†	14.9	0.0217	mg/L	0.00477	0.0217	mg/L	0.00477	21.94%
V 290.880†	26324.9	0.177	mg/L	0.0015	0.177	mg/L	0.0015	0.83%
Zn 206.200†	18255.6	0.581	mg/L	0.0032	0.581	mg/L	0.0032	0.55%
K 766.490†	19112.2	6.91	mg/L	0.024	6.91	mg/L	0.024	0.35%
Na 589.592†	630696.5	47.2	mg/L	0.52	47.2	mg/L	0.52	1.09%
Sr 407.771†	139320.0	0.0726	mg/L	0.00068	0.0726	mg/L	0.00068	0.93%
Li 670.784†	3861.8	0.0470	mg/L	0.00081	0.0470	mg/L	0.00081	1.73%

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Sequence No.: 7 **Autosampler Location: 53**
Sample ID: L1104030601 0.05 **Date Collected: 4/15/2011 1:57:30 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030601 0.05

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104030601 0.05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4960838.2						4589.94	0.09%
YRADIAL	308108.8						6029.31	1.96%
Ga 417.206	1329537.5						1330.15	0.10%
GaRADIAL	66767.2						1690.91	2.53%
Ag 328.068†	-756.2	-0.00320	mg/L	0.000375	-0.00320	mg/L	0.000375	11.74%
Al 396.153†	21182.9	4.09	mg/L	0.013	4.09	mg/L	0.013	0.32%
As 188.979†	1.1	0.00101	mg/L	0.002890	0.00101	mg/L	0.002890	286.43%
Ba 233.527†	725.0	0.0131	mg/L	0.00006	0.0131	mg/L	0.00006	0.50%
Be 234.861†	687.8	0.00032	mg/L	0.000159	0.00032	mg/L	0.000159	49.25%
B 249.677†	13.5	0.0186	mg/L	0.00056	0.0186	mg/L	0.00056	3.02%
Ca 227.546†	127.7	1.40	mg/L	0.016	1.40	mg/L	0.016	1.13%
Cd 228.802†	11.1	0.00071	mg/L	0.000252	0.00071	mg/L	0.000252	35.71%
Co 228.616†	28.8	0.00167	mg/L	0.000346	0.00167	mg/L	0.000346	20.64%
Cr 267.716†	656.2	0.00520	mg/L	0.000115	0.00520	mg/L	0.000115	2.21%
Cu 327.393†	696.6	0.00479	mg/L	0.000666	0.00479	mg/L	0.000666	13.91%
Fe 239.562†	1394.0	4.70	mg/L	0.108	4.70	mg/L	0.108	2.30%
Mg 279.077†	283.2	0.385	mg/L	0.0073	0.385	mg/L	0.0073	1.88%
Mn 257.610†	64688.7	0.136	mg/L	0.0013	0.136	mg/L	0.0013	0.94%
Mo 202.031†	1.1	0.00088	mg/L	0.000157	0.00088	mg/L	0.000157	17.83%
Ni 231.604†	99.5	0.00296	mg/L	0.000294	0.00296	mg/L	0.000294	9.94%
Pb 220.353†	14.6	0.00381	mg/L	0.000789	0.00381	mg/L	0.000789	20.68%
Sb 206.836†	7.6	0.00193	mg/L	0.001672	0.00193	mg/L	0.001672	86.73%
Se 196.026†	-5.1	-0.00556	mg/L	0.001100	-0.00556	mg/L	0.001100	19.80%
Si 251.611†	122191.5	3.57	mg/L	0.033	3.57	mg/L	0.033	0.92%
Sn 189.927†	-8.1	-0.00084	mg/L	0.000560	-0.00084	mg/L	0.000560	66.70%
Ti 334.940†	51146.7	0.0685	mg/L	0.00285	0.0685	mg/L	0.00285	4.17%
Tl 190.801†	-1.4	-0.00261	mg/L	0.005815	-0.00261	mg/L	0.005815	223.04%
V 290.880†	1432.3	0.00997	mg/L	0.000913	0.00997	mg/L	0.000913	9.16%
Zn 206.200†	988.4	0.0318	mg/L	0.00002	0.0318	mg/L	0.00002	0.08%
K 766.490†	1164.4	0.422	mg/L	0.0221	0.422	mg/L	0.0221	5.23%

Approved: April 18, 2011

Na 589.592†	32596.7	2.36	mg/L	0.018	2.36	mg/L	0.018	0.78%
Sr 407.771†	7072.4	0.00362	mg/L	0.000039	0.00362	mg/L	0.000039	1.09%
Li 670.784†	274.1	0.00263	mg/L	0.000606	0.00263	mg/L	0.000606	23.02%

Sequence No.: 8 **Autosampler Location: 54**
Sample ID: L1104022008 **Date Collected: 4/15/2011 2:04:08 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022008

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104022008

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4867406.0						38951.74	0.80%
YRADIAL	308829.6						6431.66	2.08%
Ga 417.206	1384395.5						9727.81	0.70%
GaRADIAL	67744.8						353.15	0.52%
Ag 328.068†	-652.5	-0.00253	mg/L	0.000773	-0.00253	mg/L	0.000773	30.53%
Al 396.153†	6990.8	1.34	mg/L	0.047	1.34	mg/L	0.047	3.46%
As 188.979†	3.6	0.00525	mg/L	0.005049	0.00525	mg/L	0.005049	96.16%
Ba 233.527†	2123.2	0.0381	mg/L	0.00032	0.0381	mg/L	0.00032	0.85%
Be 234.861†	247.0	0.00020	mg/L	0.000062	0.00020	mg/L	0.000062	31.17%
B 249.677†	6258.9	0.121	mg/L	0.0011	0.121	mg/L	0.0011	0.90%
Ca 227.546†	775.3	8.29	mg/L	0.125	8.29	mg/L	0.125	1.51%
Cd 228.802†	-2.4	-0.00019	mg/L	0.000226	-0.00019	mg/L	0.000226	119.30%
Co 228.616†	0.1	0.00028	mg/L	0.000135	0.00028	mg/L	0.000135	49.02%
Cr 267.716†	291.7	0.00226	mg/L	0.000113	0.00226	mg/L	0.000113	5.01%
Cu 327.393†	137.7	0.00065	mg/L	0.001129	0.00065	mg/L	0.001129	174.47%
Fe 239.562†	373.5	1.25	mg/L	0.023	1.25	mg/L	0.023	1.87%
Mg 279.077†	2288.6	3.15	mg/L	0.041	3.15	mg/L	0.041	1.30%
Mn 257.610†	10643.4	0.0239	mg/L	0.00040	0.0239	mg/L	0.00040	1.66%
Mo 202.031†	-9.1	-0.00013	mg/L	0.000271	-0.00013	mg/L	0.000271	204.37%
Ni 231.604†	79.2	0.00231	mg/L	0.000153	0.00231	mg/L	0.000153	6.62%
Pb 220.353†	-1.8	0.00112	mg/L	0.000349	0.00112	mg/L	0.000349	31.17%
Sb 206.836†	5.2	0.00015	mg/L	0.001076	0.00015	mg/L	0.001076	719.53%
Se 196.026†	-3.9	-0.00388	mg/L	0.002597	-0.00388	mg/L	0.002597	66.87%
Si 251.611†	224869.8	6.57	mg/L	0.067	6.57	mg/L	0.067	1.03%
Sn 189.927†	-5.6	-0.00039	mg/L	0.000289	-0.00039	mg/L	0.000289	73.56%
Ti 334.940†	8779.0	0.0118	mg/L	0.00021	0.0118	mg/L	0.00021	1.81%
Tl 190.801†	17.2	0.00791	mg/L	0.003062	0.00791	mg/L	0.003062	38.73%
V 290.880†	474.4	0.00351	mg/L	0.000741	0.00351	mg/L	0.000741	21.13%
Zn 206.200†	371.6	0.0121	mg/L	0.00018	0.0121	mg/L	0.00018	1.47%
K 766.490†	4579.3	1.62	mg/L	0.011	1.62	mg/L	0.011	0.66%
Na 589.592†	613741.6	45.9	mg/L	0.40	45.9	mg/L	0.40	0.87%
Sr 407.771†	80245.9	0.0529	mg/L	0.00044	0.0529	mg/L	0.00044	0.84%
Li 670.784†	312.6	0.00311	mg/L	0.000459	0.00311	mg/L	0.000459	14.76%

Sequence No.: 9 **Autosampler Location: 55**
Sample ID: L1104022008PS WG361560-03 **Date Collected: 4/15/2011 2:10:50 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022008PS WG361560-03

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104022008PS WG361560-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4804468.3						20239.35	0.42%
YRADIAL	305732.4						7207.01	2.36%
Ga 417.206	1356768.8						6110.08	0.45%

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GaRADIAL	67401.0					558.96	0.83%
Ag 328.068†	38447.7	0.185	mg/L	0.0024	0.185 mg/L	0.0024	1.29%
Al 396.153†	31628.4	6.10	mg/L	0.026	6.10 mg/L	0.026	0.43%
As 188.979†	119.8	0.212	mg/L	0.0068	0.212 mg/L	0.0068	3.21%
Ba 233.527†	28836.2	0.518	mg/L	0.0070	0.518 mg/L	0.0070	1.35%
Be 234.861†	12315.1	0.0230	mg/L	0.00027	0.0230 mg/L	0.00027	1.18%
B 249.677†	56558.6	1.05	mg/L	0.015	1.05 mg/L	0.015	1.43%
Ca 227.546†	1155.7	12.5	mg/L	0.05	12.5 mg/L	0.05	0.40%
Cd 228.802†	365.8	0.0232	mg/L	0.00025	0.0232 mg/L	0.00025	1.07%
Co 228.616†	1773.7	0.0982	mg/L	0.00014	0.0982 mg/L	0.00014	0.14%
Cr 267.716†	28450.4	0.238	mg/L	0.0034	0.238 mg/L	0.0034	1.41%
Cu 327.393†	35087.5	0.232	mg/L	0.0027	0.232 mg/L	0.0027	1.16%
Fe 239.562†	927.1	3.12	mg/L	0.036	3.12 mg/L	0.036	1.15%
Mg 279.077†	5695.9	7.84	mg/L	0.113	7.84 mg/L	0.113	1.44%
Mn 257.610†	127303.2	0.271	mg/L	0.0042	0.271 mg/L	0.0042	1.57%
Mo 202.031†	6157.3	0.495	mg/L	0.0028	0.495 mg/L	0.0028	0.57%
Ni 231.604†	7915.3	0.248	mg/L	0.0022	0.248 mg/L	0.0022	0.89%
Pb 220.353†	1271.4	0.244	mg/L	0.0013	0.244 mg/L	0.0013	0.52%
Sb 206.836†	798.2	0.579	mg/L	0.0064	0.579 mg/L	0.0064	1.11%
Se 196.026†	234.5	0.188	mg/L	0.0036	0.188 mg/L	0.0036	1.94%
Si 251.611†	304938.4	8.91	mg/L	0.105	8.91 mg/L	0.105	1.18%
Sn 189.927†	-17.5	-0.00257	mg/L	0.000304	-0.00257 mg/L	0.000304	11.86%
Ti 334.940†	377316.9	0.505	mg/L	0.0015	0.505 mg/L	0.0015	0.30%
Tl 190.801†	398.2	0.259	mg/L	0.0011	0.259 mg/L	0.0011	0.44%
V 290.880†	75416.9	0.488	mg/L	0.0066	0.488 mg/L	0.0066	1.35%
Zn 206.200†	15187.0	0.486	mg/L	0.0065	0.486 mg/L	0.0065	1.33%
K 766.490†	70634.8	25.8	mg/L	0.16	25.8 mg/L	0.16	0.60%
Na 589.592†	878832.0	66.8	mg/L	1.01	66.8 mg/L	1.01	1.51%
Sr 407.771†	834613.2	0.553	mg/L	0.0117	0.553 mg/L	0.0117	2.11%
Li 670.784†	41604.4	0.514	mg/L	0.0006	0.514 mg/L	0.0006	0.12%

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Sequence No.: 10 **Autosampler Location: 56**
Sample ID: L1104022008DL WG361560-04 **Date Collected: 4/15/2011 2:17:33 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104022008DL WG361560-04

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104022008DL WG361560-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4925696.2						41858.64	0.85%
YRADIAL	308801.5						3324.92	1.08%
Ga 417.206	1357288.1						11691.63	0.86%
GaRADIAL	67998.8						1499.62	2.21%
Ag 328.068†	-655.9	-0.00249	mg/L	0.000788	-0.00249	mg/L	0.000788	31.62%
Al 396.153†	1459.9	0.274	mg/L	0.0015	0.274	mg/L	0.0015	0.54%
As 188.979†	-0.5	-0.00202	mg/L	0.000203	-0.00202	mg/L	0.000203	10.05%
Ba 233.527†	432.3	0.00783	mg/L	0.000111	0.00783	mg/L	0.000111	1.42%
Be 234.861†	116.5	0.00016	mg/L	0.000018	0.00016	mg/L	0.000018	11.40%
B 249.677†	1615.6	0.0318	mg/L	0.00037	0.0318	mg/L	0.00037	1.16%
Ca 227.546†	158.8	1.71	mg/L	0.090	1.71	mg/L	0.090	5.24%
Cd 228.802†	-0.4	-0.00004	mg/L	0.000113	-0.00004	mg/L	0.000113	307.82%
Co 228.616†	-9.3	-0.00020	mg/L	0.000149	-0.00020	mg/L	0.000149	75.73%
Cr 267.716†	66.4	0.00040	mg/L	0.000112	0.00040	mg/L	0.000112	27.90%
Cu 327.393†	-33.3	-0.00061	mg/L	0.000138	-0.00061	mg/L	0.000138	22.68%
Fe 239.562†	74.9	0.247	mg/L	0.0116	0.247	mg/L	0.0116	4.69%
Mg 279.077†	452.9	0.621	mg/L	0.0116	0.621	mg/L	0.0116	1.86%
Mn 257.610†	2213.9	0.00490	mg/L	0.000041	0.00490	mg/L	0.000041	0.84%
Mo 202.031†	-3.9	0.00023	mg/L	0.000699	0.00023	mg/L	0.000699	307.61%
Ni 231.604†	24.3	0.00059	mg/L	0.000363	0.00059	mg/L	0.000363	61.18%
Pb 220.353†	2.8	0.00168	mg/L	0.000876	0.00168	mg/L	0.000876	52.26%
Sb 206.836†	6.1	0.00081	mg/L	0.000918	0.00081	mg/L	0.000918	113.39%
Se 196.026†	1.2	-0.00175	mg/L	0.003844	-0.00175	mg/L	0.003844	219.76%
Si 251.611†	45839.4	1.34	mg/L	0.020	1.34	mg/L	0.020	1.50%
Sn 189.927†	-2.2	0.00023	mg/L	0.000682	0.00023	mg/L	0.000682	298.63%
Ti 334.940†	1668.2	0.00224	mg/L	0.000084	0.00224	mg/L	0.000084	3.76%

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Tl 190.801†	2.9	-0.00088	mg/L	0.000811	-0.00088	mg/L	0.000811 92.40%
V 290.880†	189.1	0.00159	mg/L	0.000209	0.00159	mg/L	0.000209 13.19%
Zn 206.200†	118.6	0.00408	mg/L	0.000165	0.00408	mg/L	0.000165 4.05%
K 766.490†	1067.9	0.380	mg/L	0.0282	0.380	mg/L	0.0282 7.42%
Na 589.592†	125308.1	9.10	mg/L	0.103	9.10	mg/L	0.103 1.13%
Sr 407.771†	16126.5	0.0106	mg/L	0.00005	0.0106	mg/L	0.00005 0.49%
Li 670.784†	47.8	-0.00017	mg/L	0.000588	-0.00017	mg/L	0.000588 347.90%

Sequence No.: 11 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/15/2011 2:24:11 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4800145.2						76477.80	1.59%
YRADIAL	301913.6						3557.61	1.18%
Ga 417.206	1284251.1						19819.35	1.54%
GaRADIAL	66141.4						1173.17	1.77%
Ag 328.068†	79521.0	0.382	mg/L	0.0056	0.382	mg/L	0.0056	1.46%
QC value within limits for Ag 328.068 Recovery = 95.55%								
Al 396.153†	50688.8	9.79	mg/L	0.020	9.79	mg/L	0.020	0.20%
QC value within limits for Al 396.153 Recovery = 97.85%								
As 188.979†	244.4	0.433	mg/L	0.0063	0.433	mg/L	0.0063	1.45%
QC value within limits for As 188.979 Recovery = 108.30%								
Ba 233.527†	53535.7	0.962	mg/L	0.0162	0.962	mg/L	0.0162	1.69%
QC value within limits for Ba 233.527 Recovery = 96.23%								
Be 234.861†	25052.0	0.0473	mg/L	0.00031	0.0473	mg/L	0.00031	0.67%
QC value within limits for Be 234.861 Recovery = 94.56%								
B 249.677†	26093.2	0.490	mg/L	0.0065	0.490	mg/L	0.0065	1.33%
QC value within limits for B 249.677 Recovery = 97.94%								
Ca 227.546†	919.9	10.2	mg/L	0.17	10.2	mg/L	0.17	1.69%
QC value within limits for Ca 227.546 Recovery = 101.69%								
Cd 228.802†	762.0	0.0484	mg/L	0.00089	0.0484	mg/L	0.00089	1.84%
QC value within limits for Cd 228.802 Recovery = 96.86%								
Co 228.616†	3477.2	0.192	mg/L	0.0036	0.192	mg/L	0.0036	1.85%
QC value within limits for Co 228.616 Recovery = 96.14%								
Cr 267.716†	56891.1	0.477	mg/L	0.0063	0.477	mg/L	0.0063	1.31%
QC value within limits for Cr 267.716 Recovery = 95.40%								
Cu 327.393†	71493.0	0.472	mg/L	0.0066	0.472	mg/L	0.0066	1.39%
QC value within limits for Cu 327.393 Recovery = 94.45%								
Fe 239.562†	1164.7	3.92	mg/L	0.035	3.92	mg/L	0.035	0.90%
QC value within limits for Fe 239.562 Recovery = 98.06%								
Mg 279.077†	7106.5	9.79	mg/L	0.066	9.79	mg/L	0.066	0.68%
QC value within limits for Mg 279.077 Recovery = 97.88%								
Mn 257.610†	230639.1	0.488	mg/L	0.0079	0.488	mg/L	0.0079	1.62%
QC value within limits for Mn 257.610 Recovery = 97.59%								
Mo 202.031†	11819.5	0.950	mg/L	0.0131	0.950	mg/L	0.0131	1.37%
QC value within limits for Mo 202.031 Recovery = 94.98%								
Ni 231.604†	15453.0	0.485	mg/L	0.0060	0.485	mg/L	0.0060	1.24%
QC value within limits for Ni 231.604 Recovery = 96.94%								
Pb 220.353†	2542.6	0.487	mg/L	0.0107	0.487	mg/L	0.0107	2.20%
QC value within limits for Pb 220.353 Recovery = 97.36%								
Sb 206.836†	1622.4	1.18	mg/L	0.020	1.18	mg/L	0.020	1.69%
QC value within limits for Sb 206.836 Recovery = 98.35%								
Se 196.026†	495.7	0.395	mg/L	0.0090	0.395	mg/L	0.0090	2.27%
QC value within limits for Se 196.026 Recovery = 98.82%								
Si 251.611†	162692.2	4.74	mg/L	0.071	4.74	mg/L	0.071	1.50%
QC value within limits for Si 251.611 Recovery = 94.84%								
Sn 189.927†	5333.3	0.973	mg/L	0.0158	0.973	mg/L	0.0158	1.62%
QC value within limits for Sn 189.927 Recovery = 97.33%								
Ti 334.940†	724622.3	0.970	mg/L	0.0033	0.970	mg/L	0.0033	0.34%
QC value within limits for Ti 334.940 Recovery = 97.02%								
Tl 190.801†	760.6	0.499	mg/L	0.0076	0.499	mg/L	0.0076	1.52%

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QC value within limits for Tl 190.801 Recovery = 99.82%
V 290.880† 148456.2 0.960 mg/L 0.0157 0.960 mg/L 0.0157 1.63%
QC value within limits for V 290.880 Recovery = 95.97%
Zn 206.200† 29961.1 0.959 mg/L 0.0096 0.959 mg/L 0.0096 1.00%
QC value within limits for Zn 206.200 Recovery = 95.89%
K 766.490† 132800.1 49.2 mg/L 0.14 49.2 mg/L 0.14 0.28%
QC value within limits for K 766.490 Recovery = 98.39%
Na 589.592† 648766.5 48.6 mg/L 1.36 48.6 mg/L 1.36 2.79%
QC value within limits for Na 589.592 Recovery = 97.21%
Sr 407.771† 1492076.6 0.988 mg/L 0.0163 0.988 mg/L 0.0163 1.65%
QC value within limits for Sr 407.771 Recovery = 98.84%
Li 670.784† 81835.9 1.01 mg/L 0.008 1.01 mg/L 0.008 0.76%
QC value within limits for Li 670.784 Recovery = 101.16%
All analyte(s) passed QC.

Sequence No.: 12 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/15/2011 2:30:53 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4944677.9						19084.69	0.39%
YRADIAL	302659.7						6629.34	2.19%
Ga 417.206	1301184.1						14794.13	1.14%
GaRADIAL	65670.5						1460.92	2.22%
Ag 328.068†	-800.4	-0.00317	mg/L	0.000208	-0.00317	mg/L	0.000208	6.57%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	6.2	-0.00726	mg/L	0.020759	-0.00726	mg/L	0.020759	286.04%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.6	-0.00206	mg/L	0.004099	-0.00206	mg/L	0.004099	199.10%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	4.2	0.00016	mg/L	0.000085	0.00016	mg/L	0.000085	54.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	77.5	0.00014	mg/L	0.000038	0.00014	mg/L	0.000038	27.63%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	401.6	0.00848	mg/L	0.000340	0.00848	mg/L	0.000340	4.00%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	2.6	0.0466	mg/L	0.04295	0.0466	mg/L	0.04295	92.14%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-1.3	-0.00010	mg/L	0.000097	-0.00010	mg/L	0.000097	101.69%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-6.9	-0.00005	mg/L	0.000224	-0.00005	mg/L	0.000224	470.01%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	28.5	0.00009	mg/L	0.000159	0.00009	mg/L	0.000159	174.22%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-163.4	-0.00150	mg/L	0.000314	-0.00150	mg/L	0.000314	20.99%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	1.5	-0.00084	mg/L	0.007177	-0.00084	mg/L	0.007177	850.70%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-5.4	-0.00968	mg/L	0.003169	-0.00968	mg/L	0.003169	32.75%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	17.1	-0.00006	mg/L	0.000018	-0.00006	mg/L	0.000018	31.27%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-7.8	-0.00010	mg/L	0.000329	-0.00010	mg/L	0.000329	343.71%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	12.6	0.00023	mg/L	0.000165	0.00023	mg/L	0.000165	72.19%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	8.3	0.00265	mg/L	0.000619	0.00265	mg/L	0.000619	23.35%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	7.5	0.00181	mg/L	0.000422	0.00181	mg/L	0.000422	23.28%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	1.4	-0.00212	mg/L	0.004095	-0.00212	mg/L	0.004095	193.05%
QC value within limits for Se 196.026 Recovery = Not calculated								

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Si 251.611†	115.1	0.00416 mg/L	0.000666	0.00416 mg/L	0.000666	15.98%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-0.5	0.00054 mg/L	0.000320	0.00054 mg/L	0.000320	58.88%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-8.9	-0.00002 mg/L	0.000175	-0.00002 mg/L	0.000175	897.21%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-5.9	-0.00642 mg/L	0.002957	-0.00642 mg/L	0.002957	46.05%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	130.6	0.00119 mg/L	0.000411	0.00119 mg/L	0.000411	34.51%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	6.1	0.00049 mg/L	0.000096	0.00049 mg/L	0.000096	19.63%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	128.0	0.0483 mg/L	0.02736	0.0483 mg/L	0.02736	56.64%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	380.5	0.0319 mg/L	0.01873	0.0319 mg/L	0.01873	58.74%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	-51.0	-0.00007 mg/L	0.000077	-0.00007 mg/L	0.000077	110.31%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	174.0	0.00139 mg/L	0.002925	0.00139 mg/L	0.002925	210.09%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

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Sequence No.: 13 **Autosampler Location: 57**
Sample ID: L1104030201 **Date Collected: 4/15/2011 2:37:29 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104030201

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104030201

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4545030.0						29709.85	0.65%
YRADIAL	290740.5						9928.43	3.41%
Ga 417.206	1277226.9						14096.04	1.10%
GaRADIAL	64434.2						1105.16	1.72%
Ag 328.068†	151.1	0.00038	mg/L	0.000182	0.00038	mg/L	0.000182	48.37%
Al 396.153†	289.0	0.0482	mg/L	0.00282	0.0482	mg/L	0.00282	5.85%
As 188.979†	16.1	0.0242	mg/L	0.00514	0.0242	mg/L	0.00514	21.27%
Ba 233.527†	13895.2	0.249	mg/L	0.0021	0.249	mg/L	0.0021	0.85%
Be 234.861†	1145.2	0.00026	mg/L	0.000046	0.00026	mg/L	0.000046	18.13%
B 249.677†	19911.9	0.415	mg/L	0.0026	0.415	mg/L	0.0026	0.64%
Ca 227.546†	23479.5	251	mg/L	1.7	251	mg/L	1.7	0.66%
Cd 228.802†	-2.2	-0.00024	mg/L	0.000136	-0.00024	mg/L	0.000136	57.50%
Co 228.616†	28.7	0.00161	mg/L	0.000495	0.00161	mg/L	0.000495	30.80%
Cr 267.716†	455.4	0.00316	mg/L	0.000053	0.00316	mg/L	0.000053	1.69%
Cu 327.393†	5793.5	0.0389	mg/L	0.00041	0.0389	mg/L	0.00041	1.06%
Fe 239.562†	2908.3	9.80	mg/L	0.198	9.80	mg/L	0.198	2.02%
Mg 279.077†	49978.5	68.8	mg/L	0.44	68.8	mg/L	0.44	0.63%
Mn 257.610†	564297.0	1.19	mg/L	0.006	1.19	mg/L	0.006	0.50%
Mo 202.031†	-18.0	-0.00018	mg/L	0.000188	-0.00018	mg/L	0.000188	101.71%
Ni 231.604†	230.4	0.00701	mg/L	0.000303	0.00701	mg/L	0.000303	4.33%
Pb 220.353†	-16.3	0.00945	mg/L	0.000677	0.00945	mg/L	0.000677	7.16%
Sb 206.836†	24.1	0.0139	mg/L	0.00208	0.0139	mg/L	0.00208	14.99%
Se 196.026†	-43.8	0.0276	mg/L	0.00252	0.0276	mg/L	0.00252	9.13%
Si 251.611†	229998.8	6.72	mg/L	0.064	6.72	mg/L	0.064	0.96%
Sn 189.927†	-12.7	-0.00169	mg/L	0.001566	-0.00169	mg/L	0.001566	92.83%
Ti 334.940†	-1793.5	0.00010	mg/L	0.000126	0.00010	mg/L	0.000126	129.56%
Tl 190.801†	140.3	0.0670	mg/L	0.00132	0.0670	mg/L	0.00132	1.97%
V 290.880†	-775.2	-0.00393	mg/L	0.000603	-0.00393	mg/L	0.000603	15.35%
Zn 206.200†	1336.0	0.0427	mg/L	0.00024	0.0427	mg/L	0.00024	0.57%
K 766.490†	103721.4	38.2	mg/L	0.38	38.2	mg/L	0.38	0.98%
Na 589.592†	1300410.2	102	mg/L	2.1	102	mg/L	2.1	2.05%
Sr 407.771†	2672187.7	1.77	mg/L	0.064	1.77	mg/L	0.064	3.60%
Li 670.784†	495.9	0.00537	mg/L	0.001781	0.00537	mg/L	0.001781	33.14%

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Sequence No.: 14 **Autosampler Location: 58**
Sample ID: L1104040304 0.5 **Date Collected: 4/15/2011 2:44:13 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104040304 0.5

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104040304 0.5

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4397332.0						36201.89	0.82%
YRADIAL	285850.1						2363.77	0.83%
Ga 417.206	1206802.1						15823.66	1.31%
GaRADIAL	63680.9						1334.81	2.10%
Ag 328.068†	-623.8	-0.00234	mg/L	0.000448	-0.00234	mg/L	0.000448	19.10%
Al 396.153†	485.9	0.0851	mg/L	0.01785	0.0851	mg/L	0.01785	20.97%
As 188.979†	6.3	0.00977	mg/L	0.001632	0.00977	mg/L	0.001632	16.70%
Ba 233.527†	469.7	0.00852	mg/L	0.000031	0.00852	mg/L	0.000031	0.37%
Be 234.861†	62.6	0.00015	mg/L	0.000012	0.00015	mg/L	0.000012	7.97%
B 249.677†	8263.7	0.154	mg/L	0.0025	0.154	mg/L	0.0025	1.63%
Ca 227.546†	1804.0	19.3	mg/L	0.29	19.3	mg/L	0.29	1.51%
Cd 228.802†	1.4	0.00006	mg/L	0.000170	0.00006	mg/L	0.000170	305.84%
Co 228.616†	154.6	0.00898	mg/L	0.000522	0.00898	mg/L	0.000522	5.81%
Cr 267.716†	168.1	0.00126	mg/L	0.000115	0.00126	mg/L	0.000115	9.16%
Cu 327.393†	-413.1	-0.00460	mg/L	0.000460	-0.00460	mg/L	0.000460	10.01%
Fe 239.562†	6.7	0.0168	mg/L	0.00850	0.0168	mg/L	0.00850	50.74%
Mg 279.077†	2845.9	3.92	mg/L	0.051	3.92	mg/L	0.051	1.31%
Mn 257.610†	347.4	0.00849	mg/L	0.000048	0.00849	mg/L	0.000048	0.57%
Mo 202.031†	358.3	0.0293	mg/L	0.00028	0.0293	mg/L	0.00028	0.96%
Ni 231.604†	751.1	0.0234	mg/L	0.00048	0.0234	mg/L	0.00048	2.04%
Pb 220.353†	5.3	0.00316	mg/L	0.000798	0.00316	mg/L	0.000798	25.29%
Sb 206.836†	9.5	0.00353	mg/L	0.001494	0.00353	mg/L	0.001494	42.30%
Se 196.026†	-20.9	-0.0151	mg/L	0.00311	-0.0151	mg/L	0.00311	20.64%
Si 251.611†	41423.2	1.21	mg/L	0.012	1.21	mg/L	0.012	0.96%
Sn 189.927†	9.5	0.00236	mg/L	0.000780	0.00236	mg/L	0.000780	33.02%
Ti 334.940†	-418.6	-0.00038	mg/L	0.000121	-0.00038	mg/L	0.000121	32.15%
Tl 190.801†	39.8	0.0213	mg/L	0.00204	0.0213	mg/L	0.00204	9.62%
V 290.880†	545.2	0.00385	mg/L	0.000466	0.00385	mg/L	0.000466	12.09%
Zn 206.200†	113.6	0.00393	mg/L	0.000073	0.00393	mg/L	0.000073	1.85%
K 766.490†	13547.8	4.93	mg/L	0.129	4.93	mg/L	0.129	2.63%
Na 589.592†	Saturated2							
Sr 407.771†	156174.7	0.104	mg/L	0.0006	0.104	mg/L	0.0006	0.56%
Li 670.784†	765065.3	9.46	mg/L	0.022	9.46	mg/L	0.022	0.23%

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Sequence No.: 15 **Autosampler Location: 59**
Sample ID: PBW 65 WG361751-02 **Date Collected: 4/15/2011 2:50:55 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 65 WG361751-02

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: PBW 65 WG361751-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5023754.2						19606.03	0.39%
YRADIAL	311452.8						2461.66	0.79%
Ga 417.206	1360303.0						8268.36	0.61%
GaRADIAL	67822.1						1431.68	2.11%
Ag 328.068†	-660.4	-0.00250	mg/L	0.000327	-0.00250	mg/L	0.000327	13.07%
Al 396.153†	68.2	0.00474	mg/L	0.019654	0.00474	mg/L	0.019654	414.87%
As 188.979†	-2.0	-0.00460	mg/L	0.001063	-0.00460	mg/L	0.001063	23.11%
Ba 233.527†	17.2	0.00039	mg/L	0.000150	0.00039	mg/L	0.000150	38.57%

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Be 234.861†	91.6	0.00017	mg/L	0.000031	0.00017	mg/L	0.000031 18.50%
B 249.677†	247.1	0.00560	mg/L	0.000042	0.00560	mg/L	0.000042 0.74%
Ca 227.546†	1.3	0.0330	mg/L	0.05299	0.0330	mg/L	0.05299 160.83%
Cd 228.802†	-2.7	-0.00018	mg/L	0.000144	-0.00018	mg/L	0.000144 80.01%
Co 228.616†	-8.1	-0.00012	mg/L	0.000439	-0.00012	mg/L	0.000439 380.49%
Cr 267.716†	39.8	0.00019	mg/L	0.000103	0.00019	mg/L	0.000103 55.24%
Cu 327.393†	-5.2	-0.00045	mg/L	0.000500	-0.00045	mg/L	0.000500 110.23%
Fe 239.562†	0.6	-0.00387	mg/L	0.002296	-0.00387	mg/L	0.002296 59.40%
Mg 279.077†	0.3	-0.00177	mg/L	0.008289	-0.00177	mg/L	0.008289 467.40%
Mn 257.610†	43.8	0.00001	mg/L	0.000007	0.00001	mg/L	0.000007 116.45%
Mo 202.031†	-6.3	0.00003	mg/L	0.000148	0.00003	mg/L	0.000148 557.66%
Ni 231.604†	10.1	0.00015	mg/L	0.000282	0.00015	mg/L	0.000282 191.99%
Pb 220.353†	-1.2	0.00084	mg/L	0.000444	0.00084	mg/L	0.000444 52.71%
Sb 206.836†	4.2	-0.00053	mg/L	0.002131	-0.00053	mg/L	0.002131 404.88%
Se 196.026†	0.9	-0.00247	mg/L	0.001155	-0.00247	mg/L	0.001155 46.84%
Si 251.611†	296.7	0.00947	mg/L	0.000055	0.00947	mg/L	0.000055 0.58%
Sn 189.927†	-5.3	-0.00033	mg/L	0.001135	-0.00033	mg/L	0.001135 341.95%
Ti 334.940†	-44.6	-0.00007	mg/L	0.000152	-0.00007	mg/L	0.000152 224.58%
Tl 190.801†	0.7	-0.00218	mg/L	0.002375	-0.00218	mg/L	0.002375 109.05%
V 290.880†	115.2	0.00109	mg/L	0.000187	0.00109	mg/L	0.000187 17.12%
Zn 206.200†	47.9	0.00183	mg/L	0.000014	0.00183	mg/L	0.000014 0.74%
K 766.490†	477.3	0.175	mg/L	0.0123	0.175	mg/L	0.0123 7.03%
Na 589.592†	4196.9	0.307	mg/L	0.0236	0.307	mg/L	0.0236 7.69%
Sr 407.771†	-93.6	-0.00010	mg/L	0.000060	-0.00010	mg/L	0.000060 61.63%
Li 670.784†	405.8	0.00426	mg/L	0.000898	0.00426	mg/L	0.000898 21.07%

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Sequence No.: 16 **Autosampler Location: 60**
Sample ID: LCSW 65 WG361751-03 **Date Collected: 4/15/2011 2:57:34 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 65 WG361751-03

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: LCSW 65 WG361751-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4820461.8						45197.53	0.94%
YRADIAL	301857.0						3400.80	1.13%
Ga 417.206	1312502.4						19390.50	1.48%
GaRADIAL	65400.0						509.35	0.78%
Ag 328.068†	39492.4	0.190	mg/L	0.0038	0.190	mg/L	0.0038	2.01%
Al 396.153†	25709.5	4.96	mg/L	0.115	4.96	mg/L	0.115	2.32%
As 188.979†	120.2	0.212	mg/L	0.0068	0.212	mg/L	0.0068	3.21%
Ba 233.527†	27039.2	0.486	mg/L	0.0094	0.486	mg/L	0.0094	1.93%
Be 234.861†	12527.8	0.0237	mg/L	0.00060	0.0237	mg/L	0.00060	2.55%
B 249.677†	51888.6	0.963	mg/L	0.0232	0.963	mg/L	0.0232	2.40%
Ca 227.546†	455.8	5.05	mg/L	0.128	5.05	mg/L	0.128	2.54%
Cd 228.802†	376.9	0.0240	mg/L	0.00037	0.0240	mg/L	0.00037	1.54%
Co 228.616†	1761.7	0.0976	mg/L	0.00083	0.0976	mg/L	0.00083	0.85%
Cr 267.716†	28649.7	0.240	mg/L	0.0046	0.240	mg/L	0.0046	1.91%
Cu 327.393†	35459.9	0.234	mg/L	0.0055	0.234	mg/L	0.0055	2.34%
Fe 239.562†	582.9	1.96	mg/L	0.016	1.96	mg/L	0.016	0.81%
Mg 279.077†	3623.3	4.99	mg/L	0.027	4.99	mg/L	0.027	0.54%
Mn 257.610†	118191.9	0.250	mg/L	0.0047	0.250	mg/L	0.0047	1.86%
Mo 202.031†	6113.7	0.492	mg/L	0.0040	0.492	mg/L	0.0040	0.81%
Ni 231.604†	7884.1	0.247	mg/L	0.0041	0.247	mg/L	0.0041	1.65%
Pb 220.353†	1283.8	0.246	mg/L	0.0020	0.246	mg/L	0.0020	0.82%
Sb 206.836†	806.4	0.585	mg/L	0.0103	0.585	mg/L	0.0103	1.76%
Se 196.026†	243.6	0.193	mg/L	0.0029	0.193	mg/L	0.0029	1.51%
Si 251.611†	83664.4	2.44	mg/L	0.052	2.44	mg/L	0.052	2.14%
Sn 189.927†	2688.2	0.491	mg/L	0.0045	0.491	mg/L	0.0045	0.92%
Ti 334.940†	361115.6	0.484	mg/L	0.0013	0.484	mg/L	0.0013	0.28%
Tl 190.801†	383.0	0.250	mg/L	0.0018	0.250	mg/L	0.0018	0.71%
V 290.880†	74827.8	0.484	mg/L	0.0075	0.484	mg/L	0.0075	1.56%
Zn 206.200†	14938.4	0.478	mg/L	0.0091	0.478	mg/L	0.0091	1.89%
K 766.490†	67051.2	24.6	mg/L	0.43	24.6	mg/L	0.43	1.76%
Na 589.592†	334075.1	24.6	mg/L	0.25	24.6	mg/L	0.25	1.01%

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Sr 407.771†	751189.4	0.498 mg/L	0.0041	0.498 mg/L	0.0041	0.81%
Li 670.784†	42021.9	0.519 mg/L	0.0103	0.519 mg/L	0.0103	1.98%

Sequence No.: 17 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/15/2011 3:04:17 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4768443.4						53114.78	1.11%
YRADIAL	297577.9						9050.69	3.04%
Ga 417.206	1285918.3						16160.06	1.26%
GaRADIAL	65540.9						2435.46	3.72%
Ag 328.068†	80343.8	0.386	mg/L	0.0036	0.386	mg/L	0.0036	0.93%
QC value within limits for Ag 328.068 Recovery = 96.53%								
Al 396.153†	51308.6	9.90	mg/L	0.159	9.90	mg/L	0.159	1.60%
QC value within limits for Al 396.153 Recovery = 99.05%								
As 188.979†	239.9	0.425	mg/L	0.0089	0.425	mg/L	0.0089	2.10%
QC value within limits for As 188.979 Recovery = 106.26%								
Ba 233.527†	54518.0	0.980	mg/L	0.0081	0.980	mg/L	0.0081	0.83%
QC value within limits for Ba 233.527 Recovery = 98.00%								
Be 234.861†	25444.1	0.0481	mg/L	0.00059	0.0481	mg/L	0.00059	1.22%
QC value within limits for Be 234.861 Recovery = 96.11%								
B 249.677†	26375.5	0.495	mg/L	0.0049	0.495	mg/L	0.0049	0.98%
QC value within limits for B 249.677 Recovery = 99.02%								
Ca 227.546†	921.0	10.2	mg/L	0.13	10.2	mg/L	0.13	1.25%
QC value within limits for Ca 227.546 Recovery = 101.86%								
Cd 228.802†	764.4	0.0486	mg/L	0.00033	0.0486	mg/L	0.00033	0.68%
QC value within limits for Cd 228.802 Recovery = 97.23%								
Co 228.616†	3525.4	0.195	mg/L	0.0017	0.195	mg/L	0.0017	0.89%
QC value within limits for Co 228.616 Recovery = 97.48%								
Cr 267.716†	57810.8	0.485	mg/L	0.0032	0.485	mg/L	0.0032	0.67%
QC value within limits for Cr 267.716 Recovery = 96.94%								
Cu 327.393†	72359.5	0.478	mg/L	0.0038	0.478	mg/L	0.0038	0.80%
QC value within limits for Cu 327.393 Recovery = 95.60%								
Fe 239.562†	1183.0	3.98	mg/L	0.130	3.98	mg/L	0.130	3.26%
QC value within limits for Fe 239.562 Recovery = 99.60%								
Mg 279.077†	7217.3	9.94	mg/L	0.317	9.94	mg/L	0.317	3.19%
QC value within limits for Mg 279.077 Recovery = 99.41%								
Mn 257.610†	234827.8	0.497	mg/L	0.0044	0.497	mg/L	0.0044	0.89%
QC value within limits for Mn 257.610 Recovery = 99.36%								
Mo 202.031†	12290.2	0.988	mg/L	0.0119	0.988	mg/L	0.0119	1.21%
QC value within limits for Mo 202.031 Recovery = 98.76%								
Ni 231.604†	15657.6	0.491	mg/L	0.0026	0.491	mg/L	0.0026	0.52%
QC value within limits for Ni 231.604 Recovery = 98.22%								
Pb 220.353†	2581.6	0.494	mg/L	0.0049	0.494	mg/L	0.0049	0.98%
QC value within limits for Pb 220.353 Recovery = 98.87%								
Sb 206.836†	1630.9	1.19	mg/L	0.019	1.19	mg/L	0.019	1.62%
QC value within limits for Sb 206.836 Recovery = 98.88%								
Se 196.026†	501.9	0.400	mg/L	0.0027	0.400	mg/L	0.0027	0.66%
QC value within limits for Se 196.026 Recovery = 100.06%								
Si 251.611†	164145.0	4.78	mg/L	0.045	4.78	mg/L	0.045	0.94%
QC value within limits for Si 251.611 Recovery = 95.68%								
Sn 189.927†	5402.9	0.986	mg/L	0.0112	0.986	mg/L	0.0112	1.14%
QC value within limits for Sn 189.927 Recovery = 98.60%								
Ti 334.940†	730585.9	0.978	mg/L	0.0061	0.978	mg/L	0.0061	0.62%
QC value within limits for Ti 334.940 Recovery = 97.82%								
Tl 190.801†	773.0	0.507	mg/L	0.0073	0.507	mg/L	0.0073	1.44%
QC value within limits for Tl 190.801 Recovery = 101.44%								
V 290.880†	151036.4	0.976	mg/L	0.0082	0.976	mg/L	0.0082	0.84%
QC value within limits for V 290.880 Recovery = 97.64%								
Zn 206.200†	30436.7	0.974	mg/L	0.0076	0.974	mg/L	0.0076	0.78%
QC value within limits for Zn 206.200 Recovery = 97.41%								

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K 766.490† 134141.4 49.7 mg/L 0.70 49.7 mg/L 0.70 1.42%
QC value within limits for K 766.490 Recovery = 99.40%
Na 589.592† 661476.9 49.6 mg/L 1.81 49.6 mg/L 1.81 3.65%
QC value within limits for Na 589.592 Recovery = 99.20%
Sr 407.771† 1529122.2 1.01 mg/L 0.031 1.01 mg/L 0.031 3.05%
QC value within limits for Sr 407.771 Recovery = 101.29%
Li 670.784† 82385.6 1.02 mg/L 0.019 1.02 mg/L 0.019 1.84%
QC value within limits for Li 670.784 Recovery = 101.84%
All analyte(s) passed QC.

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Sequence No.: 18 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/15/2011 3:10:58 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	5005568.3						102994.98	2.06%
YRADIAL	307738.8						1039.77	0.34%
Ga 417.206	1323066.2						27888.68	2.11%
GaRADIAL	66534.0						1275.55	1.92%
Ag 328.068†	-658.0	-0.00249	mg/L	0.001311	-0.00249	mg/L	0.001311	52.70%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	151.7	0.0209	mg/L	0.01484	0.0209	mg/L	0.01484	71.04%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.7	0.00020	mg/L	0.001721	0.00020	mg/L	0.001721	843.90%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.4	0.00014	mg/L	0.000060	0.00014	mg/L	0.000060	43.28%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	84.9	0.00015	mg/L	0.000019	0.00015	mg/L	0.000019	12.41%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	400.8	0.00841	mg/L	0.000567	0.00841	mg/L	0.000567	6.74%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-1.9	-0.00119	mg/L	0.036519	-0.00119	mg/L	0.036519	>999.9%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-2.3	-0.00017	mg/L	0.000076	-0.00017	mg/L	0.000076	45.31%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-6.2	-0.00001	mg/L	0.000520	-0.00001	mg/L	0.000520	>999.9%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	41.4	0.00020	mg/L	0.000114	0.00020	mg/L	0.000114	57.41%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-139.6	-0.00134	mg/L	0.000182	-0.00134	mg/L	0.000182	13.59%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.2	-0.00531	mg/L	0.004189	-0.00531	mg/L	0.004189	78.88%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-3.3	-0.00675	mg/L	0.005786	-0.00675	mg/L	0.005786	85.75%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	30.8	-0.00003	mg/L	0.000017	-0.00003	mg/L	0.000017	64.20%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-7.8	-0.00009	mg/L	0.000102	-0.00009	mg/L	0.000102	108.06%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	8.2	0.00009	mg/L	0.000129	0.00009	mg/L	0.000129	143.31%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-1.5	0.00079	mg/L	0.000935	0.00079	mg/L	0.000935	117.83%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	3.1	-0.00138	mg/L	0.000633	-0.00138	mg/L	0.000633	45.77%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-9.2	-0.0106	mg/L	0.00436	-0.0106	mg/L	0.00436	41.35%
QC value less than the lower limit for Se 196.026 Recovery = Not calculated								
Si 251.611†	24.1	0.00150	mg/L	0.000991	0.00150	mg/L	0.000991	65.92%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	4.2	0.00139	mg/L	0.000931	0.00139	mg/L	0.000931	66.98%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-112.0	-0.00016	mg/L	0.000087	-0.00016	mg/L	0.000087	54.79%

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QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† -0.7 -0.00311 mg/L 0.002037 -0.00311 mg/L 0.002037 65.57%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† -48.6 0.00003 mg/L 0.001212 0.00003 mg/L 0.001212 >999.9%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† 4.3 0.00043 mg/L 0.000052 0.00043 mg/L 0.000052 11.96%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 260.7 0.0964 mg/L 0.00477 0.0964 mg/L 0.00477 4.95%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 797.0 0.0619 mg/L 0.00240 0.0619 mg/L 0.00240 3.87%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -35.6 -0.00006 mg/L 0.000059 -0.00006 mg/L 0.000059 101.47%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 227.2 0.00205 mg/L 0.001611 0.00205 mg/L 0.001611 78.54%
QC value within limits for Li 670.784 Recovery = Not calculated
QC Failed. Continue with analysis.

Sequence No.: 19 **Autosampler Location: 61**
Sample ID: L1104042901 WG361751-01 **Date Collected: 4/15/2011 3:17:34 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104042901 WG361751-01

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104042901 WG361751-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4684788.0						67960.02	1.45%
YRADIAL	306699.5						7041.53	2.30%
Ga 417.206	1322553.2						13839.15	1.05%
GaRADIAL	67037.5						1748.45	2.61%
Ag 328.068†	-380.2	-0.00127	mg/L	0.000558	-0.00127	mg/L	0.000558	43.78%
Al 396.153†	417.8	0.0724	mg/L	0.00694	0.0724	mg/L	0.00694	9.58%
As 188.979†	11.4	0.0182	mg/L	0.00356	0.0182	mg/L	0.00356	19.53%
Ba 233.527†	1123.2	0.0202	mg/L	0.00030	0.0202	mg/L	0.00030	1.47%
Be 234.861†	215.7	0.00020	mg/L	0.000087	0.00020	mg/L	0.000087	43.18%
B 249.677†	1357.2	0.0310	mg/L	0.00162	0.0310	mg/L	0.00162	5.24%
Ca 227.546†	6166.8	65.9	mg/L	0.60	65.9	mg/L	0.60	0.91%
Cd 228.802†	-3.3	-0.00029	mg/L	0.000077	-0.00029	mg/L	0.000077	26.55%
Co 228.616†	-2.8	0.00015	mg/L	0.000057	0.00015	mg/L	0.000057	38.87%
Cr 267.716†	143.2	0.00098	mg/L	0.000207	0.00098	mg/L	0.000207	21.24%
Cu 327.393†	-298.7	-0.00226	mg/L	0.000934	-0.00226	mg/L	0.000934	41.38%
Fe 239.562†	315.2	1.06	mg/L	0.022	1.06	mg/L	0.022	2.11%
Mg 279.077†	8440.5	11.6	mg/L	0.12	11.6	mg/L	0.12	1.06%
Mn 257.610†	84568.6	0.179	mg/L	0.0042	0.179	mg/L	0.0042	2.35%
Mo 202.031†	-4.7	0.00024	mg/L	0.000251	0.00024	mg/L	0.000251	103.99%
Ni 231.604†	15.4	0.00028	mg/L	0.000316	0.00028	mg/L	0.000316	113.88%
Pb 220.353†	-15.3	0.00129	mg/L	0.000176	0.00129	mg/L	0.000176	13.66%
Sb 206.836†	17.7	0.00925	mg/L	0.002257	0.00925	mg/L	0.002257	24.39%
Se 196.026†	-21.5	-0.00362	mg/L	0.002861	-0.00362	mg/L	0.002861	79.13%
Si 251.611†	122478.5	3.58	mg/L	0.070	3.58	mg/L	0.070	1.94%
Sn 189.927†	-11.0	-0.00138	mg/L	0.000396	-0.00138	mg/L	0.000396	28.76%
Ti 334.940†	1340.9	0.00245	mg/L	0.000234	0.00245	mg/L	0.000234	9.57%
Tl 190.801†	91.6	0.0508	mg/L	0.00481	0.0508	mg/L	0.00481	9.46%
V 290.880†	84.5	0.00097	mg/L	0.000863	0.00097	mg/L	0.000863	89.09%
Zn 206.200†	1080.6	0.0348	mg/L	0.00051	0.0348	mg/L	0.00051	1.46%
K 766.490†	5768.0	2.01	mg/L	0.024	2.01	mg/L	0.024	1.20%
Na 589.592†	1047643.2	80.5	mg/L	1.03	80.5	mg/L	1.03	1.28%
Sr 407.771†	309802.6	0.205	mg/L	0.0012	0.205	mg/L	0.0012	0.56%
Li 670.784†	413.0	0.00435	mg/L	0.001944	0.00435	mg/L	0.001944	44.69%

Sequence No.: 20 **Autosampler Location: 62**
Sample ID: L1104042901S WG361751-04 **Date Collected: 4/15/2011 3:24:17 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 18, 2011

Nebulizer Parameters: L1104042901S WG361751-04

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104042901S WG361751-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4708044.6						19136.77	0.41%
YRADIAL	300265.9						5488.57	1.83%
Ga 417.206	1318863.4						10548.45	0.80%
GaRADIAL	66549.5						943.91	1.42%
Ag 328.068†	38887.2	0.187	mg/L	0.0033	0.187	mg/L	0.0033	1.76%
Al 396.153†	25227.5	4.87	mg/L	0.063	4.87	mg/L	0.063	1.29%
As 188.979†	127.8	0.225	mg/L	0.0059	0.225	mg/L	0.0059	2.61%
Ba 233.527†	27520.5	0.495	mg/L	0.0114	0.495	mg/L	0.0114	2.31%
Be 234.861†	12591.1	0.0236	mg/L	0.00057	0.0236	mg/L	0.00057	2.40%
B 249.677†	52818.1	0.985	mg/L	0.0235	0.985	mg/L	0.0235	2.39%
Ca 227.546†	6402.2	68.6	mg/L	0.29	68.6	mg/L	0.29	0.42%
Cd 228.802†	365.7	0.0232	mg/L	0.00052	0.0232	mg/L	0.00052	2.23%
Co 228.616†	1729.1	0.0957	mg/L	0.00041	0.0957	mg/L	0.00041	0.43%
Cr 267.716†	28658.4	0.240	mg/L	0.0041	0.240	mg/L	0.0041	1.70%
Cu 327.393†	34739.9	0.229	mg/L	0.0051	0.229	mg/L	0.0051	2.24%
Fe 239.562†	887.0	2.99	mg/L	0.039	2.99	mg/L	0.039	1.29%
Mg 279.077†	11867.8	16.3	mg/L	0.22	16.3	mg/L	0.22	1.33%
Mn 257.610†	198171.3	0.419	mg/L	0.0082	0.419	mg/L	0.0082	1.96%
Mo 202.031†	6070.0	0.488	mg/L	0.0013	0.488	mg/L	0.0013	0.27%
Ni 231.604†	7690.9	0.241	mg/L	0.0011	0.241	mg/L	0.0011	0.47%
Pb 220.353†	1237.4	0.241	mg/L	0.0007	0.241	mg/L	0.0007	0.27%
Sb 206.836†	809.0	0.587	mg/L	0.0051	0.587	mg/L	0.0051	0.87%
Se 196.026†	215.6	0.186	mg/L	0.0012	0.186	mg/L	0.0012	0.62%
Si 251.611†	203851.0	5.95	mg/L	0.150	5.95	mg/L	0.150	2.52%
Sn 189.927†	2657.0	0.485	mg/L	0.0030	0.485	mg/L	0.0030	0.62%
Ti 334.940†	371391.4	0.498	mg/L	0.0081	0.498	mg/L	0.0081	1.64%
Tl 190.801†	450.4	0.288	mg/L	0.0053	0.288	mg/L	0.0053	1.85%
V 290.880†	75460.0	0.488	mg/L	0.0104	0.488	mg/L	0.0104	2.13%
Zn 206.200†	15586.3	0.499	mg/L	0.0095	0.499	mg/L	0.0095	1.91%
K 766.490†	70945.1	25.9	mg/L	0.38	25.9	mg/L	0.38	1.47%
Na 589.592†	1320857.7	103	mg/L	3.8	103	mg/L	3.8	3.64%
Sr 407.771†	1036057.0	0.686	mg/L	0.0176	0.686	mg/L	0.0176	2.57%
Li 670.784†	40188.5	0.496	mg/L	0.0046	0.496	mg/L	0.0046	0.93%

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Sequence No.: 21 **Autosampler Location: 63**
Sample ID: L1104042901SD WG361751-05 **Date Collected: 4/15/2011 3:31:00 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104042901SD WG361751-05

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104042901SD WG361751-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4818125.8						14438.05	0.30%
YRADIAL	307718.8						8574.42	2.79%
Ga 417.206	1341349.4						16497.19	1.23%
GaRADIAL	68342.6						795.19	1.16%
Ag 328.068†	38153.0	0.184	mg/L	0.0020	0.184	mg/L	0.0020	1.09%
Al 396.153†	25187.3	4.86	mg/L	0.029	4.86	mg/L	0.029	0.61%
As 188.979†	123.9	0.218	mg/L	0.0034	0.218	mg/L	0.0034	1.54%
Ba 233.527†	26772.3	0.481	mg/L	0.0053	0.481	mg/L	0.0053	1.10%
Be 234.861†	12213.7	0.0229	mg/L	0.00036	0.0229	mg/L	0.00036	1.58%
B 249.677†	52004.0	0.970	mg/L	0.0089	0.970	mg/L	0.0089	0.92%
Ca 227.546†	6336.5	67.9	mg/L	0.70	67.9	mg/L	0.70	1.03%
Cd 228.802†	356.7	0.0226	mg/L	0.00042	0.0226	mg/L	0.00042	1.85%
Co 228.616†	1685.9	0.0933	mg/L	0.00016	0.0933	mg/L	0.00016	0.17%

Approved: April 18, 2011

Cr 267.716†	27806.7	0.233	mg/L	0.0009	0.233	mg/L	0.0009	0.39%
Cu 327.393†	34111.6	0.225	mg/L	0.0027	0.225	mg/L	0.0027	1.22%
Fe 239.562†	869.2	2.93	mg/L	0.054	2.93	mg/L	0.054	1.85%
Mg 279.077†	11603.8	16.0	mg/L	0.30	16.0	mg/L	0.30	1.91%
Mn 257.610†	193489.1	0.409	mg/L	0.0036	0.409	mg/L	0.0036	0.88%
Mo 202.031†	5908.0	0.475	mg/L	0.0012	0.475	mg/L	0.0012	0.26%
Ni 231.604†	7494.3	0.235	mg/L	0.0004	0.235	mg/L	0.0004	0.17%
Pb 220.353†	1209.0	0.235	mg/L	0.0004	0.235	mg/L	0.0004	0.17%
Sb 206.836†	793.5	0.575	mg/L	0.0083	0.575	mg/L	0.0083	1.45%
Se 196.026†	215.4	0.186	mg/L	0.0049	0.186	mg/L	0.0049	2.66%
Si 251.611†	200992.7	5.87	mg/L	0.069	5.87	mg/L	0.069	1.17%
Sn 189.927†	2640.1	0.482	mg/L	0.0015	0.482	mg/L	0.0015	0.31%
Ti 334.940†	361157.6	0.484	mg/L	0.0057	0.484	mg/L	0.0057	1.18%
Tl 190.801†	440.5	0.282	mg/L	0.0068	0.282	mg/L	0.0068	2.43%
V 290.880†	73603.2	0.476	mg/L	0.0028	0.476	mg/L	0.0028	0.59%
Zn 206.200†	15181.6	0.486	mg/L	0.0021	0.486	mg/L	0.0021	0.43%
K 766.490†	70974.9	25.9	mg/L	0.17	25.9	mg/L	0.17	0.66%
Na 589.592†	1279351.5	99.9	mg/L	1.44	99.9	mg/L	1.44	1.44%
Sr 407.771†	1004104.0	0.665	mg/L	0.0199	0.665	mg/L	0.0199	2.99%
Li 670.784†	40450.6	0.500	mg/L	0.0009	0.500	mg/L	0.0009	0.17%

Sequence No.: 22 **Autosampler Location: 64**
Sample ID: L1104043302 **Date Collected: 4/15/2011 3:37:42 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104043302

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104043302

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4811171.4						35340.77	0.73%
YRADIAL	312222.4						2208.92	0.71%
Ga 417.206	1373887.6						27775.04	2.02%
GaRADIAL	68390.8						908.44	1.33%
Ag 328.068†	-103.5	-0.00051	mg/L	0.000807	-0.00051	mg/L	0.000807	158.43%
Al 396.153†	65560.3	12.7	mg/L	0.03	12.7	mg/L	0.03	0.23%
As 188.979†	13.1	0.0211	mg/L	0.00569	0.0211	mg/L	0.00569	26.95%
Ba 233.527†	7865.3	0.141	mg/L	0.0015	0.141	mg/L	0.0015	1.10%
Be 234.861†	1715.0	0.00048	mg/L	0.000179	0.00048	mg/L	0.000179	37.16%
B 249.677†	1038.1	0.0676	mg/L	0.00212	0.0676	mg/L	0.00212	3.13%
Ca 227.546†	6787.5	72.5	mg/L	1.03	72.5	mg/L	1.03	1.42%
Cd 228.802†	-1.5	-0.00017	mg/L	0.000071	-0.00017	mg/L	0.000071	40.58%
Co 228.616†	58.6	0.00288	mg/L	0.000107	0.00288	mg/L	0.000107	3.72%
Cr 267.716†	1950.3	0.0158	mg/L	0.00010	0.0158	mg/L	0.00010	0.66%
Cu 327.393†	1145.6	0.00882	mg/L	0.000193	0.00882	mg/L	0.000193	2.19%
Fe 239.562†	3917.6	13.2	mg/L	0.09	13.2	mg/L	0.09	0.65%
Mg 279.077†	24764.3	34.1	mg/L	0.15	34.1	mg/L	0.15	0.44%
Mn 257.610†	71871.7	0.156	mg/L	0.0032	0.156	mg/L	0.0032	2.02%
Mo 202.031†	4.7	0.00159	mg/L	0.000384	0.00159	mg/L	0.000384	24.18%
Ni 231.604†	354.2	0.0109	mg/L	0.00031	0.0109	mg/L	0.00031	2.83%
Pb 220.353†	16.7	0.00753	mg/L	0.000630	0.00753	mg/L	0.000630	8.37%
Sb 206.836†	17.5	0.00903	mg/L	0.002896	0.00903	mg/L	0.002896	32.09%
Se 196.026†	-38.6	-0.0121	mg/L	0.00680	-0.0121	mg/L	0.00680	56.22%
Si 251.611†	897055.8	26.2	mg/L	0.36	26.2	mg/L	0.36	1.37%
Sn 189.927†	-8.0	-0.00084	mg/L	0.000328	-0.00084	mg/L	0.000328	39.15%
Ti 334.940†	117064.8	0.157	mg/L	0.0028	0.157	mg/L	0.0028	1.80%
Tl 190.801†	98.1	0.0563	mg/L	0.00522	0.0563	mg/L	0.00522	9.28%
V 290.880†	2504.8	0.0175	mg/L	0.00188	0.0175	mg/L	0.00188	10.70%
Zn 206.200†	2189.9	0.0700	mg/L	0.00075	0.0700	mg/L	0.00075	1.08%
K 766.490†	10662.0	3.87	mg/L	0.025	3.87	mg/L	0.025	0.64%
Na 589.592†	35461.8	2.57	mg/L	0.012	2.57	mg/L	0.012	0.47%
Sr 407.771†	174764.8	0.113	mg/L	0.0006	0.113	mg/L	0.0006	0.51%
Li 670.784†	1219.1	0.0143	mg/L	0.00179	0.0143	mg/L	0.00179	12.47%

Sequence No.: 23 **Autosampler Location: 65**

Approved: April 18, 2011

Sample ID: L1104043301 **Date Collected: 4/15/2011 3:43:23 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104043301

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104043301

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4656088.4						19096.44	0.41%
YRADIAL	296311.3						3221.78	1.09%
Ga 417.206	1322064.8						15565.45	1.18%
GaRADIAL	66099.4						590.04	0.89%
Ag 328.068†	-102.6	0.00003	mg/L	0.000583	0.00003	mg/L	0.000583	>999.9%
Al 396.153†	1876.5	0.355	mg/L	0.0160	0.355	mg/L	0.0160	4.52%
As 188.979†	15.1	0.0233	mg/L	0.00542	0.0233	mg/L	0.00542	23.27%
Ba 233.527†	6489.7	0.116	mg/L	0.0006	0.116	mg/L	0.0006	0.54%
Be 234.861†	152.0	0.00026	mg/L	0.000017	0.00026	mg/L	0.000017	6.63%
B 249.677†	42622.7	0.790	mg/L	0.0070	0.790	mg/L	0.0070	0.89%
Ca 227.546†	12999.2	139	mg/L	1.7	139	mg/L	1.7	1.22%
Cd 228.802†	-1.8	-0.00021	mg/L	0.000130	-0.00021	mg/L	0.000130	62.67%
Co 228.616†	0.6	0.00032	mg/L	0.000362	0.00032	mg/L	0.000362	114.23%
Cr 267.716†	261.2	0.00179	mg/L	0.000023	0.00179	mg/L	0.000023	1.30%
Cu 327.393†	-436.3	-0.00324	mg/L	0.000370	-0.00324	mg/L	0.000370	11.40%
Fe 239.562†	125.2	0.414	mg/L	0.0115	0.414	mg/L	0.0115	2.78%
Mg 279.077†	45409.3	62.5	mg/L	0.18	62.5	mg/L	0.18	0.28%
Mn 257.610†	264451.3	0.555	mg/L	0.0020	0.555	mg/L	0.0020	0.35%
Mo 202.031†	-6.4	0.00015	mg/L	0.000717	0.00015	mg/L	0.000717	481.04%
Ni 231.604†	137.8	0.00411	mg/L	0.000055	0.00411	mg/L	0.000055	1.34%
Pb 220.353†	-8.9	0.00599	mg/L	0.000430	0.00599	mg/L	0.000430	7.18%
Sb 206.836†	25.3	0.0148	mg/L	0.00167	0.0148	mg/L	0.00167	11.33%
Se 196.026†	-33.4	0.00472	mg/L	0.001912	0.00472	mg/L	0.001912	40.49%
Si 251.611†	172816.6	5.05	mg/L	0.061	5.05	mg/L	0.061	1.21%
Sn 189.927†	-8.3	-0.00088	mg/L	0.001152	-0.00088	mg/L	0.001152	130.15%
Ti 334.940†	2552.0	0.00480	mg/L	0.000669	0.00480	mg/L	0.000669	13.94%
Tl 190.801†	123.9	0.0657	mg/L	0.00378	0.0657	mg/L	0.00378	5.76%
V 290.880†	-1016.4	-0.00620	mg/L	0.000617	-0.00620	mg/L	0.000617	9.95%
Zn 206.200†	546.4	0.0177	mg/L	0.00023	0.0177	mg/L	0.00023	1.28%
K 766.490†	1724.2	0.607	mg/L	0.0248	0.607	mg/L	0.0248	4.08%
Na 589.592†	271541.6	19.9	mg/L	0.14	19.9	mg/L	0.14	0.71%
Sr 407.771†	254595.6	0.169	mg/L	0.0020	0.169	mg/L	0.0020	1.17%
Li 670.784†	66.1	0.00006	mg/L	0.000536	0.00006	mg/L	0.000536	920.92%

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Sequence No.: 24 **Autosampler Location: 66**
Sample ID: L1104043301PS WG361879-01 **Date Collected: 4/15/2011 3:50:03 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104043301PS WG361879-01

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104043301PS WG361879-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4664173.3						33553.47	0.72%
YRADIAL	291134.4						1182.80	0.41%
Ga 417.206	1293230.1						12125.51	0.94%
GaRADIAL	64284.8						1167.26	1.82%
Ag 328.068†	40268.9	0.194	mg/L	0.0032	0.194	mg/L	0.0032	1.65%
Al 396.153†	27568.9	5.32	mg/L	0.018	5.32	mg/L	0.018	0.33%
As 188.979†	137.8	0.241	mg/L	0.0049	0.241	mg/L	0.0049	2.01%
Ba 233.527†	32141.6	0.578	mg/L	0.0082	0.578	mg/L	0.0082	1.43%
Be 234.861†	12704.4	0.0240	mg/L	0.00044	0.0240	mg/L	0.00044	1.84%

Approved: April 18, 2011

B 249.677†	91636.7	1.70	mg/L	0.016	1.70	mg/L	0.016	0.95%
Ca 227.546†	12395.6	133	mg/L	1.2	133	mg/L	1.2	0.94%
Cd 228.802†	371.9	0.0235	mg/L	0.00012	0.0235	mg/L	0.00012	0.49%
Co 228.616†	1700.4	0.0941	mg/L	0.00098	0.0941	mg/L	0.00098	1.04%
Cr 267.716†	28747.9	0.241	mg/L	0.0037	0.241	mg/L	0.0037	1.52%
Cu 327.393†	34733.2	0.229	mg/L	0.0023	0.229	mg/L	0.0023	1.00%
Fe 239.562†	711.5	2.39	mg/L	0.040	2.39	mg/L	0.040	1.67%
Mg 279.077†	44999.1	62.0	mg/L	0.74	62.0	mg/L	0.74	1.19%
Mn 257.610†	352570.5	0.742	mg/L	0.0083	0.742	mg/L	0.0083	1.12%
Mo 202.031†	6119.5	0.492	mg/L	0.0040	0.492	mg/L	0.0040	0.82%
Ni 231.604†	7632.0	0.239	mg/L	0.0019	0.239	mg/L	0.0019	0.79%
Pb 220.353†	1234.9	0.243	mg/L	0.0011	0.243	mg/L	0.0011	0.44%
Sb 206.836†	835.7	0.606	mg/L	0.0045	0.606	mg/L	0.0045	0.74%
Se 196.026†	219.1	0.205	mg/L	0.0019	0.205	mg/L	0.0019	0.91%
Si 251.611†	242942.6	7.09	mg/L	0.065	7.09	mg/L	0.065	0.92%
Sn 189.927†	-22.3	-0.00343	mg/L	0.000354	-0.00343	mg/L	0.000354	10.32%
Ti 334.940†	372507.7	0.500	mg/L	0.0086	0.500	mg/L	0.0086	1.73%
Tl 190.801†	479.7	0.302	mg/L	0.0031	0.302	mg/L	0.0031	1.03%
V 290.880†	74815.2	0.484	mg/L	0.0047	0.484	mg/L	0.0047	0.97%
Zn 206.200†	14803.0	0.474	mg/L	0.0073	0.474	mg/L	0.0073	1.54%
K 766.490†	70777.4	25.9	mg/L	0.05	25.9	mg/L	0.05	0.19%
Na 589.592†	593471.6	44.3	mg/L	1.94	44.3	mg/L	1.94	4.38%
Sr 407.771†	1009014.0	0.668	mg/L	0.0248	0.668	mg/L	0.0248	3.71%
Li 670.784†	42796.2	0.529	mg/L	0.0022	0.529	mg/L	0.0022	0.41%

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Sequence No.: 25 **Autosampler Location: 67**
Sample ID: L1104043301DL WG361879-02 **Date Collected: 4/15/2011 3:56:45 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104043301DL WG361879-02

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104043301DL WG361879-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4838780.7						12539.24	0.26%
YRADIAL	295542.1						2987.11	1.01%
Ga 417.206	1341207.3						7837.64	0.58%
GaRADIAL	65315.6						615.28	0.94%
Ag 328.068†	-649.3	-0.00248	mg/L	0.000217	-0.00248	mg/L	0.000217	8.78%
Al 396.153†	338.3	0.0570	mg/L	0.01252	0.0570	mg/L	0.01252	21.97%
As 188.979†	6.4	0.00995	mg/L	0.001876	0.00995	mg/L	0.001876	18.87%
Ba 233.527†	1316.5	0.0237	mg/L	0.00005	0.0237	mg/L	0.00005	0.23%
Be 234.861†	121.9	0.00022	mg/L	0.000020	0.00022	mg/L	0.000020	8.94%
B 249.677†	9027.1	0.168	mg/L	0.0019	0.168	mg/L	0.0019	1.16%
Ca 227.546†	2512.7	26.9	mg/L	0.14	26.9	mg/L	0.14	0.53%
Cd 228.802†	-4.9	-0.00037	mg/L	0.000101	-0.00037	mg/L	0.000101	27.52%
Co 228.616†	-15.2	-0.00052	mg/L	0.000166	-0.00052	mg/L	0.000166	31.86%
Cr 267.716†	94.5	0.00059	mg/L	0.000065	0.00059	mg/L	0.000065	10.94%
Cu 327.393†	-171.8	-0.00154	mg/L	0.000309	-0.00154	mg/L	0.000309	20.09%
Fe 239.562†	25.8	0.0808	mg/L	0.00908	0.0808	mg/L	0.00908	11.25%
Mg 279.077†	9297.2	12.8	mg/L	0.06	12.8	mg/L	0.06	0.50%
Mn 257.610†	53296.0	0.112	mg/L	0.0009	0.112	mg/L	0.0009	0.84%
Mo 202.031†	-8.0	-0.00009	mg/L	0.000518	-0.00009	mg/L	0.000518	606.96%
Ni 231.604†	26.5	0.00064	mg/L	0.000128	0.00064	mg/L	0.000128	19.89%
Pb 220.353†	-8.0	0.00084	mg/L	0.000042	0.00084	mg/L	0.000042	5.03%
Sb 206.836†	8.8	0.00281	mg/L	0.002612	0.00281	mg/L	0.002612	93.02%
Se 196.026†	-17.2	-0.0102	mg/L	0.00741	-0.0102	mg/L	0.00741	72.55%
Si 251.611†	34369.2	1.01	mg/L	0.007	1.01	mg/L	0.007	0.67%
Sn 189.927†	-2.0	0.00027	mg/L	0.000119	0.00027	mg/L	0.000119	43.89%
Ti 334.940†	365.6	0.00075	mg/L	0.000300	0.00075	mg/L	0.000300	40.05%
Tl 190.801†	52.3	0.0288	mg/L	0.00185	0.0288	mg/L	0.00185	6.40%
V 290.880†	-315.5	-0.00169	mg/L	0.000523	-0.00169	mg/L	0.000523	30.94%
Zn 206.200†	228.3	0.00758	mg/L	0.000115	0.00758	mg/L	0.000115	1.51%
K 766.490†	531.1	0.191	mg/L	0.0525	0.191	mg/L	0.0525	27.57%
Na 589.592†	55356.3	4.01	mg/L	0.044	4.01	mg/L	0.044	1.10%
Sr 407.771†	50740.7	0.0336	mg/L	0.00013	0.0336	mg/L	0.00013	0.39%

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Li 670.784† 121.9 0.00075 mg/L 0.001029 0.00075 mg/L 0.001029 137.63%

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Sequence No.: 26 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/15/2011 4:03:23 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4789830.3						33004.40	0.69%
YRADIAL	295714.0						4240.40	1.43%
Ga 417.206	1290961.2						4432.66	0.34%
GaRADIAL	65036.0						1643.84	2.53%
Ag 328.068†	79761.4	0.383	mg/L	0.0049	0.383	mg/L	0.0049	1.27%
QC value within limits for Ag 328.068 Recovery = 95.83%								
Al 396.153†	51596.9	9.96	mg/L	0.035	9.96	mg/L	0.035	0.35%
QC value within limits for Al 396.153 Recovery = 99.61%								
As 188.979†	246.2	0.436	mg/L	0.0021	0.436	mg/L	0.0021	0.49%
QC value within limits for As 188.979 Recovery = 109.08%								
Ba 233.527†	54158.8	0.974	mg/L	0.0034	0.974	mg/L	0.0034	0.35%
QC value within limits for Ba 233.527 Recovery = 97.35%								
Be 234.861†	25179.0	0.0475	mg/L	0.00073	0.0475	mg/L	0.00073	1.54%
QC value within limits for Be 234.861 Recovery = 95.10%								
B 249.677†	26314.5	0.494	mg/L	0.0057	0.494	mg/L	0.0057	1.16%
QC value within limits for B 249.677 Recovery = 98.80%								
Ca 227.546†	926.1	10.2	mg/L	0.01	10.2	mg/L	0.01	0.10%
QC value within limits for Ca 227.546 Recovery = 102.40%								
Cd 228.802†	763.5	0.0485	mg/L	0.00022	0.0485	mg/L	0.00022	0.45%
QC value within limits for Cd 228.802 Recovery = 97.04%								
Co 228.616†	3515.1	0.194	mg/L	0.0014	0.194	mg/L	0.0014	0.71%
QC value within limits for Co 228.616 Recovery = 97.19%								
Cr 267.716†	57528.6	0.482	mg/L	0.0013	0.482	mg/L	0.0013	0.28%
QC value within limits for Cr 267.716 Recovery = 96.47%								
Cu 327.393†	71832.2	0.475	mg/L	0.0063	0.475	mg/L	0.0063	1.34%
QC value within limits for Cu 327.393 Recovery = 94.91%								
Fe 239.562†	1189.5	4.01	mg/L	0.115	4.01	mg/L	0.115	2.87%
QC value within limits for Fe 239.562 Recovery = 100.15%								
Mg 279.077†	7269.4	10.0	mg/L	0.22	10.0	mg/L	0.22	2.22%
QC value within limits for Mg 279.077 Recovery = 100.13%								
Mn 257.610†	233150.0	0.493	mg/L	0.0023	0.493	mg/L	0.0023	0.47%
QC value within limits for Mn 257.610 Recovery = 98.65%								
Mo 202.031†	12195.4	0.980	mg/L	0.0053	0.980	mg/L	0.0053	0.54%
QC value within limits for Mo 202.031 Recovery = 98.00%								
Ni 231.604†	15669.6	0.492	mg/L	0.0016	0.492	mg/L	0.0016	0.33%
QC value within limits for Ni 231.604 Recovery = 98.30%								
Pb 220.353†	2569.5	0.492	mg/L	0.0043	0.492	mg/L	0.0043	0.87%
QC value within limits for Pb 220.353 Recovery = 98.41%								
Sb 206.836†	1622.0	1.18	mg/L	0.009	1.18	mg/L	0.009	0.74%
QC value within limits for Sb 206.836 Recovery = 98.34%								
Se 196.026†	497.8	0.397	mg/L	0.0101	0.397	mg/L	0.0101	2.55%
QC value within limits for Se 196.026 Recovery = 99.23%								
Si 251.611†	162692.9	4.74	mg/L	0.049	4.74	mg/L	0.049	1.04%
QC value within limits for Si 251.611 Recovery = 94.83%								
Sn 189.927†	5373.9	0.981	mg/L	0.0048	0.981	mg/L	0.0048	0.49%
QC value within limits for Sn 189.927 Recovery = 98.07%								
Ti 334.940†	730558.3	0.978	mg/L	0.0056	0.978	mg/L	0.0056	0.57%
QC value within limits for Ti 334.940 Recovery = 97.82%								
Tl 190.801†	759.9	0.499	mg/L	0.0055	0.499	mg/L	0.0055	1.10%
QC value within limits for Tl 190.801 Recovery = 99.75%								
V 290.880†	150105.1	0.970	mg/L	0.0036	0.970	mg/L	0.0036	0.38%
QC value within limits for V 290.880 Recovery = 97.04%								
Zn 206.200†	30246.9	0.968	mg/L	0.0018	0.968	mg/L	0.0018	0.18%
QC value within limits for Zn 206.200 Recovery = 96.80%								
K 766.490†	134161.1	49.7	mg/L	0.03	49.7	mg/L	0.03	0.05%

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QC value within limits for K 766.490 Recovery = 99.42%
Na 589.592† 657629.9 49.3 mg/L 1.90 49.3 mg/L 1.90 3.86%
QC value within limits for Na 589.592 Recovery = 98.60%
Sr 407.771† 1515340.4 1.00 mg/L 0.029 1.00 mg/L 0.029 2.86%
QC value within limits for Sr 407.771 Recovery = 100.38%
Li 670.784† 82413.1 1.02 mg/L 0.005 1.02 mg/L 0.005 0.47%
QC value within limits for Li 670.784 Recovery = 101.88%
All analyte(s) passed QC.

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Sequence No.: 27 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/15/2011 4:10:03 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4931882.9						22422.24	0.45%
YRADIAL	296189.5						5892.46	1.99%
Ga 417.206	1303312.5						24084.35	1.85%
GaRADIAL	64535.3						1049.64	1.63%
Ag 328.068†	-721.4	-0.00279	mg/L	0.000724	-0.00279	mg/L	0.000724	25.96%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	22.9	-0.00403	mg/L	0.011470	-0.00403	mg/L	0.011470	284.76%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.2	-0.00139	mg/L	0.003643	-0.00139	mg/L	0.003643	261.82%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.7	0.00015	mg/L	0.000116	0.00015	mg/L	0.000116	79.00%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	85.0	0.00015	mg/L	0.000018	0.00015	mg/L	0.000018	12.01%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	555.9	0.0113	mg/L	0.00036	0.0113	mg/L	0.00036	3.19%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	0.3	0.0218	mg/L	0.04926	0.0218	mg/L	0.04926	225.89%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-2.1	-0.00015	mg/L	0.000027	-0.00015	mg/L	0.000027	18.31%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-13.5	-0.00042	mg/L	0.000069	-0.00042	mg/L	0.000069	16.53%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	32.8	0.00013	mg/L	0.000103	0.00013	mg/L	0.000103	80.74%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-195.3	-0.00170	mg/L	0.000493	-0.00170	mg/L	0.000493	28.93%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	2.7	0.00322	mg/L	0.004931	0.00322	mg/L	0.004931	153.30%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	2.2	0.00082	mg/L	0.001769	0.00082	mg/L	0.001769	216.94%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	32.4	-0.00002	mg/L	0.000012	-0.00002	mg/L	0.000012	46.20%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-8.0	-0.00012	mg/L	0.000721	-0.00012	mg/L	0.000721	623.58%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	9.1	0.00012	mg/L	0.000213	0.00012	mg/L	0.000213	175.71%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	8.6	0.00270	mg/L	0.000439	0.00270	mg/L	0.000439	16.27%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	4.5	-0.00033	mg/L	0.002116	-0.00033	mg/L	0.002116	633.44%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.6	-0.00118	mg/L	0.004858	-0.00118	mg/L	0.004858	412.77%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	29.6	0.00166	mg/L	0.000698	0.00166	mg/L	0.000698	41.95%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-1.9	0.00028	mg/L	0.000412	0.00028	mg/L	0.000412	149.43%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-2.6	-0.00001	mg/L	0.000107	-0.00001	mg/L	0.000107	940.80%
QC value within limits for Ti 334.940 Recovery = Not calculated								

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Tl 190.801†	-8.9	-0.00839 mg/L	0.000639	-0.00839 mg/L	0.000639	7.61%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	122.1	0.00114 mg/L	0.000596	0.00114 mg/L	0.000596	52.47%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	8.2	0.00056 mg/L	0.000092	0.00056 mg/L	0.000092	16.50%	
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	132.2	0.0498 mg/L	0.01188	0.0498 mg/L	0.01188	23.84%	
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	491.2	0.0399 mg/L	0.00716	0.0399 mg/L	0.00716	17.96%	
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	-47.7	-0.00007 mg/L	0.000023	-0.00007 mg/L	0.000023	33.46%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	167.3	0.00131 mg/L	0.000472	0.00131 mg/L	0.000472	36.00%	
QC value within limits for Li 670.784 Recovery = Not calculated							

All analyte(s) passed QC.

Sequence No.: 28 **Autosampler Location: 68**
Sample ID: LLCCV **Date Collected: 4/15/2011 4:16:39 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LLCCV

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: LLCCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4864706.8						39042.58	0.80%
YRADIAL	296334.4						1932.23	0.65%
Ga 417.206	1296988.4						14129.18	1.09%
GaRADIAL	64126.5						790.29	1.23%
Ag 328.068†	817.1	0.00459	mg/L	0.000286	0.00459	mg/L	0.000286	6.23%
Al 396.153†	1051.5	0.195	mg/L	0.0162	0.195	mg/L	0.0162	8.32%
As 188.979†	6.9	0.0113	mg/L	0.00342	0.0113	mg/L	0.00342	30.20%
Ba 233.527†	1122.0	0.0202	mg/L	0.00026	0.0202	mg/L	0.00026	1.27%
Be 234.861†	579.0	0.00109	mg/L	0.000006	0.00109	mg/L	0.000006	0.52%
B 249.677†	927.5	0.0183	mg/L	0.00029	0.0183	mg/L	0.00029	1.59%
Ca 227.546†	16.2	0.199	mg/L	0.0924	0.199	mg/L	0.0924	46.54%
Cd 228.802†	14.6	0.00091	mg/L	0.000136	0.00091	mg/L	0.000136	14.99%
Co 228.616†	63.1	0.00382	mg/L	0.000395	0.00382	mg/L	0.000395	10.34%
Cr 267.716†	1284.5	0.0106	mg/L	0.00005	0.0106	mg/L	0.00005	0.51%
Cu 327.393†	1398.9	0.00883	mg/L	0.001003	0.00883	mg/L	0.001003	11.35%
Fe 239.562†	24.5	0.0766	mg/L	0.00278	0.0766	mg/L	0.00278	3.62%
Mg 279.077†	149.1	0.203	mg/L	0.0095	0.203	mg/L	0.0095	4.66%
Mn 257.610†	4978.4	0.0104	mg/L	0.00040	0.0104	mg/L	0.00040	3.87%
Mo 202.031†	238.5	0.0197	mg/L	0.00007	0.0197	mg/L	0.00007	0.37%
Ni 231.604†	336.3	0.0104	mg/L	0.00027	0.0104	mg/L	0.00027	2.60%
Pb 220.353†	52.8	0.0112	mg/L	0.00101	0.0112	mg/L	0.00101	9.03%
Sb 206.836†	35.2	0.0220	mg/L	0.00205	0.0220	mg/L	0.00205	9.30%
Se 196.026†	7.3	0.00268	mg/L	0.001409	0.00268	mg/L	0.001409	52.56%
Si 251.611†	3327.2	0.0978	mg/L	0.00494	0.0978	mg/L	0.00494	5.05%
Sn 189.927†	110.1	0.0207	mg/L	0.00059	0.0207	mg/L	0.00059	2.85%
Ti 334.940†	14992.1	0.0201	mg/L	0.00088	0.0201	mg/L	0.00088	4.36%
Tl 190.801†	17.6	0.00893	mg/L	0.005108	0.00893	mg/L	0.005108	57.19%
V 290.880†	3121.1	0.0205	mg/L	0.00146	0.0205	mg/L	0.00146	7.10%
Zn 206.200†	682.3	0.0221	mg/L	0.00025	0.0221	mg/L	0.00025	1.11%
K 766.490†	2875.0	1.04	mg/L	0.034	1.04	mg/L	0.034	3.25%
Na 589.592†	14342.4	1.04	mg/L	0.014	1.04	mg/L	0.014	1.32%
Sr 407.771†	30988.9	0.0205	mg/L	0.00009	0.0205	mg/L	0.00009	0.42%
Li 670.784†	1782.6	0.0213	mg/L	0.00145	0.0213	mg/L	0.00145	6.82%

Sequence No.: 29 **Autosampler Location: 69**
Sample ID: PBW B7 WG361021-02 **Date Collected: 4/15/2011 4:23:18 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 18, 2011

Nebulizer Parameters: PBW B7 WG361021-02

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: PBW B7 WG361021-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4982703.6						12830.47	0.26%
YRADIAL	302769.0						3285.26	1.09%
Ga 417.206	1346456.6						8381.32	0.62%
GaRADIAL	66352.1						1066.40	1.61%
Ag 328.068†	-823.2	-0.00328	mg/L	0.000659	-0.00328	mg/L	0.000659	20.11%
Al 396.153†	4.4	-0.00760	mg/L	0.003573	-0.00760	mg/L	0.003573	47.03%
As 188.979†	0.5	-0.00003	mg/L	0.003601	-0.00003	mg/L	0.003601	>999.9%
Ba 233.527†	5.8	0.00018	mg/L	0.000133	0.00018	mg/L	0.000133	72.68%
Be 234.861†	104.3	0.00019	mg/L	0.000011	0.00019	mg/L	0.000011	6.08%
B 249.677†	314.9	0.00687	mg/L	0.000162	0.00687	mg/L	0.000162	2.35%
Ca 227.546†	1.4	0.0333	mg/L	0.08885	0.0333	mg/L	0.08885	266.60%
Cd 228.802†	-2.1	-0.00015	mg/L	0.000103	-0.00015	mg/L	0.000103	67.87%
Co 228.616†	-14.5	-0.00047	mg/L	0.000157	-0.00047	mg/L	0.000157	33.24%
Cr 267.716†	33.0	0.00013	mg/L	0.000120	0.00013	mg/L	0.000120	93.00%
Cu 327.393†	-116.7	-0.00119	mg/L	0.000206	-0.00119	mg/L	0.000206	17.31%
Fe 239.562†	1.1	-0.00223	mg/L	0.004732	-0.00223	mg/L	0.004732	212.52%
Mg 279.077†	-1.3	-0.00399	mg/L	0.002529	-0.00399	mg/L	0.002529	63.40%
Mn 257.610†	29.2	-0.00003	mg/L	0.000004	-0.00003	mg/L	0.000004	13.73%
Mo 202.031†	-9.8	-0.00026	mg/L	0.000226	-0.00026	mg/L	0.000226	87.19%
Ni 231.604†	9.8	0.00014	mg/L	0.000090	0.00014	mg/L	0.000090	64.87%
Pb 220.353†	-4.0	0.00031	mg/L	0.000814	0.00031	mg/L	0.000814	260.60%
Sb 206.836†	1.1	-0.00279	mg/L	0.003177	-0.00279	mg/L	0.003177	114.00%
Se 196.026†	4.8	0.00064	mg/L	0.001855	0.00064	mg/L	0.001855	288.71%
Si 251.611†	330.7	0.0105	mg/L	0.00051	0.0105	mg/L	0.00051	4.85%
Sn 189.927†	-8.2	-0.00087	mg/L	0.000616	-0.00087	mg/L	0.000616	70.67%
Ti 334.940†	-71.6	-0.00010	mg/L	0.000025	-0.00010	mg/L	0.000025	23.72%
Tl 190.801†	-2.4	-0.00416	mg/L	0.002060	-0.00416	mg/L	0.002060	49.56%
V 290.880†	-26.4	0.00018	mg/L	0.000351	0.00018	mg/L	0.000351	199.43%
Zn 206.200†	40.7	0.00160	mg/L	0.000131	0.00160	mg/L	0.000131	8.19%
K 766.490†	742.6	0.271	mg/L	0.0353	0.271	mg/L	0.0353	13.03%
Na 589.592†	268.1	0.0238	mg/L	0.00956	0.0238	mg/L	0.00956	40.21%
Sr 407.771†	-139.7	-0.00013	mg/L	0.000019	-0.00013	mg/L	0.000019	14.50%
Li 670.784†	91.3	0.00037	mg/L	0.001575	0.00037	mg/L	0.001575	426.22%

Sequence No.: 30 **Autosampler Location: 70**
Sample ID: LCSW B7 WG361021-03 **Date Collected: 4/15/2011 4:29:56 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW B7 WG361021-03

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: LCSW B7 WG361021-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4810730.0						74640.19	1.55%
YRADIAL	301554.4						4223.36	1.40%
Ga 417.206	1298418.5						28808.15	2.22%
GaRADIAL	65716.6						494.42	0.75%
Ag 328.068†	40472.2	0.195	mg/L	0.0061	0.195	mg/L	0.0061	3.15%
Al 396.153†	26164.1	5.05	mg/L	0.025	5.05	mg/L	0.025	0.49%
As 188.979†	121.8	0.215	mg/L	0.0033	0.215	mg/L	0.0033	1.55%
Ba 233.527†	27391.5	0.492	mg/L	0.0143	0.492	mg/L	0.0143	2.91%
Be 234.861†	12816.4	0.0242	mg/L	0.00081	0.0242	mg/L	0.00081	3.36%
B 249.677†	52917.4	0.982	mg/L	0.0387	0.982	mg/L	0.0387	3.94%
Ca 227.546†	465.7	5.16	mg/L	0.140	5.16	mg/L	0.140	2.71%
Cd 228.802†	382.6	0.0243	mg/L	0.00078	0.0243	mg/L	0.00078	3.21%
Co 228.616†	1784.8	0.0989	mg/L	0.00166	0.0989	mg/L	0.00166	1.68%
Cr 267.716†	28931.3	0.242	mg/L	0.0074	0.242	mg/L	0.0074	3.04%

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Cu 327.393†	36324.2	0.240	mg/L	0.0082	0.240	mg/L	0.0082	3.41%
Fe 239.562†	584.8	1.97	mg/L	0.007	1.97	mg/L	0.007	0.35%
Mg 279.077†	3646.4	5.02	mg/L	0.017	5.02	mg/L	0.017	0.35%
Mn 257.610†	119611.0	0.253	mg/L	0.0076	0.253	mg/L	0.0076	3.02%
Mo 202.031†	6192.7	0.498	mg/L	0.0065	0.498	mg/L	0.0065	1.31%
Ni 231.604†	7997.0	0.251	mg/L	0.0056	0.251	mg/L	0.0056	2.23%
Pb 220.353†	1303.6	0.250	mg/L	0.0038	0.250	mg/L	0.0038	1.54%
Sb 206.836†	825.0	0.598	mg/L	0.0147	0.598	mg/L	0.0147	2.45%
Se 196.026†	252.8	0.200	mg/L	0.0068	0.200	mg/L	0.0068	3.39%
Si 251.611†	85472.2	2.49	mg/L	0.092	2.49	mg/L	0.092	3.68%
Sn 189.927†	2731.1	0.499	mg/L	0.0097	0.499	mg/L	0.0097	1.94%
Ti 334.940†	369045.1	0.494	mg/L	0.0010	0.494	mg/L	0.0010	0.20%
Tl 190.801†	391.5	0.256	mg/L	0.0022	0.256	mg/L	0.0022	0.84%
V 290.880†	75818.0	0.490	mg/L	0.0167	0.490	mg/L	0.0167	3.41%
Zn 206.200†	15164.1	0.485	mg/L	0.0146	0.485	mg/L	0.0146	3.02%
K 766.490†	68053.4	24.9	mg/L	0.04	24.9	mg/L	0.04	0.17%
Na 589.592†	332493.8	24.4	mg/L	0.68	24.4	mg/L	0.68	2.76%
Sr 407.771†	755448.5	0.500	mg/L	0.0100	0.500	mg/L	0.0100	2.00%
Li 670.784†	42214.8	0.521	mg/L	0.0034	0.521	mg/L	0.0034	0.65%

Sequence No.: 31 **Autosampler Location: 71**
Sample ID: L1104005601 **Date Collected: 4/15/2011 4:36:38 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104005601

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104005601

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4861862.0						34589.37	0.71%
YRADIAL	297640.3						3086.11	1.04%
Ga 417.206	1339841.6						4392.20	0.33%
GaRADIAL	65868.2						404.94	0.61%
Ag 328.068†	-210.4	-0.00173	mg/L	0.001215	-0.00173	mg/L	0.001215	70.26%
Al 396.153†	41.8	0.00135	mg/L	0.010049	0.00135	mg/L	0.010049	742.35%
As 188.979†	8.8	0.0172	mg/L	0.00707	0.0172	mg/L	0.00707	41.17%
Ba 233.527†	6744.7	0.121	mg/L	0.0013	0.121	mg/L	0.0013	1.06%
Be 234.861†	2228.5	-0.00005	mg/L	0.000150	-0.00005	mg/L	0.000150	281.36%
B 249.677†	-532.8	0.0918	mg/L	0.00239	0.0918	mg/L	0.00239	2.60%
Ca 227.546†	2799.8	30.0	mg/L	0.19	30.0	mg/L	0.19	0.62%
Cd 228.802†	-1.4	-0.00014	mg/L	0.000280	-0.00014	mg/L	0.000280	202.21%
Co 228.616†	228.8	0.0125	mg/L	0.00014	0.0125	mg/L	0.00014	1.11%
Cr 267.716†	155.2	0.00029	mg/L	0.000123	0.00029	mg/L	0.000123	42.59%
Cu 327.393†	1869.7	0.0144	mg/L	0.00031	0.0144	mg/L	0.00031	2.16%
Fe 239.562†	6408.4	21.6	mg/L	0.20	21.6	mg/L	0.20	0.92%
Mg 279.077†	11836.3	16.3	mg/L	0.19	16.3	mg/L	0.19	1.18%
Mn 257.610†	968526.3	2.03	mg/L	0.008	2.03	mg/L	0.008	0.38%
Mo 202.031†	-6.0	0.00154	mg/L	0.000387	0.00154	mg/L	0.000387	25.19%
Ni 231.604†	228.9	0.00700	mg/L	0.000509	0.00700	mg/L	0.000509	7.28%
Pb 220.353†	1.5	0.00164	mg/L	0.001777	0.00164	mg/L	0.001777	108.54%
Sb 206.836†	11.7	0.00494	mg/L	0.001411	0.00494	mg/L	0.001411	28.57%
Se 196.026†	-24.6	-0.00826	mg/L	0.004936	-0.00826	mg/L	0.004936	59.76%
Si 251.611†	213682.1	6.25	mg/L	0.090	6.25	mg/L	0.090	1.43%
Sn 189.927†	-11.4	-0.00146	mg/L	0.000743	-0.00146	mg/L	0.000743	50.99%
Ti 334.940†	-371.1	-0.00021	mg/L	0.000215	-0.00021	mg/L	0.000215	104.27%
Tl 190.801†	60.3	0.0366	mg/L	0.00392	0.0366	mg/L	0.00392	10.72%
V 290.880†	-478.9	-0.00110	mg/L	0.000740	-0.00110	mg/L	0.000740	67.43%
Zn 206.200†	1403.7	0.0446	mg/L	0.00048	0.0446	mg/L	0.00048	1.07%
K 766.490†	9487.7	3.42	mg/L	0.079	3.42	mg/L	0.079	2.31%
Na 589.592†	377547.1	27.8	mg/L	0.03	27.8	mg/L	0.03	0.11%
Sr 407.771†	278582.3	0.180	mg/L	0.0016	0.180	mg/L	0.0016	0.88%
Li 670.784†	598.6	0.00665	mg/L	0.001189	0.00665	mg/L	0.001189	17.89%

Sequence No.: 32 **Autosampler Location: 72**
Sample ID: L1104005602 **Date Collected: 4/15/2011 4:42:20 PM**

Approved: April 18, 2011

Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104005602

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104005602

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4915051.1						13126.31	0.27%
YRADIAL	302961.3						4577.24	1.51%
Ga 417.206	1385719.6						10017.65	0.72%
GaRADIAL	67662.8						655.94	0.97%
Ag 328.068†	-656.4	-0.00305	mg/L	0.000545	-0.00305	mg/L	0.000545	17.88%
Al 396.153†	248.5	0.0404	mg/L	0.00073	0.0404	mg/L	0.00073	1.81%
As 188.979†	4.2	0.00757	mg/L	0.003393	0.00757	mg/L	0.003393	44.82%
Ba 233.527†	11681.0	0.209	mg/L	0.0019	0.209	mg/L	0.0019	0.89%
Be 234.861†	1219.9	0.00029	mg/L	0.000180	0.00029	mg/L	0.000180	61.46%
B 249.677†	169.6	0.0497	mg/L	0.00141	0.0497	mg/L	0.00141	2.84%
Ca 227.546†	1745.2	18.7	mg/L	0.10	18.7	mg/L	0.10	0.53%
Cd 228.802†	-2.4	-0.00019	mg/L	0.000239	-0.00019	mg/L	0.000239	128.95%
Co 228.616†	-13.0	-0.00071	mg/L	0.000288	-0.00071	mg/L	0.000288	40.45%
Cr 267.716†	67.5	0.00027	mg/L	0.000073	0.00027	mg/L	0.000073	26.81%
Cu 327.393†	2944.7	0.0201	mg/L	0.00068	0.0201	mg/L	0.00068	3.40%
Fe 239.562†	2899.0	9.77	mg/L	0.119	9.77	mg/L	0.119	1.22%
Mg 279.077†	2733.6	3.76	mg/L	0.044	3.76	mg/L	0.044	1.17%
Mn 257.610†	166886.6	0.352	mg/L	0.0023	0.352	mg/L	0.0023	0.67%
Mo 202.031†	-10.1	0.00028	mg/L	0.000304	0.00028	mg/L	0.000304	109.58%
Ni 231.604†	2.3	-0.00011	mg/L	0.000106	-0.00011	mg/L	0.000106	95.18%
Pb 220.353†	7.9	0.00299	mg/L	0.001301	0.00299	mg/L	0.001301	43.50%
Sb 206.836†	7.1	0.00156	mg/L	0.001543	0.00156	mg/L	0.001543	98.80%
Se 196.026†	-16.4	-0.00819	mg/L	0.001150	-0.00819	mg/L	0.001150	14.05%
Si 251.611†	254364.2	7.44	mg/L	0.025	7.44	mg/L	0.025	0.33%
Sn 189.927†	-8.8	-0.00097	mg/L	0.000178	-0.00097	mg/L	0.000178	18.29%
Ti 334.940†	-41.3	0.00012	mg/L	0.000136	0.00012	mg/L	0.000136	110.51%
Tl 190.801†	37.8	0.0206	mg/L	0.00146	0.0206	mg/L	0.00146	7.11%
V 290.880†	59.3	0.00147	mg/L	0.000805	0.00147	mg/L	0.000805	54.75%
Zn 206.200†	379.9	0.0122	mg/L	0.00017	0.0122	mg/L	0.00017	1.39%
K 766.490†	4424.5	1.60	mg/L	0.043	1.60	mg/L	0.043	2.71%
Na 589.592†	119340.6	8.67	mg/L	0.117	8.67	mg/L	0.117	1.35%
Sr 407.771†	252336.8	0.165	mg/L	0.0008	0.165	mg/L	0.0008	0.50%
Li 670.784†	349.5	0.00356	mg/L	0.000697	0.00356	mg/L	0.000697	19.54%

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Sequence No.: 33 **Autosampler Location: 73**
Sample ID: L1104005603 **Date Collected: 4/15/2011 4:48:59 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104005603

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104005603

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4774334.8						101914.07	2.13%
YRADIAL	299723.2						2701.24	0.90%
Ga 417.206	1340850.1						29099.88	2.17%
GaRADIAL	67066.2						1672.11	2.49%
Ag 328.068†	-640.9	-0.00277	mg/L	0.000634	-0.00277	mg/L	0.000634	22.85%
Al 396.153†	237.6	0.0380	mg/L	0.00674	0.0380	mg/L	0.00674	17.74%
As 188.979†	6.4	0.0109	mg/L	0.00171	0.0109	mg/L	0.00171	15.58%
Ba 233.527†	11189.7	0.201	mg/L	0.0051	0.201	mg/L	0.0051	2.53%
Be 234.861†	906.1	0.00052	mg/L	0.000166	0.00052	mg/L	0.000166	31.98%
B 249.677†	474.7	0.0370	mg/L	0.00053	0.0370	mg/L	0.00053	1.44%

Approved: April 18, 2011

Ca 227.546†	1873.7	20.0	mg/L	0.45	20.0 mg/L	0.45	2.23%
Cd 228.802†	-3.5	-0.00027	mg/L	0.000111	-0.00027 mg/L	0.000111	40.59%
Co 228.616†	4.8	0.00039	mg/L	0.000141	0.00039 mg/L	0.000141	36.47%
Cr 267.716†	73.4	0.00033	mg/L	0.000096	0.00033 mg/L	0.000096	29.51%
Cu 327.393†	1417.1	0.00959	mg/L	0.001180	0.00959 mg/L	0.001180	12.30%
Fe 239.562†	1734.5	5.85	mg/L	0.168	5.85 mg/L	0.168	2.88%
Mg 279.077†	3929.9	5.41	mg/L	0.121	5.41 mg/L	0.121	2.24%
Mn 257.610†	161868.7	0.341	mg/L	0.0087	0.341 mg/L	0.0087	2.55%
Mo 202.031†	-7.7	0.00027	mg/L	0.000297	0.00027 mg/L	0.000297	108.60%
Ni 231.604†	53.5	0.00150	mg/L	0.000113	0.00150 mg/L	0.000113	7.57%
Pb 220.353†	9.9	0.00360	mg/L	0.000790	0.00360 mg/L	0.000790	21.92%
Sb 206.836†	9.7	0.00343	mg/L	0.001193	0.00343 mg/L	0.001193	34.80%
Se 196.026†	-16.1	-0.00902	mg/L	0.003892	-0.00902 mg/L	0.003892	43.13%
Si 251.611†	248752.0	7.27	mg/L	0.234	7.27 mg/L	0.234	3.22%
Sn 189.927†	-9.4	-0.00109	mg/L	0.000688	-0.00109 mg/L	0.000688	63.12%
Ti 334.940†	-226.5	-0.00011	mg/L	0.000185	-0.00011 mg/L	0.000185	166.21%
Tl 190.801†	42.5	0.0235	mg/L	0.00208	0.0235 mg/L	0.00208	8.87%
V 290.880†	78.7	0.00129	mg/L	0.000782	0.00129 mg/L	0.000782	60.46%
Zn 206.200†	1277.2	0.0409	mg/L	0.00086	0.0409 mg/L	0.00086	2.11%
K 766.490†	4865.7	1.76	mg/L	0.009	1.76 mg/L	0.009	0.54%
Na 589.592†	123555.1	8.98	mg/L	0.096	8.98 mg/L	0.096	1.07%
Sr 407.771†	242053.5	0.159	mg/L	0.0013	0.159 mg/L	0.0013	0.81%
Li 670.784†	350.7	0.00358	mg/L	0.000702	0.00358 mg/L	0.000702	19.61%

Sequence No.: 34 **Autosampler Location: 74**
Sample ID: L1104005604 **Date Collected: 4/15/2011 4:55:39 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104005604

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104005604

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5007529.2						23935.55	0.48%
YRADIAL	309265.9						8014.62	2.59%
Ga 417.206	1373447.4						13898.37	1.01%
GaRADIAL	67929.4						203.79	0.30%
Ag 328.068†	-698.6	-0.00283	mg/L	0.000581	-0.00283	mg/L	0.000581	20.51%
Al 396.153†	470.3	0.0827	mg/L	0.00527	0.0827	mg/L	0.00527	6.37%
As 188.979†	1.2	0.00148	mg/L	0.003661	0.00148	mg/L	0.003661	246.91%
Ba 233.527†	1130.2	0.0203	mg/L	0.00011	0.0203	mg/L	0.00011	0.57%
Be 234.861†	406.7	0.00016	mg/L	0.000092	0.00016	mg/L	0.000092	56.30%
B 249.677†	168.2	0.0174	mg/L	0.00023	0.0174	mg/L	0.00023	1.32%
Ca 227.546†	230.4	2.49	mg/L	0.016	2.49	mg/L	0.016	0.64%
Cd 228.802†	2.3	0.00013	mg/L	0.000143	0.00013	mg/L	0.000143	107.46%
Co 228.616†	0.5	0.00028	mg/L	0.000189	0.00028	mg/L	0.000189	66.56%
Cr 267.716†	111.7	0.00080	mg/L	0.000127	0.00080	mg/L	0.000127	15.92%
Cu 327.393†	-15.5	-0.00015	mg/L	0.000736	-0.00015	mg/L	0.000736	485.46%
Fe 239.562†	852.7	2.87	mg/L	0.067	2.87	mg/L	0.067	2.32%
Mg 279.077†	1214.5	1.67	mg/L	0.039	1.67	mg/L	0.039	2.33%
Mn 257.610†	20208.3	0.0430	mg/L	0.00032	0.0430	mg/L	0.00032	0.74%
Mo 202.031†	-6.9	0.00012	mg/L	0.000300	0.00012	mg/L	0.000300	240.32%
Ni 231.604†	43.3	0.00119	mg/L	0.000171	0.00119	mg/L	0.000171	14.41%
Pb 220.353†	15.2	0.00393	mg/L	0.001204	0.00393	mg/L	0.001204	30.62%
Sb 206.836†	2.3	-0.00192	mg/L	0.001142	-0.00192	mg/L	0.001142	59.58%
Se 196.026†	-0.6	-0.00202	mg/L	0.002209	-0.00202	mg/L	0.002209	109.58%
Si 251.611†	110207.9	3.22	mg/L	0.048	3.22	mg/L	0.048	1.50%
Sn 189.927†	-4.8	-0.00024	mg/L	0.000713	-0.00024	mg/L	0.000713	292.69%
Ti 334.940†	536.8	0.00074	mg/L	0.000196	0.00074	mg/L	0.000196	26.72%
Tl 190.801†	7.1	0.00177	mg/L	0.002673	0.00177	mg/L	0.002673	150.82%
V 290.880†	161.3	0.00161	mg/L	0.001109	0.00161	mg/L	0.001109	68.94%
Zn 206.200†	20099.4	0.642	mg/L	0.0066	0.642	mg/L	0.0066	1.03%
K 766.490†	2717.9	0.987	mg/L	0.0124	0.987	mg/L	0.0124	1.26%
Na 589.592†	17239.0	1.25	mg/L	0.016	1.25	mg/L	0.016	1.32%
Sr 407.771†	29361.1	0.0188	mg/L	0.00014	0.0188	mg/L	0.00014	0.74%
Li 670.784†	159.4	0.00121	mg/L	0.000835	0.00121	mg/L	0.000835	68.92%

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Sequence No.: 35 **Autosampler Location: 75**
Sample ID: L1104005605 **Date Collected: 4/15/2011 5:02:18 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104005605

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104005605

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4919200.6						35064.61	0.71%
YRADIAL	304877.3						7733.06	2.54%
Ga 417.206	1338120.9						19607.53	1.47%
GaRADIAL	66671.8						1268.15	1.90%
Ag 328.068†	-1137.3	-0.00775	mg/L	0.000563	-0.00775	mg/L	0.000563	7.26%
Al 396.153†	1266.6	0.241	mg/L	0.0040	0.241	mg/L	0.0040	1.66%
As 188.979†	2.8	0.0122	mg/L	0.00206	0.0122	mg/L	0.00206	16.93%
Ba 233.527†	1965.4	0.0353	mg/L	0.00013	0.0353	mg/L	0.00013	0.37%
Be 234.861†	6904.9	0.00059	mg/L	0.000293	0.00059	mg/L	0.000293	49.42%
B 249.677†	-5999.6	0.167	mg/L	0.0077	0.167	mg/L	0.0077	4.60%
Ca 227.546†	314.9	3.66	mg/L	0.111	3.66	mg/L	0.111	3.02%
Cd 228.802†	3.8	0.00024	mg/L	0.000203	0.00024	mg/L	0.000203	84.37%
Co 228.616†	29.0	0.00038	mg/L	0.000294	0.00038	mg/L	0.000294	76.58%
Cr 267.716†	125.3	0.00093	mg/L	0.000088	0.00093	mg/L	0.000088	9.52%
Cu 327.393†	149.4	0.00742	mg/L	0.000399	0.00742	mg/L	0.000399	5.38%
Fe 239.562†	17611.5	59.4	mg/L	1.08	59.4	mg/L	1.08	1.81%
Mg 279.077†	1221.8	1.65	mg/L	0.033	1.65	mg/L	0.033	1.99%
Mn 257.610†	41672.0	0.0910	mg/L	0.00091	0.0910	mg/L	0.00091	1.00%
Mo 202.031†	-14.9	0.00228	mg/L	0.000278	0.00228	mg/L	0.000278	12.16%
Ni 231.604†	79.9	0.00234	mg/L	0.000213	0.00234	mg/L	0.000213	9.09%
Pb 220.353†	28.6	0.00402	mg/L	0.000787	0.00402	mg/L	0.000787	19.58%
Sb 206.836†	9.5	0.00332	mg/L	0.001837	0.00332	mg/L	0.001837	55.34%
Se 196.026†	-31.2	-0.00536	mg/L	0.003658	-0.00536	mg/L	0.003658	68.21%
Si 251.611†	192379.7	5.62	mg/L	0.116	5.62	mg/L	0.116	2.06%
Sn 189.927†	-39.4	-0.00656	mg/L	0.000152	-0.00656	mg/L	0.000152	2.32%
Ti 334.940†	1821.2	0.00246	mg/L	0.000135	0.00246	mg/L	0.000135	5.47%
Tl 190.801†	1.6	-0.00173	mg/L	0.001944	-0.00173	mg/L	0.001944	112.45%
V 290.880†	770.0	0.00989	mg/L	0.000554	0.00989	mg/L	0.000554	5.61%
Zn 206.200†	12376.3	0.394	mg/L	0.0032	0.394	mg/L	0.0032	0.81%
K 766.490†	3029.2	1.10	mg/L	0.019	1.10	mg/L	0.019	1.74%
Na 589.592†	17009.4	1.23	mg/L	0.006	1.23	mg/L	0.006	0.51%
Sr 407.771†	32419.0	0.00833	mg/L	0.000255	0.00833	mg/L	0.000255	3.06%
Li 670.784†	186.3	0.00154	mg/L	0.001592	0.00154	mg/L	0.001592	103.05%

Sequence No.: 36 **Autosampler Location: 76**
Sample ID: L1104005606 **Date Collected: 4/15/2011 5:08:57 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104005606

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: L1104005606

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4999789.6						29758.56	0.60%
YRADIAL	303837.7						10008.52	3.29%
Ga 417.206	1365709.9						9816.41	0.72%
GaRADIAL	67099.7						1443.62	2.15%
Ag 328.068†	-827.5	-0.00410	mg/L	0.000288	-0.00410	mg/L	0.000288	7.03%
Al 396.153†	1175.0	0.220	mg/L	0.0055	0.220	mg/L	0.0055	2.49%

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As 188.979†	-1.3	-0.00123 mg/L	0.002932	-0.00123 mg/L	0.002932	239.18%
Ba 233.527†	764.9	0.0138 mg/L	0.00014	0.0138 mg/L	0.00014	0.99%
Be 234.861†	1942.3	0.00033 mg/L	0.000064	0.00033 mg/L	0.000064	19.29%
B 249.677†	-1295.0	0.0509 mg/L	0.00059	0.0509 mg/L	0.00059	1.16%
Ca 227.546†	214.7	2.38 mg/L	0.070	2.38 mg/L	0.070	2.96%
Cd 228.802†	-2.7	-0.00017 mg/L	0.000121	-0.00017 mg/L	0.000121	69.89%
Co 228.616†	-6.2	-0.00043 mg/L	0.000344	-0.00043 mg/L	0.000344	79.56%
Cr 267.716†	163.9	0.00129 mg/L	0.000030	0.00129 mg/L	0.000030	2.32%
Cu 327.393†	67.0	0.00193 mg/L	0.000198	0.00193 mg/L	0.000198	10.22%
Fe 239.562†	4711.7	15.9 mg/L	0.30	15.9 mg/L	0.30	1.92%
Mg 279.077†	1194.2	1.63 mg/L	0.050	1.63 mg/L	0.050	3.03%
Mn 257.610†	7267.1	0.0166 mg/L	0.00010	0.0166 mg/L	0.00010	0.62%
Mo 202.031†	-6.5	0.00079 mg/L	0.000210	0.00079 mg/L	0.000210	26.49%
Ni 231.604†	36.9	0.00099 mg/L	0.000264	0.00099 mg/L	0.000264	26.74%
Pb 220.353†	143.4	0.0276 mg/L	0.00051	0.0276 mg/L	0.00051	1.86%
Sb 206.836†	5.1	0.00012 mg/L	0.000776	0.00012 mg/L	0.000776	669.82%
Se 196.026†	-11.1	-0.00567 mg/L	0.002962	-0.00567 mg/L	0.002962	52.26%
Si 251.611†	122953.6	3.59 mg/L	0.027	3.59 mg/L	0.027	0.76%
Sn 189.927†	-15.6	-0.00222 mg/L	0.000208	-0.00222 mg/L	0.000208	9.39%
Ti 334.940†	1056.3	0.00143 mg/L	0.000086	0.00143 mg/L	0.000086	6.05%
Tl 190.801†	5.1	0.00051 mg/L	0.001640	0.00051 mg/L	0.001640	322.94%
V 290.880†	104.7	0.00224 mg/L	0.000882	0.00224 mg/L	0.000882	39.32%
Zn 206.200†	45377.6	1.45 mg/L	0.007	1.45 mg/L	0.007	0.47%
K 766.490†	2564.1	0.931 mg/L	0.0249	0.931 mg/L	0.0249	2.68%
Na 589.592†	13274.0	0.962 mg/L	0.0031	0.962 mg/L	0.0031	0.32%
Sr 407.771†	26115.8	0.0138 mg/L	0.00011	0.0138 mg/L	0.00011	0.78%
Li 670.784†	44.1	-0.00021 mg/L	0.000818	-0.00021 mg/L	0.000818	382.87%

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Sequence No.: 37 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/15/2011 5:15:36 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4726471.0						32686.26	0.69%
YRADIAL	288938.8						4096.96	1.42%
Ga 417.206	1267982.9						12583.30	0.99%
GaRADIAL	63840.9						798.88	1.25%
Ag 328.068†	81571.9	0.392	mg/L	0.0057	0.392	mg/L	0.0057	1.46%
QC value within limits for Ag 328.068 Recovery = 98.00%								
Al 396.153†	52268.8	10.1	mg/L	0.06	10.1	mg/L	0.06	0.59%
QC value within limits for Al 396.153 Recovery = 100.90%								
As 188.979†	249.4	0.442	mg/L	0.0049	0.442	mg/L	0.0049	1.10%
QC value greater than the upper limit for As 188.979 Recovery = 110.50%								
Ba 233.527†	55133.1	0.991	mg/L	0.0128	0.991	mg/L	0.0128	1.29%
QC value within limits for Ba 233.527 Recovery = 99.10%								
Be 234.861†	25681.6	0.0485	mg/L	0.00100	0.0485	mg/L	0.00100	2.06%
QC value within limits for Be 234.861 Recovery = 97.01%								
B 249.677†	26488.1	0.497	mg/L	0.0060	0.497	mg/L	0.0060	1.20%
QC value within limits for B 249.677 Recovery = 99.47%								
Ca 227.546†	947.1	10.5	mg/L	0.11	10.5	mg/L	0.11	1.04%
QC value within limits for Ca 227.546 Recovery = 104.71%								
Cd 228.802†	781.7	0.0497	mg/L	0.00022	0.0497	mg/L	0.00022	0.44%
QC value within limits for Cd 228.802 Recovery = 99.37%								
Co 228.616†	3591.9	0.199	mg/L	0.0013	0.199	mg/L	0.0013	0.64%
QC value within limits for Co 228.616 Recovery = 99.32%								
Cr 267.716†	58415.4	0.490	mg/L	0.0044	0.490	mg/L	0.0044	0.90%
QC value within limits for Cr 267.716 Recovery = 97.95%								
Cu 327.393†	73128.8	0.483	mg/L	0.0075	0.483	mg/L	0.0075	1.56%
QC value within limits for Cu 327.393 Recovery = 96.62%								
Fe 239.562†	1208.9	4.07	mg/L	0.016	4.07	mg/L	0.016	0.38%
QC value within limits for Fe 239.562 Recovery = 101.79%								
Mg 279.077†	7388.7	10.2	mg/L	0.08	10.2	mg/L	0.08	0.76%



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QC value within limits for Mg 279.077 Recovery = 101.77%
Mn 257.610† 237645.8 0.503 mg/L 0.0059 0.503 mg/L 0.0059 1.17%
QC value within limits for Mn 257.610 Recovery = 100.55%
Mo 202.031† 12479.7 1.00 mg/L 0.006 1.00 mg/L 0.006 0.60%
QC value within limits for Mo 202.031 Recovery = 100.28%
Ni 231.604† 15955.4 0.500 mg/L 0.0081 0.500 mg/L 0.0081 1.62%
QC value within limits for Ni 231.604 Recovery = 100.09%
Pb 220.353† 2623.8 0.502 mg/L 0.0045 0.502 mg/L 0.0045 0.90%
QC value within limits for Pb 220.353 Recovery = 100.49%
Sb 206.836† 1664.8 1.21 mg/L 0.005 1.21 mg/L 0.005 0.45%
QC value within limits for Sb 206.836 Recovery = 100.94%
Se 196.026† 508.9 0.406 mg/L 0.0055 0.406 mg/L 0.0055 1.36%
QC value within limits for Se 196.026 Recovery = 101.47%
Si 251.611† 166244.0 4.84 mg/L 0.069 4.84 mg/L 0.069 1.43%
QC value within limits for Si 251.611 Recovery = 96.90%
Sn 189.927† 5498.3 1.00 mg/L 0.005 1.00 mg/L 0.005 0.52%
QC value within limits for Sn 189.927 Recovery = 100.34%
Ti 334.940† 740231.0 0.991 mg/L 0.0054 0.991 mg/L 0.0054 0.55%
QC value within limits for Ti 334.940 Recovery = 99.11%
Tl 190.801† 780.6 0.512 mg/L 0.0097 0.512 mg/L 0.0097 1.90%
QC value within limits for Tl 190.801 Recovery = 102.44%
V 290.880† 152670.3 0.987 mg/L 0.0110 0.987 mg/L 0.0110 1.12%
QC value within limits for V 290.880 Recovery = 98.70%
Zn 206.200† 30889.2 0.989 mg/L 0.0109 0.989 mg/L 0.0109 1.11%
QC value within limits for Zn 206.200 Recovery = 98.86%
K 766.490† 136164.2 50.5 mg/L 0.28 50.5 mg/L 0.28 0.55%
QC value within limits for K 766.490 Recovery = 100.94%
Na 589.592† 673149.4 50.5 mg/L 1.43 50.5 mg/L 1.43 2.84%
QC value within limits for Na 589.592 Recovery = 101.02%
Sr 407.771† 1558799.0 1.03 mg/L 0.023 1.03 mg/L 0.023 2.25%
QC value within limits for Sr 407.771 Recovery = 103.26%
Li 670.784† 83446.9 1.03 mg/L 0.003 1.03 mg/L 0.003 0.32%
QC value within limits for Li 670.784 Recovery = 103.15%
QC Failed. Continue with analysis.

Sequence No.: 38 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/15/2011 5:22:15 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4927518.3						48964.60	0.99%
YRADIAL	297155.1						2506.94	0.84%
Ga 417.206	1313905.4						13940.80	1.06%
GaRADIAL	64855.3						1504.64	2.32%
Ag 328.068†	-693.2	-0.00266	mg/L	0.000479	-0.00266	mg/L	0.000479	18.02%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	46.2	0.00047	mg/L	0.018676	0.00047	mg/L	0.018676	>999.9%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	1.7	0.00197	mg/L	0.002974	0.00197	mg/L	0.002974	150.85%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	1.6	0.00011	mg/L	0.000114	0.00011	mg/L	0.000114	104.38%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	73.1	0.00013	mg/L	0.000019	0.00013	mg/L	0.000019	14.64%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	267.3	0.00598	mg/L	0.000320	0.00598	mg/L	0.000320	5.35%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	0.9	0.0284	mg/L	0.02516	0.0284	mg/L	0.02516	88.70%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-2.7	-0.00020	mg/L	0.000089	-0.00020	mg/L	0.000089	45.79%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-6.6	-0.00003	mg/L	0.000085	-0.00003	mg/L	0.000085	283.95%
QC value within limits for Co 228.616 Recovery = Not calculated								

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Cr 267.716†	33.0	0.00013 mg/L	0.000093	0.00013 mg/L	0.000093	72.11%
QC value within limits for Cr 267.716 Recovery = Not calculated						
Cu 327.393†	-13.7	-0.00051 mg/L	0.000571	-0.00051 mg/L	0.000571	111.90%
QC value within limits for Cu 327.393 Recovery = Not calculated						
Fe 239.562†	0.9	-0.00283 mg/L	0.001869	-0.00283 mg/L	0.001869	65.92%
QC value within limits for Fe 239.562 Recovery = Not calculated						
Mg 279.077†	0.4	-0.00171 mg/L	0.004283	-0.00171 mg/L	0.004283	250.30%
QC value within limits for Mg 279.077 Recovery = Not calculated						
Mn 257.610†	21.1	-0.00005 mg/L	0.000027	-0.00005 mg/L	0.000027	54.03%
QC value within limits for Mn 257.610 Recovery = Not calculated						
Mo 202.031†	-4.9	0.00014 mg/L	0.000253	0.00014 mg/L	0.000253	184.03%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	8.1	0.00008 mg/L	0.000212	0.00008 mg/L	0.000212	254.19%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	6.5	0.00230 mg/L	0.001327	0.00230 mg/L	0.001327	57.69%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	2.1	-0.00205 mg/L	0.000219	-0.00205 mg/L	0.000219	10.72%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	0.3	-0.00298 mg/L	0.004904	-0.00298 mg/L	0.004904	164.36%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-0.5	0.00078 mg/L	0.000670	0.00078 mg/L	0.000670	85.57%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-1.3	0.00040 mg/L	0.000466	0.00040 mg/L	0.000466	116.58%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-98.1	-0.00014 mg/L	0.000089	-0.00014 mg/L	0.000089	63.99%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	2.3	-0.00116 mg/L	0.005861	-0.00116 mg/L	0.005861	504.03%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	99.1	0.00099 mg/L	0.000435	0.00099 mg/L	0.000435	44.12%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	4.7	0.00044 mg/L	0.000188	0.00044 mg/L	0.000188	42.31%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	132.6	0.0500 mg/L	0.03469	0.0500 mg/L	0.03469	69.45%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	257.4	0.0230 mg/L	0.00912	0.0230 mg/L	0.00912	39.63%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	-51.1	-0.00007 mg/L	0.000070	-0.00007 mg/L	0.000070	101.37%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	140.9	0.00098 mg/L	0.001163	0.00098 mg/L	0.001163	118.30%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 39 **Autosampler Location: 77**
Sample ID: L1104005607 **Date Collected: 4/15/2011 5:28:52 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104005607

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: L1104005607

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4911228.2						43178.44	0.88%
YRADIAL	305531.1						5697.83	1.86%
Ga 417.206	1363105.4						14521.29	1.07%
GaRADIAL	67399.6						1121.63	1.66%
Ag 328.068†	-1991.7	-0.0173	mg/L	0.00087	-0.0173	mg/L	0.00087	5.02%
Al 396.153†	24037.8	4.66	mg/L	0.032	4.66	mg/L	0.032	0.68%
As 188.979†	5.1	0.0308	mg/L	0.00230	0.0308	mg/L	0.00230	7.47%
Ba 233.527†	2963.3	0.0532	mg/L	0.00046	0.0532	mg/L	0.00046	0.87%
Be 234.861†	18978.6	0.00058	mg/L	0.001350	0.00058	mg/L	0.001350	234.57%
B 249.677†	-18022.8	0.448	mg/L	0.0162	0.448	mg/L	0.0162	3.62%
Ca 227.546†	440.1	5.53	mg/L	0.069	5.53	mg/L	0.069	1.25%
Cd 228.802†	-3.3	-0.00020	mg/L	0.000234	-0.00020	mg/L	0.000234	115.77%
Co 228.616†	86.5	0.00069	mg/L	0.000371	0.00069	mg/L	0.000371	54.10%
Cr 267.716†	1466.5	0.0123	mg/L	0.00042	0.0123	mg/L	0.00042	3.39%
Cu 327.393†	2492.8	0.0358	mg/L	0.00018	0.0358	mg/L	0.00018	0.50%

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Fe 239.562†	49950.7	169	mg/L	3.0	169	mg/L	3.0 1.75%
Mg 279.077†	1381.2	1.81	mg/L	0.033	1.81	mg/L	0.033 1.84%
Mn 257.610†	137954.0	0.299	mg/L	0.0027	0.299	mg/L	0.0027 0.89%
Mo 202.031†	4.7	0.00930	mg/L	0.000656	0.00930	mg/L	0.000656 7.06%
Ni 231.604†	160.9	0.00488	mg/L	0.000537	0.00488	mg/L	0.000537 11.00%
Pb 220.353†	948.3	0.173	mg/L	0.0004	0.173	mg/L	0.0004 0.21%
Sb 206.836†	15.5	0.00757	mg/L	0.000557	0.00757	mg/L	0.000557 7.36%
Se 196.026†	-84.4	-0.00764	mg/L	0.002438	-0.00764	mg/L	0.002438 31.89%
Si 251.611†	424010.1	12.4	mg/L	0.08	12.4	mg/L	0.08 0.61%
Sn 189.927†	-36.0	-0.00594	mg/L	0.000430	-0.00594	mg/L	0.000430 7.24%
Ti 334.940†	20381.8	0.0273	mg/L	0.00036	0.0273	mg/L	0.00036 1.33%
Tl 190.801†	3.0	-0.00035	mg/L	0.001283	-0.00035	mg/L	0.001283 367.38%
V 290.880†	3188.4	0.0339	mg/L	0.00051	0.0339	mg/L	0.00051 1.51%
Zn 206.200†	207456.7	6.62	mg/L	0.063	6.62	mg/L	0.063 0.95%
K 766.490†	3831.2	1.39	mg/L	0.052	1.39	mg/L	0.052 3.76%
Na 589.592†	13551.9	0.982	mg/L	0.0293	0.982	mg/L	0.0293 2.99%
Sr 407.771†	34253.3	-0.0146	mg/L	0.00065	-0.0146	mg/L	0.00065 4.47%
Li 670.784†	336.2	0.00340	mg/L	0.000735	0.00340	mg/L	0.000735 21.63%

Sequence No.: 40 **Autosampler Location: 78**
Sample ID: L1104005608 **Date Collected: 4/15/2011 5:35:31 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104005608

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: L1104005608

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4883350.4						41243.08	0.84%
YRADIAL	303552.7						3601.64	1.19%
Ga 417.206	1341662.4						25450.95	1.90%
GaRADIAL	66879.9						551.92	0.83%
Ag 328.068†	-297.3	-0.00170	mg/L	0.001735	-0.00170	mg/L	0.001735	101.83%
Al 396.153†	25.9	-0.00212	mg/L	0.009013	-0.00212	mg/L	0.009013	425.16%
As 188.979†	6.3	0.0121	mg/L	0.00365	0.0121	mg/L	0.00365	30.19%
Ba 233.527†	11702.4	0.210	mg/L	0.0018	0.210	mg/L	0.0018	0.84%
Be 234.861†	1808.9	-0.00003	mg/L	0.000061	-0.00003	mg/L	0.000061	207.25%
B 249.677†	-247.2	0.0742	mg/L	0.00027	0.0742	mg/L	0.00027	0.36%
Ca 227.546†	2608.9	28.0	mg/L	0.28	28.0	mg/L	0.28	1.02%
Cd 228.802†	-2.9	-0.00023	mg/L	0.000065	-0.00023	mg/L	0.000065	28.74%
Co 228.616†	5.7	0.00015	mg/L	0.000094	0.00015	mg/L	0.000094	62.39%
Cr 267.716†	59.7	0.00019	mg/L	0.000113	0.00019	mg/L	0.000113	58.51%
Cu 327.393†	3141.6	0.0222	mg/L	0.00011	0.0222	mg/L	0.00011	0.50%
Fe 239.562†	4945.5	16.7	mg/L	0.23	16.7	mg/L	0.23	1.38%
Mg 279.077†	7831.5	10.8	mg/L	0.16	10.8	mg/L	0.16	1.52%
Mn 257.610†	190608.8	0.402	mg/L	0.0024	0.402	mg/L	0.0024	0.59%
Mo 202.031†	-9.9	0.00064	mg/L	0.000426	0.00064	mg/L	0.000426	66.78%
Ni 231.604†	37.2	0.00098	mg/L	0.000324	0.00098	mg/L	0.000324	33.18%
Pb 220.353†	-3.9	0.00088	mg/L	0.001392	0.00088	mg/L	0.001392	157.81%
Sb 206.836†	8.3	0.00242	mg/L	0.002677	0.00242	mg/L	0.002677	110.41%
Se 196.026†	-23.1	-0.00872	mg/L	0.005891	-0.00872	mg/L	0.005891	67.58%
Si 251.611†	206903.2	6.05	mg/L	0.095	6.05	mg/L	0.095	1.58%
Sn 189.927†	-5.1	-0.00031	mg/L	0.001474	-0.00031	mg/L	0.001474	476.66%
Ti 334.940†	-185.6	0.00002	mg/L	0.000152	0.00002	mg/L	0.000152	684.44%
Tl 190.801†	51.8	0.0289	mg/L	0.00674	0.0289	mg/L	0.00674	23.37%
V 290.880†	-288.2	-0.00025	mg/L	0.000919	-0.00025	mg/L	0.000919	373.61%
Zn 206.200†	1175.6	0.0374	mg/L	0.00055	0.0374	mg/L	0.00055	1.46%
K 766.490†	5501.1	1.99	mg/L	0.042	1.99	mg/L	0.042	2.11%
Na 589.592†	172156.4	12.5	mg/L	0.06	12.5	mg/L	0.06	0.50%
Sr 407.771†	406150.6	0.266	mg/L	0.0002	0.266	mg/L	0.0002	0.07%
Li 670.784†	770.9	0.00878	mg/L	0.000906	0.00878	mg/L	0.000906	10.32%

Sequence No.: 41 **Autosampler Location: 79**
Sample ID: L1104005608PS WG361885-01 **Date Collected: 4/15/2011 5:41:13 PM**
Analyst: KHR **Data Type: Original**

Approved: April 18, 2011

Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104005608PS WG361885-01

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: L1104005608PS WG361885-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4836958.8						28311.14	0.59%
YRADIAL	303661.9						2646.97	0.87%
Ga 417.206	1318563.5						26620.49	2.02%
GaRADIAL	66360.9						258.25	0.39%
Ag 328.068†	39522.4	0.189	mg/L	0.0049	0.189	mg/L	0.0049	2.58%
Al 396.153†	25075.9	4.84	mg/L	0.075	4.84	mg/L	0.075	1.54%
As 188.979†	111.8	0.199	mg/L	0.0139	0.199	mg/L	0.0139	6.97%
Ba 233.527†	36886.4	0.663	mg/L	0.0104	0.663	mg/L	0.0104	1.58%
Be 234.861†	14283.2	0.0240	mg/L	0.00067	0.0240	mg/L	0.00067	2.79%
B 249.677†	50781.4	1.01	mg/L	0.016	1.01	mg/L	0.016	1.57%
Ca 227.546†	2799.3	30.1	mg/L	0.45	30.1	mg/L	0.45	1.48%
Cd 228.802†	367.0	0.0234	mg/L	0.00046	0.0234	mg/L	0.00046	1.95%
Co 228.616†	1741.8	0.0960	mg/L	0.00055	0.0960	mg/L	0.00055	0.57%
Cr 267.716†	28012.8	0.235	mg/L	0.0018	0.235	mg/L	0.0018	0.77%
Cu 327.393†	37929.1	0.252	mg/L	0.0060	0.252	mg/L	0.0060	2.38%
Fe 239.562†	4869.7	16.4	mg/L	0.22	16.4	mg/L	0.22	1.36%
Mg 279.077†	10314.2	14.2	mg/L	0.26	14.2	mg/L	0.26	1.84%
Mn 257.610†	286011.0	0.604	mg/L	0.0081	0.604	mg/L	0.0081	1.35%
Mo 202.031†	6038.3	0.486	mg/L	0.0036	0.486	mg/L	0.0036	0.73%
Ni 231.604†	7780.8	0.244	mg/L	0.0010	0.244	mg/L	0.0010	0.41%
Pb 220.353†	1265.2	0.243	mg/L	0.0015	0.243	mg/L	0.0015	0.61%
Sb 206.836†	823.3	0.597	mg/L	0.0109	0.597	mg/L	0.0109	1.82%
Se 196.026†	217.6	0.183	mg/L	0.0005	0.183	mg/L	0.0005	0.26%
Si 251.611†	267826.1	7.82	mg/L	0.186	7.82	mg/L	0.186	2.38%
Sn 189.927†	-14.4	-0.00201	mg/L	0.000778	-0.00201	mg/L	0.000778	38.78%
Ti 334.940†	365918.6	0.490	mg/L	0.0052	0.490	mg/L	0.0052	1.06%
Tl 190.801†	430.2	0.279	mg/L	0.0090	0.279	mg/L	0.0090	3.21%
V 290.880†	73918.1	0.479	mg/L	0.0062	0.479	mg/L	0.0062	1.29%
Zn 206.200†	15638.3	0.500	mg/L	0.0048	0.500	mg/L	0.0048	0.96%
K 766.490†	70820.3	25.9	mg/L	0.13	25.9	mg/L	0.13	0.51%
Na 589.592†	480300.2	35.6	mg/L	0.14	35.6	mg/L	0.14	0.41%
Sr 407.771†	1099753.8	0.726	mg/L	0.0005	0.726	mg/L	0.0005	0.07%
Li 670.784†	41675.0	0.515	mg/L	0.0039	0.515	mg/L	0.0039	0.75%

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Sequence No.: 42 **Autosampler Location: 80**
Sample ID: L1104005608DL WG361885-02 **Date Collected: 4/15/2011 5:46:56 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104005608DL WG361885-02

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: L1104005608DL WG361885-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4931877.1						33939.91	0.69%
YRADIAL	297249.3						2366.07	0.80%
Ga 417.206	1364851.0						6615.61	0.48%
GaRADIAL	66575.0						703.97	1.06%
Ag 328.068†	-626.5	-0.00253	mg/L	0.000380	-0.00253	mg/L	0.000380	15.06%
Al 396.153†	201.1	0.0307	mg/L	0.00114	0.0307	mg/L	0.00114	3.72%
As 188.979†	-0.3	-0.00111	mg/L	0.004623	-0.00111	mg/L	0.004623	417.37%
Ba 233.527†	2372.5	0.0426	mg/L	0.00037	0.0426	mg/L	0.00037	0.87%
Be 234.861†	464.7	0.00019	mg/L	0.000102	0.00019	mg/L	0.000102	54.52%
B 249.677†	167.6	0.0195	mg/L	0.00090	0.0195	mg/L	0.00090	4.59%
Ca 227.546†	505.3	5.43	mg/L	0.020	5.43	mg/L	0.020	0.38%

Approved: April 18, 2011

Cd 228.802†	-2.9	-0.00020	mg/L	0.000210	-0.00020	mg/L	0.000210 106.83%
Co 228.616†	-8.3	-0.00022	mg/L	0.000286	-0.00022	mg/L	0.000286 127.98%
Cr 267.716†	27.9	0.00005	mg/L	0.000096	0.00005	mg/L	0.000096 181.65%
Cu 327.393†	622.2	0.00406	mg/L	0.000863	0.00406	mg/L	0.000863 21.26%
Fe 239.562†	981.4	3.31	mg/L	0.035	3.31	mg/L	0.035 1.06%
Mg 279.077†	1576.1	2.17	mg/L	0.019	2.17	mg/L	0.019 0.89%
Mn 257.610†	38859.2	0.0818	mg/L	0.00027	0.0818	mg/L	0.00027 0.33%
Mo 202.031†	-8.6	0.00002	mg/L	0.000205	0.00002	mg/L	0.000205 >999.9%
Ni 231.604†	15.5	0.00031	mg/L	0.000411	0.00031	mg/L	0.000411 131.56%
Pb 220.353†	-4.9	0.00026	mg/L	0.000737	0.00026	mg/L	0.000737 286.16%
Sb 206.836†	4.9	-0.00005	mg/L	0.002617	-0.00005	mg/L	0.002617 >999.9%
Se 196.026†	-4.9	-0.00460	mg/L	0.001579	-0.00460	mg/L	0.001579 34.36%
Si 251.611†	41199.0	1.21	mg/L	0.012	1.21	mg/L	0.012 1.01%
Sn 189.927†	-5.7	-0.00041	mg/L	0.000441	-0.00041	mg/L	0.000441 106.19%
Ti 334.940†	-145.1	-0.00015	mg/L	0.000201	-0.00015	mg/L	0.000201 135.30%
Tl 190.801†	11.2	0.00422	mg/L	0.002619	0.00422	mg/L	0.002619 62.03%
V 290.880†	-117.6	-0.00016	mg/L	0.000665	-0.00016	mg/L	0.000665 412.15%
Zn 206.200†	333.6	0.0109	mg/L	0.00018	0.0109	mg/L	0.00018 1.65%
K 766.490†	1126.5	0.408	mg/L	0.0057	0.408	mg/L	0.0057 1.40%
Na 589.592†	34935.9	2.53	mg/L	0.021	2.53	mg/L	0.021 0.82%
Sr 407.771†	82173.1	0.0537	mg/L	0.00040	0.0537	mg/L	0.00040 0.75%
Li 670.784†	140.8	0.00098	mg/L	0.000397	0.00098	mg/L	0.000397 40.44%

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Sequence No.: 43 **Autosampler Location: 81**
Sample ID: L1104005609 **Date Collected: 4/15/2011 5:53:35 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104005609

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: L1104005609

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4952543.2						55015.22	1.11%
YRADIAL	305172.1						2694.24	0.88%
Ga 417.206	1358203.6						9562.48	0.70%
GaRADIAL	67564.7						642.28	0.95%
Ag 328.068†	-171.9	-0.00108	mg/L	0.001017	-0.00108	mg/L	0.001017	94.50%
Al 396.153†	62.2	0.00485	mg/L	0.006676	0.00485	mg/L	0.006676	137.58%
As 188.979†	5.1	0.0101	mg/L	0.00252	0.0101	mg/L	0.00252	25.01%
Ba 233.527†	14319.0	0.257	mg/L	0.0039	0.257	mg/L	0.0039	1.53%
Be 234.861†	1661.3	-0.00018	mg/L	0.000184	-0.00018	mg/L	0.000184	102.23%
B 249.677†	-632.7	0.0647	mg/L	0.00271	0.0647	mg/L	0.00271	4.20%
Ca 227.546†	1659.0	17.8	mg/L	0.06	17.8	mg/L	0.06	0.31%
Cd 228.802†	-2.0	-0.00016	mg/L	0.000091	-0.00016	mg/L	0.000091	55.67%
Co 228.616†	-9.3	-0.00069	mg/L	0.000350	-0.00069	mg/L	0.000350	50.72%
Cr 267.716†	50.3	0.00006	mg/L	0.000092	0.00006	mg/L	0.000092	162.63%
Cu 327.393†	2594.1	0.0185	mg/L	0.00077	0.0185	mg/L	0.00077	4.13%
Fe 239.562†	4794.4	16.2	mg/L	0.44	16.2	mg/L	0.44	2.74%
Mg 279.077†	3314.0	4.55	mg/L	0.127	4.55	mg/L	0.127	2.79%
Mn 257.610†	256094.6	0.539	mg/L	0.0031	0.539	mg/L	0.0031	0.58%
Mo 202.031†	-1.6	0.00131	mg/L	0.000293	0.00131	mg/L	0.000293	22.39%
Ni 231.604†	-0.6	-0.00020	mg/L	0.000095	-0.00020	mg/L	0.000095	46.67%
Pb 220.353†	-3.3	0.00053	mg/L	0.001368	0.00053	mg/L	0.001368	257.99%
Sb 206.836†	4.0	-0.00071	mg/L	0.002664	-0.00071	mg/L	0.002664	377.37%
Se 196.026†	-13.3	-0.00367	mg/L	0.004062	-0.00367	mg/L	0.004062	110.70%
Si 251.611†	251482.5	7.35	mg/L	0.122	7.35	mg/L	0.122	1.67%
Sn 189.927†	-9.0	-0.00102	mg/L	0.000137	-0.00102	mg/L	0.000137	13.46%
Ti 334.940†	-141.5	-0.00002	mg/L	0.000063	-0.00002	mg/L	0.000063	313.25%
Tl 190.801†	40.0	0.0224	mg/L	0.00412	0.0224	mg/L	0.00412	18.45%
V 290.880†	-113.6	0.00084	mg/L	0.000408	0.00084	mg/L	0.000408	48.43%
Zn 206.200†	2220.2	0.0708	mg/L	0.00085	0.0708	mg/L	0.00085	1.19%
K 766.490†	5359.7	1.94	mg/L	0.021	1.94	mg/L	0.021	1.07%
Na 589.592†	133223.1	9.68	mg/L	0.027	9.68	mg/L	0.027	0.28%
Sr 407.771†	271371.7	0.176	mg/L	0.0007	0.176	mg/L	0.0007	0.40%
Li 670.784†	736.3	0.00835	mg/L	0.001837	0.00835	mg/L	0.001837	22.01%

Approved: April 18, 2011

Sequence No.: 44 **Autosampler Location: 82**
Sample ID: L1104005610 **Date Collected: 4/15/2011 5:59:17 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104005610

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: L1104005610

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4906664.8						30143.79	0.61%
YRADIAL	300162.8						5055.41	1.68%
Ga 417.206	1370074.8						24003.81	1.75%
GaRADIAL	66733.4						1973.93	2.96%
Ag 328.068†	-468.7	-0.00200	mg/L	0.000261	-0.00200	mg/L	0.000261	13.00%
Al 396.153†	212.3	0.0331	mg/L	0.00335	0.0331	mg/L	0.00335	10.13%
As 188.979†	9.4	0.0160	mg/L	0.00382	0.0160	mg/L	0.00382	23.95%
Ba 233.527†	26748.1	0.480	mg/L	0.0062	0.480	mg/L	0.0062	1.30%
Be 234.861†	830.6	0.00035	mg/L	0.000150	0.00035	mg/L	0.000150	43.41%
B 249.677†	1745.3	0.0610	mg/L	0.00120	0.0610	mg/L	0.00120	1.96%
Ca 227.546†	3555.8	38.0	mg/L	0.76	38.0	mg/L	0.76	1.99%
Cd 228.802†	-2.3	-0.00021	mg/L	0.000138	-0.00021	mg/L	0.000138	65.22%
Co 228.616†	-20.3	-0.00111	mg/L	0.000167	-0.00111	mg/L	0.000167	15.01%
Cr 267.716†	112.2	0.00068	mg/L	0.000109	0.00068	mg/L	0.000109	15.99%
Cu 327.393†	11002.6	0.0727	mg/L	0.00076	0.0727	mg/L	0.00076	1.04%
Fe 239.562†	1767.6	5.96	mg/L	0.183	5.96	mg/L	0.183	3.07%
Mg 279.077†	6424.4	8.84	mg/L	0.210	8.84	mg/L	0.210	2.38%
Mn 257.610†	129957.9	0.275	mg/L	0.0026	0.275	mg/L	0.0026	0.96%
Mo 202.031†	-10.3	0.00006	mg/L	0.000335	0.00006	mg/L	0.000335	599.45%
Ni 231.604†	14.0	0.00025	mg/L	0.000094	0.00025	mg/L	0.000094	38.45%
Pb 220.353†	36.6	0.00948	mg/L	0.000523	0.00948	mg/L	0.000523	5.51%
Sb 206.836†	12.9	0.00579	mg/L	0.002243	0.00579	mg/L	0.002243	38.74%
Se 196.026†	-24.2	-0.0110	mg/L	0.00182	-0.0110	mg/L	0.00182	16.61%
Si 251.611†	239439.5	7.00	mg/L	0.088	7.00	mg/L	0.088	1.25%
Sn 189.927†	-1.0	0.00045	mg/L	0.000963	0.00045	mg/L	0.000963	212.29%
Ti 334.940†	-394.0	-0.00016	mg/L	0.000102	-0.00016	mg/L	0.000102	65.42%
Tl 190.801†	60.8	0.0336	mg/L	0.00135	0.0336	mg/L	0.00135	4.01%
V 290.880†	-237.0	-0.00075	mg/L	0.000296	-0.00075	mg/L	0.000296	39.44%
Zn 206.200†	1584.9	0.0508	mg/L	0.00035	0.0508	mg/L	0.00035	0.69%
K 766.490†	7348.9	2.63	mg/L	0.037	2.63	mg/L	0.037	1.40%
Na 589.592†	529336.0	39.4	mg/L	0.52	39.4	mg/L	0.52	1.32%
Sr 407.771†	615048.5	0.406	mg/L	0.0015	0.406	mg/L	0.0015	0.38%
Li 670.784†	1319.4	0.0156	mg/L	0.00183	0.0156	mg/L	0.00183	11.76%

Sequence No.: 45 **Autosampler Location: 83**
Sample ID: L1104020401 **Date Collected: 4/15/2011 6:05:57 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020401

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: L1104020401

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4690738.0						41416.94	0.88%
YRADIAL	298042.0						7165.65	2.40%
Ga 417.206	1308823.5						14414.40	1.10%
GaRADIAL	65505.8						1861.71	2.84%
Ag 328.068†	-416.4	-0.00139	mg/L	0.000506	-0.00139	mg/L	0.000506	36.42%
Al 396.153†	207.4	0.0317	mg/L	0.01964	0.0317	mg/L	0.01964	62.03%
As 188.979†	11.7	0.0189	mg/L	0.00083	0.0189	mg/L	0.00083	4.37%

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Ba 233.527†	1975.9	0.0355	mg/L	0.00038	0.0355	mg/L	0.00038 1.07%
Be 234.861†	100.1	0.00016	mg/L	0.000017	0.00016	mg/L	0.000017 10.62%
B 249.677†	1783.0	0.0344	mg/L	0.00025	0.0344	mg/L	0.00025 0.73%
Ca 227.546†	5434.8	58.1	mg/L	0.66	58.1	mg/L	0.66 1.14%
Cd 228.802†	0.1	-0.00007	mg/L	0.000118	-0.00007	mg/L	0.000118 174.35%
Co 228.616†	-12.9	-0.00040	mg/L	0.000146	-0.00040	mg/L	0.000146 36.87%
Cr 267.716†	148.2	0.00109	mg/L	0.000080	0.00109	mg/L	0.000080 7.30%
Cu 327.393†	1360.2	0.00855	mg/L	0.000223	0.00855	mg/L	0.000223 2.61%
Fe 239.562†	26.7	0.0838	mg/L	0.00391	0.0838	mg/L	0.00391 4.66%
Mg 279.077†	8659.8	11.9	mg/L	0.53	11.9	mg/L	0.53 4.45%
Mn 257.610†	348.0	0.00167	mg/L	0.000039	0.00167	mg/L	0.000039 2.32%
Mo 202.031†	2.1	0.00070	mg/L	0.000120	0.00070	mg/L	0.000120 17.15%
Ni 231.604†	34.9	0.00089	mg/L	0.000001	0.00089	mg/L	0.000001 0.17%
Pb 220.353†	-5.3	0.00285	mg/L	0.000473	0.00285	mg/L	0.000473 16.61%
Sb 206.836†	17.8	0.00936	mg/L	0.001555	0.00936	mg/L	0.001555 16.60%
Se 196.026†	-26.2	-0.00956	mg/L	0.002824	-0.00956	mg/L	0.002824 29.53%
Si 251.611†	47867.4	1.40	mg/L	0.034	1.40	mg/L	0.034 2.45%
Sn 189.927†	-5.7	-0.00040	mg/L	0.001298	-0.00040	mg/L	0.001298 322.40%
Ti 334.940†	-86.9	0.00046	mg/L	0.000034	0.00046	mg/L	0.000034 7.47%
Tl 190.801†	86.0	0.0476	mg/L	0.00267	0.0476	mg/L	0.00267 5.60%
V 290.880†	-345.2	-0.00188	mg/L	0.000777	-0.00188	mg/L	0.000777 41.24%
Zn 206.200†	920.5	0.0297	mg/L	0.00042	0.0297	mg/L	0.00042 1.41%
K 766.490†	7743.2	2.73	mg/L	0.050	2.73	mg/L	0.050 1.85%
Na 589.592†	1021404.0	78.4	mg/L	1.30	78.4	mg/L	1.30 1.66%
Sr 407.771†	356631.7	0.236	mg/L	0.0013	0.236	mg/L	0.0013 0.55%
Li 670.784†	1004.6	0.0117	mg/L	0.00098	0.0117	mg/L	0.00098 8.39%

Sequence No.: 46 **Autosampler Location: 84**
Sample ID: L1104020402 **Date Collected: 4/15/2011 6:12:40 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020402

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: L1104020402

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4744380.8						32283.17	0.68%
YRADIAL	297363.7						6179.95	2.08%
Ga 417.206	1329623.7						16462.80	1.24%
GaRADIAL	66092.5						721.11	1.09%
Ag 328.068†	-239.5	-0.00078	mg/L	0.000552	-0.00078	mg/L	0.000552	71.20%
Al 396.153†	531.2	0.0943	mg/L	0.01568	0.0943	mg/L	0.01568	16.63%
As 188.979†	14.2	0.0226	mg/L	0.00639	0.0226	mg/L	0.00639	28.25%
Ba 233.527†	3204.0	0.0575	mg/L	0.00046	0.0575	mg/L	0.00046	0.79%
Be 234.861†	104.8	0.00017	mg/L	0.000047	0.00017	mg/L	0.000047	28.18%
B 249.677†	1816.5	0.0351	mg/L	0.00075	0.0351	mg/L	0.00075	2.15%
Ca 227.546†	8576.7	91.6	mg/L	0.98	91.6	mg/L	0.98	1.07%
Cd 228.802†	-0.7	-0.00013	mg/L	0.000046	-0.00013	mg/L	0.000046	34.63%
Co 228.616†	-8.7	-0.00017	mg/L	0.000332	-0.00017	mg/L	0.000332	199.93%
Cr 267.716†	163.8	0.00122	mg/L	0.000133	0.00122	mg/L	0.000133	10.91%
Cu 327.393†	-370.2	-0.00285	mg/L	0.000233	-0.00285	mg/L	0.000233	8.20%
Fe 239.562†	37.6	0.120	mg/L	0.0047	0.120	mg/L	0.0047	3.94%
Mg 279.077†	15538.3	21.4	mg/L	0.31	21.4	mg/L	0.31	1.47%
Mn 257.610†	3265.2	0.00882	mg/L	0.000107	0.00882	mg/L	0.000107	1.22%
Mo 202.031†	2.2	0.00071	mg/L	0.000246	0.00071	mg/L	0.000246	34.70%
Ni 231.604†	30.4	0.00074	mg/L	0.000449	0.00074	mg/L	0.000449	60.42%
Pb 220.353†	-10.8	0.00343	mg/L	0.001665	0.00343	mg/L	0.001665	48.50%
Sb 206.836†	22.9	0.0130	mg/L	0.00085	0.0130	mg/L	0.00085	6.49%
Se 196.026†	-29.6	-0.00388	mg/L	0.003731	-0.00388	mg/L	0.003731	96.24%
Si 251.611†	152246.0	4.45	mg/L	0.108	4.45	mg/L	0.108	2.43%
Sn 189.927†	-7.2	-0.00069	mg/L	0.001504	-0.00069	mg/L	0.001504	217.29%
Ti 334.940†	-83.9	0.00080	mg/L	0.000118	0.00080	mg/L	0.000118	14.87%
Tl 190.801†	108.2	0.0589	mg/L	0.00499	0.0589	mg/L	0.00499	8.46%
V 290.880†	-553.8	-0.00323	mg/L	0.000880	-0.00323	mg/L	0.000880	27.24%
Zn 206.200†	126.7	0.00435	mg/L	0.000111	0.00435	mg/L	0.000111	2.55%
K 766.490†	7564.2	2.68	mg/L	0.041	2.68	mg/L	0.041	1.52%

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Na 589.592†	855467.5	64.9	mg/L	0.52	64.9	mg/L	0.52	0.80%
Sr 407.771†	2084476.7	1.38	mg/L	0.012	1.38	mg/L	0.012	0.83%
Li 670.784†	2455.8	0.0296	mg/L	0.00106	0.0296	mg/L	0.00106	3.58%

Sequence No.: 47 **Autosampler Location: 85**
Sample ID: L1104020403 WG361021-01 **Date Collected: 4/15/2011 6:19:24 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020403 WG361021-01

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: L1104020403 WG361021-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4749729.4						1960.39	0.04%
YRADIAL	296020.5						6689.60	2.26%
Ga 417.206	1321265.9						12174.24	0.92%
GaRADIAL	65785.7						1109.03	1.69%
Ag 328.068†	-305.3	-0.00105	mg/L	0.000296	-0.00105	mg/L	0.000296	28.24%
Al 396.153†	46.5	0.00051	mg/L	0.014864	0.00051	mg/L	0.014864	>999.9%
As 188.979†	10.2	0.0158	mg/L	0.00070	0.0158	mg/L	0.00070	4.42%
Ba 233.527†	5697.3	0.102	mg/L	0.0003	0.102	mg/L	0.0003	0.34%
Be 234.861†	109.4	0.00019	mg/L	0.000040	0.00019	mg/L	0.000040	21.31%
B 249.677†	2489.0	0.0474	mg/L	0.00045	0.0474	mg/L	0.00045	0.96%
Ca 227.546†	7081.6	75.7	mg/L	0.63	75.7	mg/L	0.63	0.83%
Cd 228.802†	18.2	0.00112	mg/L	0.000199	0.00112	mg/L	0.000199	17.79%
Co 228.616†	-10.0	-0.00025	mg/L	0.000226	-0.00025	mg/L	0.000226	88.84%
Cr 267.716†	204.8	0.00156	mg/L	0.000143	0.00156	mg/L	0.000143	9.15%
Cu 327.393†	-183.7	-0.00162	mg/L	0.000663	-0.00162	mg/L	0.000663	40.90%
Fe 239.562†	24.5	0.0763	mg/L	0.00396	0.0763	mg/L	0.00396	5.19%
Mg 279.077†	14220.3	19.6	mg/L	0.33	19.6	mg/L	0.33	1.67%
Mn 257.610†	9449.4	0.0217	mg/L	0.00005	0.0217	mg/L	0.00005	0.24%
Mo 202.031†	19.6	0.00211	mg/L	0.000309	0.00211	mg/L	0.000309	14.64%
Ni 231.604†	44.8	0.00120	mg/L	0.000074	0.00120	mg/L	0.000074	6.17%
Pb 220.353†	-9.9	0.00284	mg/L	0.000544	0.00284	mg/L	0.000544	19.11%
Sb 206.836†	17.2	0.00892	mg/L	0.002546	0.00892	mg/L	0.002546	28.55%
Se 196.026†	-30.4	-0.00855	mg/L	0.006740	-0.00855	mg/L	0.006740	78.85%
Si 251.611†	95080.4	2.78	mg/L	0.043	2.78	mg/L	0.043	1.54%
Sn 189.927†	-8.3	-0.00089	mg/L	0.001658	-0.00089	mg/L	0.001658	186.08%
Ti 334.940†	-563.8	-0.00001	mg/L	0.000241	-0.00001	mg/L	0.000241	>999.9%
Tl 190.801†	98.2	0.0539	mg/L	0.00148	0.0539	mg/L	0.00148	2.74%
V 290.880†	-541.2	-0.00315	mg/L	0.001316	-0.00315	mg/L	0.001316	41.72%
Zn 206.200†	113.2	0.00391	mg/L	0.000130	0.00391	mg/L	0.000130	3.32%
K 766.490†	9096.7	3.21	mg/L	0.101	3.21	mg/L	0.101	3.16%
Na 589.592†	1281997.6	100	mg/L	1.6	100	mg/L	1.6	1.57%
Sr 407.771†	1776477.4	1.18	mg/L	0.006	1.18	mg/L	0.006	0.48%
Li 670.784†	1481.7	0.0176	mg/L	0.00161	0.0176	mg/L	0.00161	9.15%

Sequence No.: 48 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/15/2011 6:26:08 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4862982.1						11425.10	0.23%
YRADIAL	291960.4						3759.59	1.29%
Ga 417.206	1312005.5						1945.15	0.15%

Approved: April 18, 2011

GaRADIAL	64632.6				1676.81	2.59%
Ag 328.068†	78440.5	0.377 mg/L	0.0034	0.377 mg/L	0.0034	0.91%
QC value within limits for Ag 328.068 Recovery = 94.25%						
Al 396.153†	50660.5	9.78 mg/L	0.020	9.78 mg/L	0.020	0.21%
QC value within limits for Al 396.153 Recovery = 97.80%						
As 188.979†	235.8	0.418 mg/L	0.0078	0.418 mg/L	0.0078	1.88%
QC value within limits for As 188.979 Recovery = 104.42%						
Ba 233.527†	53223.7	0.957 mg/L	0.0096	0.957 mg/L	0.0096	1.00%
QC value within limits for Ba 233.527 Recovery = 95.67%						
Be 234.861†	24563.2	0.0464 mg/L	0.00032	0.0464 mg/L	0.00032	0.69%
QC value within limits for Be 234.861 Recovery = 92.77%						
B 249.677†	25355.7	0.476 mg/L	0.0051	0.476 mg/L	0.0051	1.07%
QC value within limits for B 249.677 Recovery = 95.24%						
Ca 227.546†	899.0	9.95 mg/L	0.125	9.95 mg/L	0.125	1.26%
QC value within limits for Ca 227.546 Recovery = 99.49%						
Cd 228.802†	745.5	0.0474 mg/L	0.00023	0.0474 mg/L	0.00023	0.48%
QC value within limits for Cd 228.802 Recovery = 94.80%						
Co 228.616†	3448.3	0.191 mg/L	0.0011	0.191 mg/L	0.0011	0.56%
QC value within limits for Co 228.616 Recovery = 95.35%						
Cr 267.716†	56553.1	0.474 mg/L	0.0048	0.474 mg/L	0.0048	1.01%
QC value within limits for Cr 267.716 Recovery = 94.83%						
Cu 327.393†	70276.6	0.464 mg/L	0.0052	0.464 mg/L	0.0052	1.13%
QC value within limits for Cu 327.393 Recovery = 92.85%						
Fe 239.562†	1168.1	3.93 mg/L	0.096	3.93 mg/L	0.096	2.43%
QC value within limits for Fe 239.562 Recovery = 98.35%						
Mg 279.077†	7172.2	9.88 mg/L	0.188	9.88 mg/L	0.188	1.90%
QC value within limits for Mg 279.077 Recovery = 98.79%						
Mn 257.610†	229067.1	0.485 mg/L	0.0041	0.485 mg/L	0.0041	0.84%
QC value within limits for Mn 257.610 Recovery = 96.92%						
Mo 202.031†	11952.1	0.960 mg/L	0.0044	0.960 mg/L	0.0044	0.46%
QC value within limits for Mo 202.031 Recovery = 96.05%						
Ni 231.604†	15497.6	0.486 mg/L	0.0036	0.486 mg/L	0.0036	0.75%
QC value within limits for Ni 231.604 Recovery = 97.22%						
Pb 220.353†	2527.1	0.484 mg/L	0.0017	0.484 mg/L	0.0017	0.35%
QC value within limits for Pb 220.353 Recovery = 96.78%						
Sb 206.836†	1582.5	1.15 mg/L	0.005	1.15 mg/L	0.005	0.45%
QC value within limits for Sb 206.836 Recovery = 95.94%						
Se 196.026†	486.8	0.388 mg/L	0.0042	0.388 mg/L	0.0042	1.09%
QC value within limits for Se 196.026 Recovery = 97.02%						
Si 251.611†	159620.9	4.65 mg/L	0.048	4.65 mg/L	0.048	1.03%
QC value within limits for Si 251.611 Recovery = 93.04%						
Sn 189.927†	5275.3	0.963 mg/L	0.0030	0.963 mg/L	0.0030	0.31%
QC value within limits for Sn 189.927 Recovery = 96.27%						
Ti 334.940†	713768.3	0.956 mg/L	0.0103	0.956 mg/L	0.0103	1.08%
QC value within limits for Ti 334.940 Recovery = 95.57%						
Tl 190.801†	755.2	0.495 mg/L	0.0038	0.495 mg/L	0.0038	0.76%
QC value within limits for Tl 190.801 Recovery = 99.09%						
V 290.880†	147434.5	0.953 mg/L	0.0074	0.953 mg/L	0.0074	0.77%
QC value within limits for V 290.880 Recovery = 95.31%						
Zn 206.200†	29948.1	0.958 mg/L	0.0048	0.958 mg/L	0.0048	0.50%
QC value within limits for Zn 206.200 Recovery = 95.85%						
K 766.490†	132418.8	49.0 mg/L	0.14	49.0 mg/L	0.14	0.29%
QC value within limits for K 766.490 Recovery = 98.10%						
Na 589.592†	646229.3	48.4 mg/L	0.81	48.4 mg/L	0.81	1.68%
QC value within limits for Na 589.592 Recovery = 96.82%						
Sr 407.771†	1488750.4	0.986 mg/L	0.0026	0.986 mg/L	0.0026	0.27%
QC value within limits for Sr 407.771 Recovery = 98.62%						
Li 670.784†	80440.6	0.994 mg/L	0.0081	0.994 mg/L	0.0081	0.81%
QC value within limits for Li 670.784 Recovery = 99.44%						

All analyte(s) passed QC.

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Sequence No.: 49 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/15/2011 6:32:49 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Approved: April 18, 2011

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4917467.9						16625.36	0.34%
YRADIAL	296096.9						5158.26	1.74%
Ga 417.206	1300092.2						5905.61	0.45%
GaRADIAL	64748.6						1805.66	2.79%
Ag 328.068†	-839.9	-0.00336	mg/L	0.000296	-0.00336	mg/L	0.000296	8.81%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	24.5	-0.00373	mg/L	0.008008	-0.00373	mg/L	0.008008	214.73%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	2.8	0.00406	mg/L	0.003026	0.00406	mg/L	0.003026	74.58%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-4.9	-0.00001	mg/L	0.000128	-0.00001	mg/L	0.000128	>999.9%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	67.8	0.00012	mg/L	0.000021	0.00012	mg/L	0.000021	17.50%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	183.1	0.00439	mg/L	0.000203	0.00439	mg/L	0.000203	4.64%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	1.0	0.0292	mg/L	0.05106	0.0292	mg/L	0.05106	175.06%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-1.3	-0.00011	mg/L	0.000105	-0.00011	mg/L	0.000105	95.66%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-7.1	-0.00006	mg/L	0.000149	-0.00006	mg/L	0.000149	255.87%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	23.8	0.00005	mg/L	0.000096	0.00005	mg/L	0.000096	186.79%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-136.4	-0.00132	mg/L	0.000459	-0.00132	mg/L	0.000459	34.81%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-1.6	-0.0113	mg/L	0.00334	-0.0113	mg/L	0.00334	29.45%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-2.8	-0.00605	mg/L	0.004300	-0.00605	mg/L	0.004300	71.12%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	20.8	0.00005	mg/L	0.000004	-0.00005	mg/L	0.000004	8.21%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-7.0	-0.00004	mg/L	0.000339	-0.00004	mg/L	0.000339	930.91%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	9.1	0.00012	mg/L	0.000212	0.00012	mg/L	0.000212	178.06%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	4.1	0.00186	mg/L	0.001439	0.00186	mg/L	0.001439	77.36%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	5.8	0.00061	mg/L	0.000516	0.00061	mg/L	0.000516	84.78%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.5	-0.00442	mg/L	0.002597	-0.00442	mg/L	0.002597	58.71%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	13.9	0.00120	mg/L	0.000064	0.00120	mg/L	0.000064	5.33%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	4.7	0.00149	mg/L	0.000666	0.00149	mg/L	0.000666	44.62%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-19.5	-0.00003	mg/L	0.000174	-0.00003	mg/L	0.000174	513.47%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-2.9	-0.00447	mg/L	0.001269	-0.00447	mg/L	0.001269	28.36%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	51.3	0.00068	mg/L	0.000738	0.00068	mg/L	0.000738	109.07%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	9.3	0.00059	mg/L	0.000072	0.00059	mg/L	0.000072	12.20%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	201.1	0.0748	mg/L	0.01569	0.0748	mg/L	0.01569	20.98%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	703.5	0.0552	mg/L	0.00201	0.0552	mg/L	0.00201	3.63%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	-4.5	-0.00004	mg/L	0.000031	-0.00004	mg/L	0.000031	85.50%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	167.2	0.00131	mg/L	0.000962	0.00131	mg/L	0.000962	73.53%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

Sequence No.: 50 **Autosampler Location: 86**
Sample ID: L1104020404S WG361021-04 **Date Collected: 4/15/2011 6:39:24 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**

Approved: April 18, 2011

Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020404S WG361021-04

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: L1104020404S WG361021-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4689383.3						52094.33	1.11%
YRADIAL	292840.6						5877.60	2.01%
Ga 417.206	1302875.7						16214.83	1.24%
GaRADIAL	65766.3						1126.30	1.71%
Ag 328.068†	39673.3	0.191	mg/L	0.0043	0.191	mg/L	0.0043	2.27%
Al 396.153†	25456.9	4.91	mg/L	0.034	4.91	mg/L	0.034	0.70%
As 188.979†	130.1	0.229	mg/L	0.0013	0.229	mg/L	0.0013	0.56%
Ba 233.527†	32221.9	0.579	mg/L	0.0116	0.579	mg/L	0.0116	2.01%
Be 234.861†	12654.1	0.0239	mg/L	0.00067	0.0239	mg/L	0.00067	2.79%
B 249.677†	54327.7	1.01	mg/L	0.020	1.01	mg/L	0.020	2.00%
Ca 227.546†	7344.6	78.6	mg/L	0.69	78.6	mg/L	0.69	0.88%
Cd 228.802†	391.3	0.0248	mg/L	0.00029	0.0248	mg/L	0.00029	1.16%
Co 228.616†	1728.7	0.0957	mg/L	0.00115	0.0957	mg/L	0.00115	1.20%
Cr 267.716†	28886.0	0.242	mg/L	0.0049	0.242	mg/L	0.0049	2.03%
Cu 327.393†	34909.6	0.230	mg/L	0.0052	0.230	mg/L	0.0052	2.24%
Fe 239.562†	603.7	2.03	mg/L	0.030	2.03	mg/L	0.030	1.46%
Mg 279.077†	17506.1	24.1	mg/L	0.25	24.1	mg/L	0.25	1.04%
Mn 257.610†	126018.3	0.268	mg/L	0.0053	0.268	mg/L	0.0053	1.97%
Mo 202.031†	6137.8	0.493	mg/L	0.0063	0.493	mg/L	0.0063	1.27%
Ni 231.604†	7731.6	0.242	mg/L	0.0025	0.242	mg/L	0.0025	1.04%
Pb 220.353†	1254.4	0.244	mg/L	0.0040	0.244	mg/L	0.0040	1.62%
Sb 206.836†	817.1	0.593	mg/L	0.0072	0.593	mg/L	0.0072	1.22%
Se 196.026†	217.6	0.190	mg/L	0.0020	0.190	mg/L	0.0020	1.04%
Si 251.611†	176708.1	5.16	mg/L	0.108	5.16	mg/L	0.108	2.09%
Sn 189.927†	2683.1	0.490	mg/L	0.0049	0.490	mg/L	0.0049	1.00%
Ti 334.940†	370416.9	0.497	mg/L	0.0125	0.497	mg/L	0.0125	2.52%
Tl 190.801†	461.9	0.294	mg/L	0.0041	0.294	mg/L	0.0041	1.38%
V 290.880†	75482.3	0.488	mg/L	0.0097	0.488	mg/L	0.0097	2.00%
Zn 206.200†	14792.9	0.474	mg/L	0.0077	0.474	mg/L	0.0077	1.63%
K 766.490†	75794.9	27.7	mg/L	0.21	27.7	mg/L	0.21	0.77%
Na 589.592†	1551420.0	124	mg/L	2.7	124	mg/L	2.7	2.16%
Sr 407.771†	2459586.4	1.63	mg/L	0.047	1.63	mg/L	0.047	2.86%
Li 670.784†	41973.3	0.518	mg/L	0.0007	0.518	mg/L	0.0007	0.14%

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Sequence No.: 51 **Autosampler Location: 87**
Sample ID: L1104020405SD WG361021-05 **Date Collected: 4/15/2011 6:46:08 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020405SD WG361021-05

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: L1104020405SD WG361021-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4726437.8						41393.80	0.88%
YRADIAL	295418.8						2768.27	0.94%
Ga 417.206	1307521.1						8171.92	0.62%
GaRADIAL	66259.8						498.39	0.75%
Ag 328.068†	39323.2	0.189	mg/L	0.0017	0.189	mg/L	0.0017	0.91%
Al 396.153†	25069.4	4.84	mg/L	0.011	4.84	mg/L	0.011	0.23%
As 188.979†	128.7	0.226	mg/L	0.0026	0.226	mg/L	0.0026	1.13%
Ba 233.527†	31879.8	0.573	mg/L	0.0039	0.573	mg/L	0.0039	0.69%
Be 234.861†	12569.6	0.0237	mg/L	0.00024	0.0237	mg/L	0.00024	1.01%
B 249.677†	54351.3	1.01	mg/L	0.010	1.01	mg/L	0.010	0.99%
Ca 227.546†	7373.0	78.9	mg/L	0.71	78.9	mg/L	0.71	0.91%
Cd 228.802†	382.7	0.0243	mg/L	0.00008	0.0243	mg/L	0.00008	0.32%

Approved: April 18, 2011

Co 228.616†	1701.2	0.0942 mg/L	0.00099	0.0942 mg/L	0.00099	1.05%
Cr 267.716†	28401.0	0.238 mg/L	0.0008	0.238 mg/L	0.0008	0.32%
Cu 327.393†	34688.3	0.229 mg/L	0.0032	0.229 mg/L	0.0032	1.40%
Fe 239.562†	593.4	1.99 mg/L	0.015	1.99 mg/L	0.015	0.75%
Mg 279.077†	17447.4	24.0 mg/L	0.16	24.0 mg/L	0.16	0.67%
Mn 257.610†	124678.5	0.266 mg/L	0.0021	0.266 mg/L	0.0021	0.79%
Mo 202.031†	6056.6	0.487 mg/L	0.0051	0.487 mg/L	0.0051	1.05%
Ni 231.604†	7613.3	0.239 mg/L	0.0026	0.239 mg/L	0.0026	1.07%
Pb 220.353†	1236.6	0.241 mg/L	0.0029	0.241 mg/L	0.0029	1.21%
Sb 206.836†	811.5	0.589 mg/L	0.0076	0.589 mg/L	0.0076	1.29%
Se 196.026†	219.0	0.191 mg/L	0.0010	0.191 mg/L	0.0010	0.50%
Si 251.611†	176490.5	5.15 mg/L	0.047	5.15 mg/L	0.047	0.92%
Sn 189.927†	2653.6	0.485 mg/L	0.0054	0.485 mg/L	0.0054	1.12%
Ti 334.940†	365690.0	0.490 mg/L	0.0047	0.490 mg/L	0.0047	0.96%
Tl 190.801†	454.8	0.290 mg/L	0.0089	0.290 mg/L	0.0089	3.08%
V 290.880†	74460.7	0.482 mg/L	0.0042	0.482 mg/L	0.0042	0.87%
Zn 206.200†	14650.4	0.469 mg/L	0.0034	0.469 mg/L	0.0034	0.73%
K 766.490†	75781.2	27.7 mg/L	0.20	27.7 mg/L	0.20	0.73%
Na 589.592†	1522761.1	121 mg/L	1.9	121 mg/L	1.9	1.55%
Sr 407.771†	2412836.6	1.60 mg/L	0.018	1.60 mg/L	0.018	1.12%
Li 670.784†	41839.7	0.517 mg/L	0.0030	0.517 mg/L	0.0030	0.58%

Sequence No.: 52 **Autosampler Location: 88**
Sample ID: L1104020406 **Date Collected: 4/15/2011 6:52:51 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020406

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: L1104020406

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4650363.9						67238.17	1.45%
YRADIAL	290347.8						1863.08	0.64%
Ga 417.206	1320167.1						15945.34	1.21%
GaRADIAL	64525.1						1199.21	1.86%
Ag 328.068†	-369.9	-0.00131	mg/L	0.000206	-0.00131	mg/L	0.000206	15.72%
Al 396.153†	731.6	0.133	mg/L	0.0065	0.133	mg/L	0.0065	4.90%
As 188.979†	16.2	0.0260	mg/L	0.00524	0.0260	mg/L	0.00524	20.15%
Ba 233.527†	2724.2	0.0489	mg/L	0.00050	0.0489	mg/L	0.00050	1.02%
Be 234.861†	127.1	0.00019	mg/L	0.000016	0.00019	mg/L	0.000016	8.51%
B 249.677†	2354.4	0.0456	mg/L	0.00060	0.0456	mg/L	0.00060	1.33%
Ca 227.546†	9470.0	101	mg/L	1.2	101	mg/L	1.2	1.15%
Cd 228.802†	-3.1	-0.00030	mg/L	0.000108	-0.00030	mg/L	0.000108	36.32%
Co 228.616†	-6.0	-0.00002	mg/L	0.000205	-0.00002	mg/L	0.000205	959.79%
Cr 267.716†	142.6	0.00101	mg/L	0.000129	0.00101	mg/L	0.000129	12.75%
Cu 327.393†	233.1	0.00115	mg/L	0.000668	0.00115	mg/L	0.000668	58.16%
Fe 239.562†	77.2	0.254	mg/L	0.0077	0.254	mg/L	0.0077	3.02%
Mg 279.077†	10895.8	15.0	mg/L	0.29	15.0	mg/L	0.29	1.92%
Mn 257.610†	39557.4	0.0846	mg/L	0.00224	0.0846	mg/L	0.00224	2.64%
Mo 202.031†	16.4	0.00187	mg/L	0.000443	0.00187	mg/L	0.000443	23.62%
Ni 231.604†	90.2	0.00262	mg/L	0.000107	0.00262	mg/L	0.000107	4.09%
Pb 220.353†	-12.7	0.00353	mg/L	0.000531	0.00353	mg/L	0.000531	15.07%
Sb 206.836†	24.4	0.0141	mg/L	0.00411	0.0141	mg/L	0.00411	29.02%
Se 196.026†	-32.5	-0.00376	mg/L	0.004877	-0.00376	mg/L	0.004877	129.57%
Si 251.611†	208469.9	6.09	mg/L	0.151	6.09	mg/L	0.151	2.48%
Sn 189.927†	-7.5	-0.00073	mg/L	0.001260	-0.00073	mg/L	0.001260	172.09%
Ti 334.940†	777.0	0.00204	mg/L	0.000284	0.00204	mg/L	0.000284	13.91%
Tl 190.801†	112.0	0.0607	mg/L	0.00264	0.0607	mg/L	0.00264	4.35%
V 290.880†	-233.9	-0.00115	mg/L	0.000438	-0.00115	mg/L	0.000438	37.93%
Zn 206.200†	248.9	0.00824	mg/L	0.000069	0.00824	mg/L	0.000069	0.84%
K 766.490†	11642.7	4.21	mg/L	0.048	4.21	mg/L	0.048	1.14%
Na 589.592†	248880.7	18.2	mg/L	0.28	18.2	mg/L	0.28	1.52%
Sr 407.771†	1334212.8	0.885	mg/L	0.0082	0.885	mg/L	0.0082	0.93%
Li 670.784†	1133.0	0.0133	mg/L	0.00059	0.0133	mg/L	0.00059	4.42%

Approved: April 18, 2011

Sequence No.: 53 **Autosampler Location: 89**
Sample ID: L1104020407 **Date Collected: 4/15/2011 6:59:34 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020407

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: L1104020407

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4746089.1						53031.01	1.12%
YRADIAL	291373.5						4141.78	1.42%
Ga 417.206	1323178.3						19292.76	1.46%
GaRADIAL	64718.6						563.50	0.87%
Ag 328.068†	-229.4	-0.00053	mg/L	0.000435	-0.00053	mg/L	0.000435	81.64%
Al 396.153†	2424.2	0.461	mg/L	0.0112	0.461	mg/L	0.0112	2.43%
As 188.979†	16.1	0.0254	mg/L	0.00172	0.0254	mg/L	0.00172	6.76%
Ba 233.527†	2381.9	0.0428	mg/L	0.00057	0.0428	mg/L	0.00057	1.33%
Be 234.861†	146.4	0.00020	mg/L	0.000025	0.00020	mg/L	0.000025	12.39%
B 249.677†	1341.4	0.0268	mg/L	0.00059	0.0268	mg/L	0.00059	2.20%
Ca 227.546†	11337.4	121	mg/L	2.4	121	mg/L	2.4	1.99%
Cd 228.802†	-3.6	-0.00033	mg/L	0.000205	-0.00033	mg/L	0.000205	61.31%
Co 228.616†	-9.2	-0.00021	mg/L	0.000213	-0.00021	mg/L	0.000213	103.61%
Cr 267.716†	303.3	0.00238	mg/L	0.000026	0.00238	mg/L	0.000026	1.08%
Cu 327.393†	-583.8	-0.00422	mg/L	0.000357	-0.00422	mg/L	0.000357	8.46%
Fe 239.562†	95.5	0.316	mg/L	0.0115	0.316	mg/L	0.0115	3.63%
Mg 279.077†	14342.8	19.8	mg/L	0.30	19.8	mg/L	0.30	1.52%
Mn 257.610†	7144.4	0.0162	mg/L	0.00020	0.0162	mg/L	0.00020	1.22%
Mo 202.031†	3.6	0.00084	mg/L	0.000347	0.00084	mg/L	0.000347	41.45%
Ni 231.604†	32.6	0.00081	mg/L	0.000403	0.00081	mg/L	0.000403	49.84%
Pb 220.353†	-19.8	0.00315	mg/L	0.002296	0.00315	mg/L	0.002296	72.90%
Sb 206.836†	24.6	0.0143	mg/L	0.00246	0.0143	mg/L	0.00246	17.20%
Se 196.026†	-25.8	0.00659	mg/L	0.004650	0.00659	mg/L	0.004650	70.62%
Si 251.611†	186790.0	5.46	mg/L	0.114	5.46	mg/L	0.114	2.10%
Sn 189.927†	-8.6	-0.00094	mg/L	0.001130	-0.00094	mg/L	0.001130	120.67%
Ti 334.940†	2853.4	0.00502	mg/L	0.000834	0.00502	mg/L	0.000834	16.60%
Tl 190.801†	114.2	0.0602	mg/L	0.00612	0.0602	mg/L	0.00612	10.17%
V 290.880†	-387.5	-0.00214	mg/L	0.001449	-0.00214	mg/L	0.001449	67.65%
Zn 206.200†	154.0	0.00521	mg/L	0.000157	0.00521	mg/L	0.000157	3.02%
K 766.490†	3443.3	1.22	mg/L	0.035	1.22	mg/L	0.035	2.85%
Na 589.592†	486470.3	36.1	mg/L	0.51	36.1	mg/L	0.51	1.42%
Sr 407.771†	550474.7	0.365	mg/L	0.0028	0.365	mg/L	0.0028	0.78%
Li 670.784†	569.9	0.00629	mg/L	0.001051	0.00629	mg/L	0.001051	16.71%

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Sequence No.: 54 **Autosampler Location: 90**
Sample ID: L1104020408 **Date Collected: 4/15/2011 7:06:16 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020408

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: L1104020408

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4740926.8						19302.59	0.41%
YRADIAL	294272.9						5151.80	1.75%
Ga 417.206	1330566.7						2821.62	0.21%
GaRADIAL	65523.9						954.87	1.46%
Ag 328.068†	-301.5	-0.00087	mg/L	0.000567	-0.00087	mg/L	0.000567	65.46%
Al 396.153†	231.4	0.0363	mg/L	0.01311	0.0363	mg/L	0.01311	36.11%
As 188.979†	17.6	0.0280	mg/L	0.00423	0.0280	mg/L	0.00423	15.10%
Ba 233.527†	2713.7	0.0487	mg/L	0.00012	0.0487	mg/L	0.00012	0.25%

Approved: April 18, 2011

Be 234.861†	113.0	0.00020	mg/L	0.000014	0.00020	mg/L	0.000014	6.92%
B 249.677†	1428.0	0.0275	mg/L	0.00009	0.0275	mg/L	0.00009	0.33%
Ca 227.546†	11867.0	127	mg/L	0.6	127	mg/L	0.6	0.44%
Cd 228.802†	-1.7	-0.00022	mg/L	0.000179	-0.00022	mg/L	0.000179	81.78%
Co 228.616†	-8.4	-0.00014	mg/L	0.000054	-0.00014	mg/L	0.000054	37.81%
Cr 267.716†	89.5	0.00060	mg/L	0.000165	0.00060	mg/L	0.000165	27.68%
Cu 327.393†	-473.7	-0.00353	mg/L	0.000612	-0.00353	mg/L	0.000612	17.30%
Fe 239.562†	10.0	0.0271	mg/L	0.00699	0.0271	mg/L	0.00699	25.79%
Mg 279.077†	15724.7	21.7	mg/L	0.53	21.7	mg/L	0.53	2.44%
Mn 257.610†	4637.4	0.0109	mg/L	0.00003	0.0109	mg/L	0.00003	0.30%
Mo 202.031†	-3.7	0.00023	mg/L	0.000402	0.00023	mg/L	0.000402	174.15%
Ni 231.604†	9.4	0.00008	mg/L	0.000058	0.00008	mg/L	0.000058	72.03%
Pb 220.353†	-15.5	0.00422	mg/L	0.000248	0.00422	mg/L	0.000248	5.88%
Sb 206.836†	18.7	0.00999	mg/L	0.001668	0.00999	mg/L	0.001668	16.69%
Se 196.026†	-39.8	-0.00328	mg/L	0.002292	-0.00328	mg/L	0.002292	69.93%
Si 251.611†	176650.3	5.16	mg/L	0.056	5.16	mg/L	0.056	1.08%
Sn 189.927†	-13.0	-0.00174	mg/L	0.000605	-0.00174	mg/L	0.000605	34.73%
Ti 334.940†	-1136.2	-0.00026	mg/L	0.000215	-0.00026	mg/L	0.000215	82.17%
Tl 190.801†	111.3	0.0578	mg/L	0.00311	0.0578	mg/L	0.00311	5.39%
V 290.880†	-435.2	-0.00247	mg/L	0.000447	-0.00247	mg/L	0.000447	18.06%
Zn 206.200†	130.2	0.00445	mg/L	0.000176	0.00445	mg/L	0.000176	3.96%
K 766.490†	3724.7	1.32	mg/L	0.053	1.32	mg/L	0.053	4.00%
Na 589.592†	499172.7	37.1	mg/L	0.33	37.1	mg/L	0.33	0.90%
Sr 407.771†	573100.6	0.380	mg/L	0.0040	0.380	mg/L	0.0040	1.07%
Li 670.784†	610.2	0.00679	mg/L	0.000101	0.00679	mg/L	0.000101	1.48%

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Sequence No.: 55 **Autosampler Location: 91**
Sample ID: L1104020409 **Date Collected: 4/15/2011 7:12:58 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020409

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: L1104020409

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4663991.2						24949.22	0.53%
YRADIAL	289261.3						3855.88	1.33%
Ga 417.206	1297007.7						11958.74	0.92%
GaRADIAL	64521.1						1255.01	1.95%
Ag 328.068†	-277.7	-0.00092	mg/L	0.000156	-0.00092	mg/L	0.000156	16.94%
Al 396.153†	2493.5	0.474	mg/L	0.0159	0.474	mg/L	0.0159	3.35%
As 188.979†	13.3	0.0211	mg/L	0.00527	0.0211	mg/L	0.00527	24.97%
Ba 233.527†	4574.5	0.0821	mg/L	0.00072	0.0821	mg/L	0.00072	0.88%
Be 234.861†	327.4	0.00032	mg/L	0.000167	0.00032	mg/L	0.000167	52.20%
B 249.677†	1268.9	0.0323	mg/L	0.00061	0.0323	mg/L	0.00061	1.90%
Ca 227.546†	9345.5	99.8	mg/L	1.16	99.8	mg/L	1.16	1.16%
Cd 228.802†	3.2	0.00013	mg/L	0.000183	0.00013	mg/L	0.000183	145.98%
Co 228.616†	237.3	0.0135	mg/L	0.00034	0.0135	mg/L	0.00034	2.48%
Cr 267.716†	243.6	0.00160	mg/L	0.000126	0.00160	mg/L	0.000126	7.88%
Cu 327.393†	1474.3	0.00951	mg/L	0.000789	0.00951	mg/L	0.000789	8.30%
Fe 239.562†	538.5	1.81	mg/L	0.015	1.81	mg/L	0.015	0.86%
Mg 279.077†	10402.1	14.3	mg/L	0.18	14.3	mg/L	0.18	1.26%
Mn 257.610†	314190.0	0.660	mg/L	0.0011	0.660	mg/L	0.0011	0.16%
Mo 202.031†	20.6	0.00240	mg/L	0.000245	0.00240	mg/L	0.000245	10.19%
Ni 231.604†	192.0	0.00582	mg/L	0.000271	0.00582	mg/L	0.000271	4.66%
Pb 220.353†	14.8	0.00853	mg/L	0.000524	0.00853	mg/L	0.000524	6.14%
Sb 206.836†	23.3	0.0134	mg/L	0.00027	0.0134	mg/L	0.00027	2.02%
Se 196.026†	-33.4	-0.00455	mg/L	0.004675	-0.00455	mg/L	0.004675	102.74%
Si 251.611†	119224.7	3.49	mg/L	0.033	3.49	mg/L	0.033	0.96%
Sn 189.927†	-8.1	-0.00085	mg/L	0.000441	-0.00085	mg/L	0.000441	52.20%
Ti 334.940†	8152.6	0.0119	mg/L	0.00023	0.0119	mg/L	0.00023	1.94%
Tl 190.801†	105.2	0.0573	mg/L	0.00036	0.0573	mg/L	0.00036	0.63%
V 290.880†	-174.9	-0.00065	mg/L	0.000297	-0.00065	mg/L	0.000297	45.36%
Zn 206.200†	1192.2	0.0383	mg/L	0.00034	0.0383	mg/L	0.00034	0.90%
K 766.490†	8229.7	2.91	mg/L	0.038	2.91	mg/L	0.038	1.29%
Na 589.592†	1009128.6	77.4	mg/L	1.19	77.4	mg/L	1.19	1.54%

Approved: April 18, 2011

Sr 407.771†	557447.5	0.369	mg/L	0.0039	0.369	mg/L	0.0039	1.05%
Li 670.784†	1152.8	0.0135	mg/L	0.00051	0.0135	mg/L	0.00051	3.81%

Sequence No.: 56 **Autosampler Location: 92**
Sample ID: L1104020410 **Date Collected: 4/15/2011 7:19:41 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020410

Analyte	Back Pressure	Flow
All	195.0 kPa	0.50 L/min

Mean Data: L1104020410

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4628326.7						40231.52	0.87%
YRADIAL	287682.4						2453.38	0.85%
Ga 417.206	1308464.3						15570.68	1.19%
GaRADIAL	63854.2						1239.08	1.94%
Ag 328.068†	-129.5	-0.00018	mg/L	0.000772	-0.00018	mg/L	0.000772	425.89%
Al 396.153†	-24.8	-0.0132	mg/L	0.00792	-0.0132	mg/L	0.00792	60.02%
As 188.979†	13.3	0.0210	mg/L	0.00328	0.0210	mg/L	0.00328	15.61%
Ba 233.527†	4436.0	0.0796	mg/L	0.00097	0.0796	mg/L	0.00097	1.22%
Be 234.861†	194.7	0.00021	mg/L	0.000019	0.00021	mg/L	0.000019	8.99%
B 249.677†	1302.9	0.0304	mg/L	0.00040	0.0304	mg/L	0.00040	1.32%
Ca 227.546†	9412.2	101	mg/L	1.4	101	mg/L	1.4	1.41%
Cd 228.802†	-0.5	-0.00011	mg/L	0.000197	-0.00011	mg/L	0.000197	172.07%
Co 228.616†	222.4	0.0127	mg/L	0.00038	0.0127	mg/L	0.00038	2.99%
Cr 267.716†	135.5	0.00070	mg/L	0.000044	0.00070	mg/L	0.000044	6.37%
Cu 327.393†	-543.5	-0.00387	mg/L	0.000536	-0.00387	mg/L	0.000536	13.84%
Fe 239.562†	339.5	1.14	mg/L	0.022	1.14	mg/L	0.022	1.90%
Mg 279.077†	10627.5	14.6	mg/L	0.31	14.6	mg/L	0.31	2.15%
Mn 257.610†	320923.6	0.674	mg/L	0.0087	0.674	mg/L	0.0087	1.29%
Mo 202.031†	19.1	0.00226	mg/L	0.000556	0.00226	mg/L	0.000556	24.63%
Ni 231.604†	140.2	0.00419	mg/L	0.000049	0.00419	mg/L	0.000049	1.16%
Pb 220.353†	-22.4	0.00156	mg/L	0.001212	0.00156	mg/L	0.001212	77.75%
Sb 206.836†	18.9	0.0102	mg/L	0.00318	0.0102	mg/L	0.00318	31.21%
Se 196.026†	-30.7	-0.00241	mg/L	0.007249	-0.00241	mg/L	0.007249	301.12%
Si 251.611†	99662.7	2.91	mg/L	0.061	2.91	mg/L	0.061	2.11%
Sn 189.927†	-6.3	-0.00051	mg/L	0.000608	-0.00051	mg/L	0.000608	118.19%
Ti 334.940†	-1174.3	-0.00058	mg/L	0.000154	-0.00058	mg/L	0.000154	26.81%
Tl 190.801†	110.3	0.0604	mg/L	0.00303	0.0604	mg/L	0.00303	5.01%
V 290.880†	-227.3	-0.00104	mg/L	0.000857	-0.00104	mg/L	0.000857	82.11%
Zn 206.200†	738.1	0.0238	mg/L	0.00010	0.0238	mg/L	0.00010	0.44%
K 766.490†	8138.2	2.88	mg/L	0.050	2.88	mg/L	0.050	1.74%
Na 589.592†	1042497.4	80.1	mg/L	0.86	80.1	mg/L	0.86	1.08%
Sr 407.771†	567610.4	0.376	mg/L	0.0019	0.376	mg/L	0.0019	0.50%
Li 670.784†	1241.5	0.0146	mg/L	0.00137	0.0146	mg/L	0.00137	9.41%

Sequence No.: 57 **Autosampler Location: 93**
Sample ID: PBW 25 WG361973-02 **Date Collected: 4/15/2011 7:26:24 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 25 WG361973-02

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: PBW 25 WG361973-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5031801.6						55242.74	1.10%
YRADIAL	300135.2						6407.34	2.13%
Ga 417.206	1284312.4						8737.80	0.68%
GaRADIAL	65943.7						314.78	0.48%

Approved: April 18, 2011

Ag 328.068†	-901.2	-0.00365 mg/L	0.000676	-0.00365 mg/L	0.000676	18.51%
Al 396.153†	48.8	0.00098 mg/L	0.016312	0.00098 mg/L	0.016312	>999.9%
As 188.979†	3.3	0.00483 mg/L	0.003304	0.00483 mg/L	0.003304	68.48%
Ba 233.527†	-1.4	0.00005 mg/L	0.000042	0.00005 mg/L	0.000042	77.96%
Be 234.861†	8.0	0.00001 mg/L	0.000038	0.00001 mg/L	0.000038	429.66%
B 249.677†	114.2	0.00316 mg/L	0.000062	0.00316 mg/L	0.000062	1.95%
Ca 227.546†	2.0	0.0403 mg/L	0.00689	0.0403 mg/L	0.00689	17.12%
Cd 228.802†	-3.0	-0.00022 mg/L	0.000289	-0.00022 mg/L	0.000289	128.34%
Co 228.616†	-16.0	-0.00056 mg/L	0.000245	-0.00056 mg/L	0.000245	44.10%
Cr 267.716†	52.7	0.00029 mg/L	0.000053	0.00029 mg/L	0.000053	18.01%
Cu 327.393†	-128.1	-0.00126 mg/L	0.000628	-0.00126 mg/L	0.000628	49.71%
Fe 239.562†	1.4	-0.00110 mg/L	0.006434	-0.00110 mg/L	0.006434	586.05%
Mg 279.077†	8.4	0.00926 mg/L	0.005834	0.00926 mg/L	0.005834	63.03%
Mn 257.610†	178.8	0.00028 mg/L	0.000002	0.00028 mg/L	0.000002	0.75%
Mo 202.031†	-12.0	-0.00044 mg/L	0.000178	-0.00044 mg/L	0.000178	40.74%
Ni 231.604†	11.9	0.00021 mg/L	0.000324	0.00021 mg/L	0.000324	155.35%
Pb 220.353†	0.2	0.00110 mg/L	0.001198	0.00110 mg/L	0.001198	108.49%
Sb 206.836†	8.6	0.00264 mg/L	0.001375	0.00264 mg/L	0.001375	52.17%
Se 196.026†	5.6	0.00122 mg/L	0.001321	0.00122 mg/L	0.001321	108.26%
Si 251.611†	207.6	0.00687 mg/L	0.000539	0.00687 mg/L	0.000539	7.84%
Sn 189.927†	8.6	0.00220 mg/L	0.000693	0.00220 mg/L	0.000693	31.56%
Ti 334.940†	-119.0	-0.00017 mg/L	0.000103	-0.00017 mg/L	0.000103	61.81%
Tl 190.801†	-7.4	-0.00742 mg/L	0.001658	-0.00742 mg/L	0.001658	22.35%
V 290.880†	21.6	0.00049 mg/L	0.000413	0.00049 mg/L	0.000413	84.96%
Zn 206.200†	81.2	0.00289 mg/L	0.000218	0.00289 mg/L	0.000218	7.54%
K 766.490†	101.0	0.0384 mg/L	0.01060	0.0384 mg/L	0.01060	27.57%
Na 589.592†	1230.8	0.0932 mg/L	0.01298	0.0932 mg/L	0.01298	13.92%
Sr 407.771†	-60.3	-0.00008 mg/L	0.000027	-0.00008 mg/L	0.000027	35.11%
Li 670.784†	-3.1	-0.00080 mg/L	0.000490	-0.00080 mg/L	0.000490	61.33%

Sequence No.: 58 **Autosampler Location: 7**
Sample ID: ICSA **Date Collected: 4/15/2011 7:33:03 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	196.0 kPa	0.50 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4469580.4						55772.24	1.25%
YRADIAL	277325.9						633.29	0.23%
Ga 417.206	1222674.4						9231.70	0.76%
GaRADIAL	62183.7						268.57	0.43%
Ag 328.068†	112.8	-0.00373	mg/L	0.001479	-0.00373	mg/L	0.001479	39.65%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	1273202.0	246	mg/L	2.5	246	mg/L	2.5	1.00%
QC value within limits for Al 396.153 Recovery = 98.53%								
As 188.979†	16.0	0.00088	mg/L	0.003073	0.00088	mg/L	0.003073	348.01%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	122.2	-0.00004	mg/L	0.000096	-0.00004	mg/L	0.000096	235.78%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	10719.4	-0.00043	mg/L	0.000296	-0.00043	mg/L	0.000296	68.50%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	-9137.5	0.0164	mg/L	0.00914	0.0164	mg/L	0.00914	55.88%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	25949.1	278	mg/L	4.0	278	mg/L	4.0	1.43%
QC value within limits for Ca 227.546 Recovery = 111.04%								
Cd 228.802†	-2.0	-0.00020	mg/L	0.000121	-0.00020	mg/L	0.000121	60.71%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	15.9	-0.00135	mg/L	0.000204	-0.00135	mg/L	0.000204	15.06%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	660.2	-0.00069	mg/L	0.000103	-0.00069	mg/L	0.000103	14.88%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-1640.6	0.00012	mg/L	0.000144	0.00012	mg/L	0.000144	118.43%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	29264.9	98.7	mg/L	0.29	98.7	mg/L	0.29	0.29%

Approved: April 18, 2011

QC value within limits for Fe 239.562 Recovery = 98.72%
Mg 279.077† 183787.5 253 mg/L 0.5 253 mg/L 0.5 0.18%
QC value within limits for Mg 279.077 Recovery = 101.23%
Mn 257.610† -171.2 0.00037 mg/L 0.000093 0.00037 mg/L 0.000093 24.91%
QC value within limits for Mn 257.610 Recovery = Not calculated
Mo 202.031† -19.2 0.00386 mg/L 0.000537 0.00386 mg/L 0.000537 13.91%
QC value within limits for Mo 202.031 Recovery = Not calculated
Ni 231.604† -56.1 -0.00198 mg/L 0.000304 -0.00198 mg/L 0.000304 15.32%
QC value within limits for Ni 231.604 Recovery = Not calculated
Pb 220.353† -70.8 0.00480 mg/L 0.001842 0.00480 mg/L 0.001842 38.34%
QC value within limits for Pb 220.353 Recovery = Not calculated
Sb 206.836† 23.2 0.0132 mg/L 0.00053 0.0132 mg/L 0.00053 4.00%
QC value within limits for Sb 206.836 Recovery = Not calculated
Se 196.026† -95.7 0.00565 mg/L 0.005641 0.00565 mg/L 0.005641 99.83%
QC value within limits for Se 196.026 Recovery = Not calculated
Si 251.611† 9369.4 0.275 mg/L 0.0054 0.275 mg/L 0.0054 1.97%
QC value within limits for Si 251.611 Recovery = Not calculated
Sn 189.927† -45.2 -0.00762 mg/L 0.001030 -0.00762 mg/L 0.001030 13.53%
QC value within limits for Sn 189.927 Recovery = Not calculated
Ti 334.940† -1997.5 0.00009 mg/L 0.000050 0.00009 mg/L 0.000050 56.84%
QC value within limits for Ti 334.940 Recovery = Not calculated
Tl 190.801† 133.1 0.0583 mg/L 0.00802 0.0583 mg/L 0.00802 13.76%
QC value within limits for Tl 190.801 Recovery = Not calculated
V 290.880† -919.3 0.00198 mg/L 0.000798 0.00198 mg/L 0.000798 40.29%
QC value within limits for V 290.880 Recovery = Not calculated
Zn 206.200† 25.4 -0.00115 mg/L 0.000263 -0.00115 mg/L 0.000263 22.97%
QC value within limits for Zn 206.200 Recovery = Not calculated
K 766.490† 17.6 0.00818 mg/L 0.007456 0.00818 mg/L 0.007456 91.10%
QC value within limits for K 766.490 Recovery = Not calculated
Na 589.592† 1466.8 0.110 mg/L 0.0064 0.110 mg/L 0.0064 5.84%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† 21423.5 -0.00765 mg/L 0.000047 -0.00765 mg/L 0.000047 0.61%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 305.4 0.00302 mg/L 0.000950 0.00302 mg/L 0.000950 31.48%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 59 **Autosampler Location: 8**
Sample ID: ICSAB **Date Collected: 4/15/2011 7:38:43 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4361137.8						25386.59	0.58%
YRADIAL	275054.2						803.24	0.29%
Ga 417.206	1190248.1						9992.08	0.84%
GaRADIAL	61590.3						386.79	0.63%
Ag 328.068†	108204.3	0.514	mg/L	0.0073	0.514	mg/L	0.0073	1.42%
QC value within limits for Ag 328.068 Recovery = 102.74%								
Al 396.153†	1347275.5	261	mg/L	4.4	261	mg/L	4.4	1.68%
QC value within limits for Al 396.153 Recovery = 104.26%								
As 188.979†	155.6	0.251	mg/L	0.0204	0.251	mg/L	0.0204	8.13%
QC value within limits for As 188.979 Recovery = 100.31%								
Ba 233.527†	13984.2	0.249	mg/L	0.0014	0.249	mg/L	0.0014	0.55%
QC value within limits for Ba 233.527 Recovery = 99.55%								
Be 234.861†	145965.9	0.250	mg/L	0.0056	0.250	mg/L	0.0056	2.25%
QC value within limits for Be 234.861 Recovery = 100.14%								
B 249.677†	-10943.1	-0.0313	mg/L	0.00787	-0.0313	mg/L	0.00787	25.12%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	27555.1	295	mg/L	2.2	295	mg/L	2.2	0.74%
QC value within limits for Ca 227.546 Recovery = 118.04%								
Cd 228.802†	7571.3	0.492	mg/L	0.0088	0.492	mg/L	0.0088	1.79%
QC value within limits for Cd 228.802 Recovery = 98.49%								

Approved: April 18, 2011

Co 228.616†	4233.4	0.234 mg/L	0.0019	0.234 mg/L	0.0019	0.82%
QC value within limits for Co 228.616 Recovery = 93.68%						
Cr 267.716†	30252.2	0.247 mg/L	0.0015	0.247 mg/L	0.0015	0.61%
QC value within limits for Cr 267.716 Recovery = 98.85%						
Cu 327.393†	36294.0	0.250 mg/L	0.0040	0.250 mg/L	0.0040	1.58%
QC value within limits for Cu 327.393 Recovery = 100.10%						
Fe 239.562†	30245.5	102 mg/L	0.2	102 mg/L	0.2	0.16%
QC value within limits for Fe 239.562 Recovery = 102.03%						
Mg 279.077†	187910.4	259 mg/L	0.5	259 mg/L	0.5	0.21%
QC value within limits for Mg 279.077 Recovery = 103.50%						
Mn 257.610†	118576.9	0.250 mg/L	0.0015	0.250 mg/L	0.0015	0.59%
QC value within limits for Mn 257.610 Recovery = 100.18%						
Mo 202.031†	-17.7	0.00421 mg/L	0.001642	0.00421 mg/L	0.001642	38.98%
QC value within limits for Mo 202.031 Recovery = Not calculated						
Ni 231.604†	14941.4	0.469 mg/L	0.0024	0.469 mg/L	0.0024	0.51%
QC value within limits for Ni 231.604 Recovery = 93.72%						
Pb 220.353†	2492.4	0.490 mg/L	0.0033	0.490 mg/L	0.0033	0.67%
QC value within limits for Pb 220.353 Recovery = 98.08%						
Sb 206.836†	732.0	0.527 mg/L	0.0081	0.527 mg/L	0.0081	1.54%
QC value within limits for Sb 206.836 Recovery = 105.40%						
Se 196.026†	215.5	0.258 mg/L	0.0119	0.258 mg/L	0.0119	4.61%
QC value within limits for Se 196.026 Recovery = 103.35%						
Si 251.611†	199.2	0.00663 mg/L	0.000951	0.00663 mg/L	0.000951	14.33%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	-43.1	-0.00724 mg/L	0.000506	-0.00724 mg/L	0.000506	6.99%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-2708.3	-0.00077 mg/L	0.000015	-0.00077 mg/L	0.000015	1.91%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	895.9	0.549 mg/L	0.0087	0.549 mg/L	0.0087	1.58%
QC value within limits for Tl 190.801 Recovery = 109.75%						
V 290.880†	38136.0	0.255 mg/L	0.0013	0.255 mg/L	0.0013	0.51%
QC value within limits for V 290.880 Recovery = 101.87%						
Zn 206.200†	14668.0	0.467 mg/L	0.0026	0.467 mg/L	0.0026	0.56%
QC value within limits for Zn 206.200 Recovery = 93.50%						
K 766.490†	14444.3	5.25 mg/L	0.043	5.25 mg/L	0.043	0.81%
QC value within limits for K 766.490 Recovery = 104.94%						
Na 589.592†	71237.3	5.16 mg/L	0.034	5.16 mg/L	0.034	0.65%
QC value within limits for Na 589.592 Recovery = 103.24%						
Sr 407.771†	44560.7	0.00696 mg/L	0.000131	0.00696 mg/L	0.000131	1.89%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	180.4	0.00147 mg/L	0.000610	0.00147 mg/L	0.000610	41.48%
QC value within limits for Li 670.784 Recovery = Not calculated						

All analyte(s) passed QC.

Sequence No.: 60 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/15/2011 7:44:21 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4662251.1						69461.92	1.49%
YRADIAL	291632.4						7120.08	2.44%
Ga 417.206	1256630.1						21406.18	1.70%
GaRADIAL	64772.3						502.08	0.78%
Ag 328.068†	82341.1	0.396	mg/L	0.0087	0.396	mg/L	0.0087	2.20%
QC value within limits for Ag 328.068 Recovery = 98.93%								
Al 396.153†	51093.2	9.86	mg/L	0.232	9.86	mg/L	0.232	2.35%
QC value within limits for Al 396.153 Recovery = 98.63%								
As 188.979†	252.5	0.448	mg/L	0.0075	0.448	mg/L	0.0075	1.68%
QC value greater than the upper limit for As 188.979 Recovery = 111.90%								
Ba 233.527†	55856.0	1.00	mg/L	0.016	1.00	mg/L	0.016	1.63%
QC value within limits for Ba 233.527 Recovery = 100.40%								
Be 234.861†	25656.2	0.0485	mg/L	0.00082	0.0485	mg/L	0.00082	1.70%

Approved: April 18, 2011

QC value within limits for Be 234.861 Recovery = 96.97%

B 249.677†	26639.0	0.500 mg/L	0.0124	0.500 mg/L	0.0124	2.49%
QC value within limits for B 249.677 Recovery = 100.00%							
Ca 227.546†	951.2	10.5 mg/L	0.19	10.5 mg/L	0.19	1.84%
QC value within limits for Ca 227.546 Recovery = 105.20%							
Cd 228.802†	787.3	0.0500 mg/L	0.00105	0.0500 mg/L	0.00105	2.09%
QC value within limits for Cd 228.802 Recovery = 100.07%							
Co 228.616†	3615.4	0.200 mg/L	0.0029	0.200 mg/L	0.0029	1.45%
QC value within limits for Co 228.616 Recovery = 99.98%							
Cr 267.716†	59515.3	0.499 mg/L	0.0102	0.499 mg/L	0.0102	2.03%
QC value within limits for Cr 267.716 Recovery = 99.80%							
Cu 327.393†	73951.1	0.489 mg/L	0.0114	0.489 mg/L	0.0114	2.33%
QC value within limits for Cu 327.393 Recovery = 97.70%							
Fe 239.562†	1183.6	3.99 mg/L	0.022	3.99 mg/L	0.022	0.54%
QC value within limits for Fe 239.562 Recovery = 99.66%							
Mg 279.077†	7264.9	10.0 mg/L	0.11	10.0 mg/L	0.11	1.07%
QC value within limits for Mg 279.077 Recovery = 100.07%							
Mn 257.610†	239928.4	0.507 mg/L	0.0088	0.507 mg/L	0.0088	1.74%
QC value within limits for Mn 257.610 Recovery = 101.50%							
Mo 202.031†	12554.2	1.01 mg/L	0.012	1.01 mg/L	0.012	1.19%
QC value within limits for Mo 202.031 Recovery = 100.88%							
Ni 231.604†	16193.1	0.508 mg/L	0.0091	0.508 mg/L	0.0091	1.78%
QC value within limits for Ni 231.604 Recovery = 101.59%							
Pb 220.353†	2650.4	0.507 mg/L	0.0059	0.507 mg/L	0.0059	1.17%
QC value within limits for Pb 220.353 Recovery = 101.49%							
Sb 206.836†	1662.1	1.21 mg/L	0.012	1.21 mg/L	0.012	1.02%
QC value within limits for Sb 206.836 Recovery = 100.78%							
Se 196.026†	510.1	0.407 mg/L	0.0087	0.407 mg/L	0.0087	2.13%
QC value within limits for Se 196.026 Recovery = 101.71%							
Si 251.611†	167741.1	4.89 mg/L	0.114	4.89 mg/L	0.114	2.34%
QC value within limits for Si 251.611 Recovery = 97.77%							
Sn 189.927†	5542.9	1.01 mg/L	0.013	1.01 mg/L	0.013	1.29%
QC value within limits for Sn 189.927 Recovery = 101.15%							
Ti 334.940†	735311.7	0.985 mg/L	0.0061	0.985 mg/L	0.0061	0.62%
QC value within limits for Ti 334.940 Recovery = 98.45%							
Tl 190.801†	780.7	0.512 mg/L	0.0088	0.512 mg/L	0.0088	1.72%
QC value within limits for Tl 190.801 Recovery = 102.44%							
V 290.880†	154713.1	1.00 mg/L	0.019	1.00 mg/L	0.019	1.88%
QC value within limits for V 290.880 Recovery = 100.01%							
Zn 206.200†	31318.4	1.00 mg/L	0.019	1.00 mg/L	0.019	1.92%
QC value within limits for Zn 206.200 Recovery = 100.23%							
K 766.490†	133408.1	49.4 mg/L	0.97	49.4 mg/L	0.97	1.95%
QC value within limits for K 766.490 Recovery = 98.85%							
Na 589.592†	652716.3	48.9 mg/L	0.53	48.9 mg/L	0.53	1.07%
QC value within limits for Na 589.592 Recovery = 97.83%							
Sr 407.771†	1510072.4	1.00 mg/L	0.026	1.00 mg/L	0.026	2.62%
QC value within limits for Sr 407.771 Recovery = 100.03%							
Li 670.784†	81436.0	1.01 mg/L	0.017	1.01 mg/L	0.017	1.66%
QC value within limits for Li 670.784 Recovery = 100.67%							

QC Failed. Continue with analysis.

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Sequence No.: 61 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/15/2011 7:51:01 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4880459.1						55090.70	1.13%
YRADIAL	299408.4						5343.06	1.78%
Ga 417.206	1283429.7						16074.62	1.25%
GaRADIAL	65458.6						854.96	1.31%
Ag 328.068†	-934.7	-0.00381	mg/L	0.000467	-0.00381	mg/L	0.000467	12.25%

QC value within limits for Ag 328.068 Recovery = Not calculated

Approved: April 18, 2011

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Al 396.153†              35.2    -0.00164 mg/L      0.002780    -0.00164 mg/L      0.002780 169.40%
   QC value within limits for Al 396.153  Recovery = Not calculated
As 188.979†               1.7     0.00201 mg/L      0.000421     0.00201 mg/L      0.000421  20.99%
   QC value within limits for As 188.979  Recovery = Not calculated
Ba 233.527†               2.1     0.00012 mg/L      0.000132     0.00012 mg/L      0.000132 114.30%
   QC value within limits for Ba 233.527  Recovery = Not calculated
Be 234.861†              79.8     0.00014 mg/L      0.000016     0.00014 mg/L      0.000016  10.91%
   QC value within limits for Be 234.861  Recovery = Not calculated
B 249.677†              174.0     0.00428 mg/L      0.000505     0.00428 mg/L      0.000505  11.80%
   QC value within limits for B 249.677  Recovery = Not calculated
Ca 227.546†              -1.9    -0.00147 mg/L      0.012041    -0.00147 mg/L      0.012041 817.77%
   QC value within limits for Ca 227.546  Recovery = Not calculated
Cd 228.802†              -2.6    -0.00019 mg/L      0.000052    -0.00019 mg/L      0.000052  27.60%
   QC value within limits for Cd 228.802  Recovery = Not calculated
Co 228.616†             -10.9    -0.00027 mg/L      0.000182    -0.00027 mg/L      0.000182  67.16%
   QC value within limits for Co 228.616  Recovery = Not calculated
Cr 267.716†              49.1     0.00026 mg/L      0.000041     0.00026 mg/L      0.000041  15.68%
   QC value within limits for Cr 267.716  Recovery = Not calculated
Cu 327.393†            -189.7    -0.00167 mg/L      0.000235    -0.00167 mg/L      0.000235  14.08%
   QC value within limits for Cu 327.393  Recovery = Not calculated
Fe 239.562†               2.2     0.00158 mg/L      0.011135     0.00158 mg/L      0.011135 703.74%
   QC value within limits for Fe 239.562  Recovery = Not calculated
Mg 279.077†               2.7     0.00147 mg/L      0.005515     0.00147 mg/L      0.005515 375.31%
   QC value within limits for Mg 279.077  Recovery = Not calculated
Mn 257.610†              46.1     0.00000 mg/L      0.000017     0.00000 mg/L      0.000017 646.97%
   QC value within limits for Mn 257.610  Recovery = Not calculated
Mo 202.031†              -8.9    -0.00018 mg/L      0.000156    -0.00018 mg/L      0.000156  84.61%
   QC value within limits for Mo 202.031  Recovery = Not calculated
Ni 231.604†               4.8    -0.00002 mg/L      0.000154    -0.00002 mg/L      0.000154 >999.9%
   QC value within limits for Ni 231.604  Recovery = Not calculated
Pb 220.353†              11.9     0.00332 mg/L      0.001264     0.00332 mg/L      0.001264  38.05%
   QC value within limits for Pb 220.353  Recovery = Not calculated
Sb 206.836†               7.8     0.00206 mg/L      0.002619     0.00206 mg/L      0.002619 127.26%
   QC value within limits for Sb 206.836  Recovery = Not calculated
Se 196.026†              -2.6    -0.00527 mg/L      0.002665    -0.00527 mg/L      0.002665  50.57%
   QC value within limits for Se 196.026  Recovery = Not calculated
Si 251.611†               0.4     0.00081 mg/L      0.000294     0.00081 mg/L      0.000294  36.10%
   QC value within limits for Si 251.611  Recovery = Not calculated
Sn 189.927†               2.7     0.00112 mg/L      0.000237     0.00112 mg/L      0.000237  21.27%
   QC value within limits for Sn 189.927  Recovery = Not calculated
Ti 334.940†              31.4     0.00003 mg/L      0.000125     0.00003 mg/L      0.000125 369.71%
   QC value within limits for Ti 334.940  Recovery = Not calculated
Tl 190.801†              -5.0    -0.00588 mg/L      0.002343    -0.00588 mg/L      0.002343  39.81%
   QC value within limits for Tl 190.801  Recovery = Not calculated
V 290.880†              -20.5     0.00021 mg/L      0.000461     0.00021 mg/L      0.000461 215.40%
   QC value within limits for V 290.880  Recovery = Not calculated
Zn 206.200†              10.3     0.00063 mg/L      0.000112     0.00063 mg/L      0.000112  17.90%
   QC value within limits for Zn 206.200  Recovery = Not calculated
K 766.490†              177.4      0.0662 mg/L       0.03953      0.0662 mg/L       0.03953  59.72%
   QC value within limits for K 766.490  Recovery = Not calculated
Na 589.592†             495.5      0.0402 mg/L       0.00755      0.0402 mg/L       0.00755  18.79%
   QC value within limits for Na 589.592  Recovery = Not calculated
Sr 407.771†             -50.3    -0.00007 mg/L      0.000033    -0.00007 mg/L      0.000033  47.41%
   QC value within limits for Sr 407.771  Recovery = Not calculated
Li 670.784†              51.8    -0.00012 mg/L      0.001467    -0.00012 mg/L      0.001467 >999.9%
   QC value within limits for Li 670.784  Recovery = Not calculated
All analyte(s) passed QC.
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Sequence No.: 62 **Autosampler Location: 94**
Sample ID: LCSW 25 WG361973-03 **Date Collected: 4/15/2011 7:57:37 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 25 WG361973-03

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: LCSW 25 WG361973-03

	Mean Corrected	Calib.	Sample

Approved: April 18, 2011

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	4946770.2						114839.08	2.32%
YRADIAL	299859.5						5494.40	1.83%
Ga 417.206	1300220.0						30484.55	2.34%
GaRADIAL	65815.7						1113.30	1.69%
Ag 328.068†	38052.7	0.183	mg/L	0.0071	0.183	mg/L	0.0071	3.90%
Al 396.153†	24851.4	4.79	mg/L	0.086	4.79	mg/L	0.086	1.79%
As 188.979†	118.0	0.209	mg/L	0.0029	0.209	mg/L	0.0029	1.41%
Ba 233.527†	25853.9	0.465	mg/L	0.0165	0.465	mg/L	0.0165	3.54%
Be 234.861†	11628.4	0.0220	mg/L	0.00087	0.0220	mg/L	0.00087	3.95%
B 249.677†	48729.9	0.905	mg/L	0.0299	0.905	mg/L	0.0299	3.31%
Ca 227.546†	435.4	4.82	mg/L	0.171	4.82	mg/L	0.171	3.55%
Cd 228.802†	368.4	0.0234	mg/L	0.00067	0.0234	mg/L	0.00067	2.87%
Co 228.616†	1694.6	0.0939	mg/L	0.00184	0.0939	mg/L	0.00184	1.96%
Cr 267.716†	27579.8	0.231	mg/L	0.0068	0.231	mg/L	0.0068	2.93%
Cu 327.393†	34864.0	0.230	mg/L	0.0082	0.230	mg/L	0.0082	3.55%
Fe 239.562†	561.4	1.89	mg/L	0.015	1.89	mg/L	0.015	0.82%
Mg 279.077†	3509.3	4.83	mg/L	0.041	4.83	mg/L	0.041	0.85%
Mn 257.610†	112032.0	0.237	mg/L	0.0082	0.237	mg/L	0.0082	3.44%
Mo 202.031†	5955.3	0.479	mg/L	0.0087	0.479	mg/L	0.0087	1.81%
Ni 231.604†	7417.1	0.233	mg/L	0.0080	0.233	mg/L	0.0080	3.46%
Pb 220.353†	1229.7	0.236	mg/L	0.0044	0.236	mg/L	0.0044	1.87%
Sb 206.836†	787.3	0.571	mg/L	0.0134	0.571	mg/L	0.0134	2.34%
Se 196.026†	235.1	0.186	mg/L	0.0028	0.186	mg/L	0.0028	1.51%
Si 251.611†	80876.4	2.36	mg/L	0.086	2.36	mg/L	0.086	3.66%
Sn 189.927†	-3.7	-0.00004	mg/L	0.000538	-0.00004	mg/L	0.000538	>999.9%
Ti 334.940†	349671.7	0.468	mg/L	0.0183	0.468	mg/L	0.0183	3.92%
Tl 190.801†	364.0	0.237	mg/L	0.0041	0.237	mg/L	0.0041	1.71%
V 290.880†	72005.6	0.466	mg/L	0.0174	0.466	mg/L	0.0174	3.74%
Zn 206.200†	14086.2	0.451	mg/L	0.0138	0.451	mg/L	0.0138	3.05%
K 766.490†	64327.7	23.6	mg/L	0.41	23.6	mg/L	0.41	1.73%
Na 589.592†	320313.4	23.5	mg/L	0.24	23.5	mg/L	0.24	1.02%
Sr 407.771†	728765.0	0.483	mg/L	0.0095	0.483	mg/L	0.0095	1.97%
Li 670.784†	39439.7	0.487	mg/L	0.0081	0.487	mg/L	0.0081	1.67%

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Sequence No.: 63 **Autosampler Location: 95**
Sample ID: FBLK 361768-01 **Date Collected: 4/15/2011 8:04:21 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK 361768-01

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: FBLK 361768-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4847183.0						37025.81	0.76%
YRADIAL	297739.6						6875.17	2.31%
Ga 417.206	1287742.8						14524.87	1.13%
GaRADIAL	65031.5						721.55	1.11%
Ag 328.068†	-839.7	-0.00346	mg/L	0.000245	-0.00346	mg/L	0.000245	7.07%
Al 396.153†	2026.5	0.384	mg/L	0.0186	0.384	mg/L	0.0186	4.84%
As 188.979†	6.1	0.0101	mg/L	0.00376	0.0101	mg/L	0.00376	37.24%
Ba 233.527†	173.8	0.00320	mg/L	0.000075	0.00320	mg/L	0.000075	2.35%
Be 234.861†	190.9	-0.00003	mg/L	0.000046	-0.00003	mg/L	0.000046	151.27%
B 249.677†	784.4	0.0238	mg/L	0.00039	0.0238	mg/L	0.00039	1.63%
Ca 227.546†	45.5	0.514	mg/L	0.0125	0.514	mg/L	0.0125	2.44%
Cd 228.802†	15.2	0.00095	mg/L	0.000005	0.00095	mg/L	0.000005	0.55%
Co 228.616†	30.3	0.00197	mg/L	0.000543	0.00197	mg/L	0.000543	27.57%
Cr 267.716†	174.9	0.00131	mg/L	0.000089	0.00131	mg/L	0.000089	6.76%
Cu 327.393†	17196.6	0.113	mg/L	0.0022	0.113	mg/L	0.0022	1.95%
Fe 239.562†	555.9	1.87	mg/L	0.022	1.87	mg/L	0.022	1.20%
Mg 279.077†	81.2	0.109	mg/L	0.0051	0.109	mg/L	0.0051	4.69%
Mn 257.610†	21870.0	0.0473	mg/L	0.00024	0.0473	mg/L	0.00024	0.51%
Mo 202.031†	-7.6	0.00002	mg/L	0.000309	0.00002	mg/L	0.000309	>999.9%
Ni 231.604†	48.7	0.00136	mg/L	0.000120	0.00136	mg/L	0.000120	8.78%
Pb 220.353†	204.8	0.0397	mg/L	0.00139	0.0397	mg/L	0.00139	3.50%
Sb 206.836†	6.5	0.00115	mg/L	0.001882	0.00115	mg/L	0.001882	163.11%

Approved: April 18, 2011

Se 196.026†	5.0	0.00154 mg/L	0.002207	0.00154 mg/L	0.002207	143.61%
Si 251.611†	14153.7	0.414 mg/L	0.0102	0.414 mg/L	0.0102	2.46%
Sn 189.927†	20.3	0.00433 mg/L	0.000200	0.00433 mg/L	0.000200	4.62%
Ti 334.940†	4613.3	0.00617 mg/L	0.000107	0.00617 mg/L	0.000107	1.74%
Tl 190.801†	-10.0	-0.00899 mg/L	0.001869	-0.00899 mg/L	0.001869	20.79%
V 290.880†	372.7	0.00290 mg/L	0.000106	0.00290 mg/L	0.000106	3.65%
Zn 206.200†	17728.8	0.566 mg/L	0.0029	0.566 mg/L	0.0029	0.51%
K 766.490†	847.9	0.162 mg/L	0.0262	0.162 mg/L	0.0262	16.16%
Na 589.592†	1808207.9	147 mg/L	0.9	147 mg/L	0.9	0.62%
Sr 407.771†	2583.5	0.00126 mg/L	0.000048	0.00126 mg/L	0.000048	3.79%
Li 670.784†	123.5	0.00077 mg/L	0.000779	0.00077 mg/L	0.000779	101.39%

Sequence No.: 64 **Autosampler Location: 96**
Sample ID: FBLK WG361934-01 **Date Collected: 4/15/2011 8:11:04 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: FBLK WG361934-01

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: FBLK WG361934-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4891969.8						16142.24	0.33%
YRADIAL	307444.2						3716.06	1.21%
Ga 417.206	1294744.6						2560.75	0.20%
GaRADIAL	66114.3						1505.58	2.28%
Ag 328.068†	-918.0	-0.00373	mg/L	0.000666	-0.00373	mg/L	0.000666	17.83%
Al 396.153†	585.9	0.105	mg/L	0.0012	0.105	mg/L	0.0012	1.18%
As 188.979†	3.1	0.00450	mg/L	0.001876	0.00450	mg/L	0.001876	41.66%
Ba 233.527†	24.7	0.00052	mg/L	0.000085	0.00052	mg/L	0.000085	16.34%
Be 234.861†	38.9	0.00005	mg/L	0.000011	0.00005	mg/L	0.000011	19.95%
B 249.677†	832.7	0.0166	mg/L	0.00090	0.0166	mg/L	0.00090	5.43%
Ca 227.546†	7.3	0.0956	mg/L	0.11931	0.0956	mg/L	0.11931	124.78%
Cd 228.802†	-0.9	-0.00008	mg/L	0.000132	-0.00008	mg/L	0.000132	156.94%
Co 228.616†	-13.4	-0.00042	mg/L	0.000243	-0.00042	mg/L	0.000243	57.63%
Cr 267.716†	81.3	0.00053	mg/L	0.000070	0.00053	mg/L	0.000070	13.18%
Cu 327.393†	-110.4	-0.00113	mg/L	0.000413	-0.00113	mg/L	0.000413	36.42%
Fe 239.562†	18.7	0.0573	mg/L	0.00074	0.0573	mg/L	0.00074	1.29%
Mg 279.077†	39.9	0.0527	mg/L	0.00462	0.0527	mg/L	0.00462	8.77%
Mn 257.610†	744.9	0.00292	mg/L	0.000043	0.00292	mg/L	0.000043	1.48%
Mo 202.031†	-14.3	-0.00062	mg/L	0.000032	-0.00062	mg/L	0.000032	5.20%
Ni 231.604†	17.9	0.00040	mg/L	0.000332	0.00040	mg/L	0.000332	83.52%
Pb 220.353†	12.0	0.00335	mg/L	0.001614	0.00335	mg/L	0.001614	48.22%
Sb 206.836†	5.0	0.00004	mg/L	0.001753	0.00004	mg/L	0.001753	>999.9%
Se 196.026†	-0.7	-0.00371	mg/L	0.000198	-0.00371	mg/L	0.000198	5.35%
Si 251.611†	14169.5	0.415	mg/L	0.0054	0.415	mg/L	0.0054	1.30%
Sn 189.927†	7.8	0.00205	mg/L	0.001284	0.00205	mg/L	0.001284	62.60%
Ti 334.940†	3435.9	0.00459	mg/L	0.000285	0.00459	mg/L	0.000285	6.19%
Tl 190.801†	-10.5	-0.00935	mg/L	0.003796	-0.00935	mg/L	0.003796	40.60%
V 290.880†	185.9	0.00155	mg/L	0.001033	0.00155	mg/L	0.001033	66.54%
Zn 206.200†	222.5	0.00740	mg/L	0.000173	0.00740	mg/L	0.000173	2.34%
K 766.490†	700.0	0.107	mg/L	0.0099	0.107	mg/L	0.0099	9.30%
Na 589.592†	1828636.0	149	mg/L	3.4	149	mg/L	3.4	2.26%
Sr 407.771†	731.1	0.00044	mg/L	0.000095	0.00044	mg/L	0.000095	21.80%
Li 670.784†	346.7	0.00353	mg/L	0.001302	0.00353	mg/L	0.001302	36.88%

Sequence No.: 65 **Autosampler Location: 97**
Sample ID: L1104041001 **Date Collected: 4/15/2011 8:17:47 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104041001

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Approved: April 18, 2011

Mean Data: L1104041001

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4848512.7						32340.13	0.67%
YRADIAL	295860.9						3993.75	1.35%
Ga 417.206	1311494.6						9181.40	0.70%
GaRADIAL	64656.7						645.14	1.00%
Ag 328.068†	-693.6	-0.00273	mg/L	0.000442	-0.00273	mg/L	0.000442	16.16%
Al 396.153†	748.8	0.136	mg/L	0.0169	0.136	mg/L	0.0169	12.40%
As 188.979†	10.9	0.0171	mg/L	0.00483	0.0171	mg/L	0.00483	28.30%
Ba 233.527†	3763.8	0.0675	mg/L	0.00055	0.0675	mg/L	0.00055	0.82%
Be 234.861†	47.8	0.00010	mg/L	0.000017	0.00010	mg/L	0.000017	16.17%
B 249.677†	2985.9	0.0566	mg/L	0.00032	0.0566	mg/L	0.00032	0.56%
Ca 227.546†	7140.6	76.3	mg/L	0.36	76.3	mg/L	0.36	0.48%
Cd 228.802†	-0.3	-0.00009	mg/L	0.000122	-0.00009	mg/L	0.000122	136.77%
Co 228.616†	-1.5	0.00022	mg/L	0.000201	0.00022	mg/L	0.000201	91.59%
Cr 267.716†	147.0	0.00092	mg/L	0.000014	0.00092	mg/L	0.000014	1.55%
Cu 327.393†	-459.2	-0.00342	mg/L	0.000608	-0.00342	mg/L	0.000608	17.79%
Fe 239.562†	37.3	0.120	mg/L	0.0074	0.120	mg/L	0.0074	6.19%
Mg 279.077†	1024.5	1.41	mg/L	0.007	1.41	mg/L	0.007	0.53%
Mn 257.610†	174248.9	0.367	mg/L	0.0056	0.367	mg/L	0.0056	1.53%
Mo 202.031†	-16.9	-0.00075	mg/L	0.000021	-0.00075	mg/L	0.000021	2.78%
Ni 231.604†	66.2	0.00188	mg/L	0.000327	0.00188	mg/L	0.000327	17.41%
Pb 220.353†	-6.3	0.00351	mg/L	0.000802	0.00351	mg/L	0.000802	22.87%
Sb 206.836†	24.5	0.0142	mg/L	0.00128	0.0142	mg/L	0.00128	9.02%
Se 196.026†	-31.3	-0.00921	mg/L	0.005871	-0.00921	mg/L	0.005871	63.78%
Si 251.611†	37833.4	1.11	mg/L	0.049	1.11	mg/L	0.049	4.44%
Sn 189.927†	-2.0	0.00026	mg/L	0.000479	0.00026	mg/L	0.000479	185.64%
Ti 334.940†	2829.3	0.00454	mg/L	0.000236	0.00454	mg/L	0.000236	5.18%
Tl 190.801†	83.1	0.0447	mg/L	0.00390	0.0447	mg/L	0.00390	8.72%
V 290.880†	319.3	0.00241	mg/L	0.000232	0.00241	mg/L	0.000232	9.62%
Zn 206.200†	318.7	0.0105	mg/L	0.00016	0.0105	mg/L	0.00016	1.50%
K 766.490†	1752.1	0.488	mg/L	0.0431	0.488	mg/L	0.0431	8.83%
Na 589.592†	1831093.4	149	mg/L	3.0	149	mg/L	3.0	2.00%
Sr 407.771†	191234.9	0.127	mg/L	0.0003	0.127	mg/L	0.0003	0.26%
Li 670.784†	258.0	0.00243	mg/L	0.001200	0.00243	mg/L	0.001200	49.37%

Sequence No.: 66 **Autosampler Location: 98**
Sample ID: L1104047701 **Date Collected: 4/15/2011 8:24:31 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104047701

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: L1104047701

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4736026.8						33518.51	0.71%
YRADIAL	290008.9						5979.58	2.06%
Ga 417.206	1242827.0						3958.41	0.32%
GaRADIAL	62821.6						343.32	0.55%
Ag 328.068†	-817.2	-0.00327	mg/L	0.000464	-0.00327	mg/L	0.000464	14.18%
Al 396.153†	407.6	0.0704	mg/L	0.02058	0.0704	mg/L	0.02058	29.23%
As 188.979†	3.7	0.00520	mg/L	0.002437	0.00520	mg/L	0.002437	46.82%
Ba 233.527†	4771.3	0.0856	mg/L	0.00067	0.0856	mg/L	0.00067	0.78%
Be 234.861†	26.8	0.00004	mg/L	0.000009	0.00004	mg/L	0.000009	22.10%
B 249.677†	4211.0	0.0788	mg/L	0.00106	0.0788	mg/L	0.00106	1.34%
Ca 227.546†	1852.6	19.8	mg/L	0.15	19.8	mg/L	0.15	0.74%
Cd 228.802†	141.7	0.00920	mg/L	0.000354	0.00920	mg/L	0.000354	3.85%
Co 228.616†	-16.9	-0.00064	mg/L	0.000350	-0.00064	mg/L	0.000350	55.11%
Cr 267.716†	120.1	0.00087	mg/L	0.000265	0.00087	mg/L	0.000265	30.30%
Cu 327.393†	163.8	0.00072	mg/L	0.000850	0.00072	mg/L	0.000850	117.29%
Fe 239.562†	16.6	0.0500	mg/L	0.00322	0.0500	mg/L	0.00322	6.45%
Mg 279.077†	1151.6	1.58	mg/L	0.019	1.58	mg/L	0.019	1.17%
Mn 257.610†	23284.3	0.0504	mg/L	0.00081	0.0504	mg/L	0.00081	1.60%

Approved: April 18, 2011

Mo 202.031†	-12.6	-0.00047 mg/L	0.000253	-0.00047 mg/L	0.000253	54.18%
Ni 231.604†	60.8	0.00173 mg/L	0.000289	0.00173 mg/L	0.000289	16.72%
Pb 220.353†	30.4	0.00776 mg/L	0.000472	0.00776 mg/L	0.000472	6.08%
Sb 206.836†	14.0	0.00659 mg/L	0.002629	0.00659 mg/L	0.002629	39.92%
Se 196.026†	-11.9	-0.00776 mg/L	0.007598	-0.00776 mg/L	0.007598	97.89%
Si 251.611†	24613.1	0.720 mg/L	0.0195	0.720 mg/L	0.0195	2.70%
Sn 189.927†	4.7	0.00149 mg/L	0.000282	0.00149 mg/L	0.000282	18.90%
Ti 334.940†	1023.2	0.00156 mg/L	0.000213	0.00156 mg/L	0.000213	13.67%
Tl 190.801†	29.3	0.0146 mg/L	0.00267	0.0146 mg/L	0.00267	18.31%
V 290.880†	261.7	0.00204 mg/L	0.001212	0.00204 mg/L	0.001212	59.49%
Zn 206.200†	28755.9	0.918 mg/L	0.0096	0.918 mg/L	0.0096	1.05%
K 766.490†	3463.7	1.10 mg/L	0.022	1.10 mg/L	0.022	2.00%
Na 589.592†	1880376.8	154 mg/L	1.5	154 mg/L	1.5	1.00%
Sr 407.771†	98283.9	0.0651 mg/L	0.00070	0.0651 mg/L	0.00070	1.07%
Li 670.784†	232.5	0.00212 mg/L	0.001615	0.00212 mg/L	0.001615	76.28%

Sequence No.: 67 **Autosampler Location: 99**
Sample ID: L1104047701PS WG362016-01 **Date Collected: 4/15/2011 8:31:15 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104047701PS WG362016-01

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: L1104047701PS WG362016-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4673627.8						61755.75	1.32%
YRADIAL	290188.4						1233.69	0.43%
Ga 417.206	1263292.9						15748.76	1.25%
GaRADIAL	63797.0						1499.82	2.35%
Ag 328.068†	39367.5	0.190	mg/L	0.0020	0.190	mg/L	0.0020	1.05%
Al 396.153†	26106.4	5.04	mg/L	0.049	5.04	mg/L	0.049	0.97%
As 188.979†	127.3	0.225	mg/L	0.0069	0.225	mg/L	0.0069	3.05%
Ba 233.527†	31006.7	0.557	mg/L	0.0084	0.557	mg/L	0.0084	1.50%
Be 234.861†	12212.1	0.0231	mg/L	0.00051	0.0231	mg/L	0.00051	2.23%
B 249.677†	54430.1	1.01	mg/L	0.010	1.01	mg/L	0.010	0.95%
Ca 227.546†	2122.4	22.9	mg/L	0.20	22.9	mg/L	0.20	0.89%
Cd 228.802†	495.3	0.0316	mg/L	0.00051	0.0316	mg/L	0.00051	1.61%
Co 228.616†	1735.7	0.0961	mg/L	0.00171	0.0961	mg/L	0.00171	1.78%
Cr 267.716†	28964.9	0.243	mg/L	0.0020	0.243	mg/L	0.0020	0.84%
Cu 327.393†	36069.7	0.238	mg/L	0.0028	0.238	mg/L	0.0028	1.18%
Fe 239.562†	589.5	1.98	mg/L	0.048	1.98	mg/L	0.048	2.40%
Mg 279.077†	4589.8	6.32	mg/L	0.120	6.32	mg/L	0.120	1.89%
Mn 257.610†	136867.3	0.291	mg/L	0.0045	0.291	mg/L	0.0045	1.53%
Mo 202.031†	6135.9	0.493	mg/L	0.0092	0.493	mg/L	0.0092	1.86%
Ni 231.604†	7846.1	0.246	mg/L	0.0037	0.246	mg/L	0.0037	1.49%
Pb 220.353†	1301.2	0.251	mg/L	0.0024	0.251	mg/L	0.0024	0.94%
Sb 206.836†	812.4	0.589	mg/L	0.0093	0.589	mg/L	0.0093	1.59%
Se 196.026†	239.2	0.194	mg/L	0.0018	0.194	mg/L	0.0018	0.91%
Si 251.611†	105494.6	3.08	mg/L	0.039	3.08	mg/L	0.039	1.25%
Sn 189.927†	-4.3	-0.00015	mg/L	0.002072	-0.00015	mg/L	0.002072	>999.9%
Ti 334.940†	370620.5	0.496	mg/L	0.0096	0.496	mg/L	0.0096	1.94%
Tl 190.801†	393.8	0.256	mg/L	0.0050	0.256	mg/L	0.0050	1.94%
V 290.880†	76411.6	0.494	mg/L	0.0071	0.494	mg/L	0.0071	1.44%
Zn 206.200†	41105.4	1.31	mg/L	0.023	1.31	mg/L	0.023	1.72%
K 766.490†	70726.1	25.8	mg/L	0.11	25.8	mg/L	0.11	0.43%
Na 589.592†	2023877.1	168	mg/L	3.9	168	mg/L	3.9	2.33%
Sr 407.771†	849600.0	0.563	mg/L	0.0019	0.563	mg/L	0.0019	0.34%
Li 670.784†	41265.3	0.510	mg/L	0.0043	0.510	mg/L	0.0043	0.84%

Sequence No.: 68 **Autosampler Location: 100**
Sample ID: L1104047701DL WG362016-02 **Date Collected: 4/15/2011 8:37:59 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 18, 2011

Nebulizer Parameters: L1104047701DL WG362016-02

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: L1104047701DL WG362016-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4960014.4						29868.29	0.60%
YRADIAL	303313.6						5310.69	1.75%
Ga 417.206	1333398.5						12641.30	0.95%
GaRADIAL	65767.4						124.11	0.19%
Ag 328.068†	-858.4	-0.00345	mg/L	0.000448	-0.00345	mg/L	0.000448	12.99%
Al 396.153†	127.0	0.0161	mg/L	0.00842	0.0161	mg/L	0.00842	52.27%
As 188.979†	3.5	0.00525	mg/L	0.004961	0.00525	mg/L	0.004961	94.50%
Ba 233.527†	931.9	0.0168	mg/L	0.00006	0.0168	mg/L	0.00006	0.34%
Be 234.861†	93.2	0.00017	mg/L	0.000004	0.00017	mg/L	0.000004	2.36%
B 249.677†	1026.0	0.0200	mg/L	0.00112	0.0200	mg/L	0.00112	5.62%
Ca 227.546†	349.8	3.76	mg/L	0.048	3.76	mg/L	0.048	1.28%
Cd 228.802†	23.8	0.00152	mg/L	0.000033	0.00152	mg/L	0.000033	2.16%
Co 228.616†	-12.7	-0.00038	mg/L	0.000228	-0.00038	mg/L	0.000228	60.52%
Cr 267.716†	48.3	0.00026	mg/L	0.000043	0.00026	mg/L	0.000043	16.43%
Cu 327.393†	11.9	-0.00033	mg/L	0.000297	-0.00033	mg/L	0.000297	90.62%
Fe 239.562†	4.7	0.0100	mg/L	0.00291	0.0100	mg/L	0.00291	29.11%
Mg 279.077†	229.5	0.314	mg/L	0.0059	0.314	mg/L	0.0059	1.88%
Mn 257.610†	4610.2	0.00987	mg/L	0.000098	0.00987	mg/L	0.000098	1.00%
Mo 202.031†	-9.4	-0.00022	mg/L	0.000131	-0.00022	mg/L	0.000131	59.38%
Ni 231.604†	22.4	0.00053	mg/L	0.000144	0.00053	mg/L	0.000144	27.14%
Pb 220.353†	11.9	0.00349	mg/L	0.001950	0.00349	mg/L	0.001950	55.79%
Sb 206.836†	3.7	-0.00093	mg/L	0.000263	-0.00093	mg/L	0.000263	28.10%
Se 196.026†	-4.7	-0.00607	mg/L	0.003311	-0.00607	mg/L	0.003311	54.58%
Si 251.611†	4576.9	0.135	mg/L	0.0018	0.135	mg/L	0.0018	1.34%
Sn 189.927†	-5.2	-0.00033	mg/L	0.000787	-0.00033	mg/L	0.000787	240.08%
Ti 334.940†	99.0	0.00016	mg/L	0.000035	0.00016	mg/L	0.000035	21.74%
Tl 190.801†	5.6	0.00063	mg/L	0.002334	0.00063	mg/L	0.002334	370.04%
V 290.880†	-9.9	0.00028	mg/L	0.000086	0.00028	mg/L	0.000086	30.62%
Zn 206.200†	5724.6	0.183	mg/L	0.0033	0.183	mg/L	0.0033	1.81%
K 766.490†	769.7	0.254	mg/L	0.0457	0.254	mg/L	0.0457	18.03%
Na 589.592†	372700.5	27.5	mg/L	0.49	27.5	mg/L	0.49	1.79%
Sr 407.771†	18582.1	0.0123	mg/L	0.00012	0.0123	mg/L	0.00012	0.98%
Li 670.784†	298.6	0.00293	mg/L	0.001606	0.00293	mg/L	0.001606	54.72%

Sequence No.: 69 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/15/2011 8:44:42 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4649426.9						36924.14	0.79%
YRADIAL	285861.4						1955.44	0.68%
Ga 417.206	1251540.7						8688.12	0.69%
GaRADIAL	63803.5						1314.63	2.06%
Ag 328.068†	82106.3	0.395	mg/L	0.0053	0.395	mg/L	0.0053	1.35%
QC value within limits for Ag 328.068 Recovery = 98.65%								
Al 396.153†	52707.7	10.2	mg/L	0.10	10.2	mg/L	0.10	0.99%
QC value within limits for Al 396.153 Recovery = 101.75%								
As 188.979†	258.0	0.457	mg/L	0.0055	0.457	mg/L	0.0055	1.20%
QC value greater than the upper limit for As 188.979 Recovery = 114.34%								
Ba 233.527†	55602.2	0.999	mg/L	0.0152	0.999	mg/L	0.0152	1.52%
QC value within limits for Ba 233.527 Recovery = 99.95%								
Be 234.861†	25590.1	0.0483	mg/L	0.00050	0.0483	mg/L	0.00050	1.04%
QC value within limits for Be 234.861 Recovery = 96.70%								

Approved: April 18, 2011

B 249.677†	26550.7	0.499 mg/L	0.0070	0.499 mg/L	0.0070	1.41%
QC value within limits for B 249.677 Recovery = 99.70%						
Ca 227.546†	961.5	10.6 mg/L	0.09	10.6 mg/L	0.09	0.80%
QC value within limits for Ca 227.546 Recovery = 106.27%						
Cd 228.802†	790.6	0.0502 mg/L	0.00031	0.0502 mg/L	0.00031	0.62%
QC value within limits for Cd 228.802 Recovery = 100.44%						
Co 228.616†	3638.0	0.201 mg/L	0.0014	0.201 mg/L	0.0014	0.72%
QC value within limits for Co 228.616 Recovery = 100.60%						
Cr 267.716†	59223.4	0.497 mg/L	0.0071	0.497 mg/L	0.0071	1.42%
QC value within limits for Cr 267.716 Recovery = 99.31%						
Cu 327.393†	73848.3	0.488 mg/L	0.0078	0.488 mg/L	0.0078	1.59%
QC value within limits for Cu 327.393 Recovery = 97.57%						
Fe 239.562†	1214.4	4.09 mg/L	0.110	4.09 mg/L	0.110	2.69%
QC value within limits for Fe 239.562 Recovery = 102.25%						
Mg 279.077†	7399.7	10.2 mg/L	0.20	10.2 mg/L	0.20	1.97%
QC value within limits for Mg 279.077 Recovery = 101.93%						
Mn 257.610†	238591.4	0.505 mg/L	0.0063	0.505 mg/L	0.0063	1.26%
QC value within limits for Mn 257.610 Recovery = 100.95%						
Mo 202.031†	12630.5	1.01 mg/L	0.009	1.01 mg/L	0.009	0.90%
QC value within limits for Mo 202.031 Recovery = 101.49%						
Ni 231.604†	16081.7	0.504 mg/L	0.0077	0.504 mg/L	0.0077	1.52%
QC value within limits for Ni 231.604 Recovery = 100.89%						
Pb 220.353†	2664.9	0.510 mg/L	0.0053	0.510 mg/L	0.0053	1.04%
QC value within limits for Pb 220.353 Recovery = 102.05%						
Sb 206.836†	1677.2	1.22 mg/L	0.010	1.22 mg/L	0.010	0.83%
QC value within limits for Sb 206.836 Recovery = 101.70%						
Se 196.026†	516.4	0.412 mg/L	0.0012	0.412 mg/L	0.0012	0.29%
QC value within limits for Se 196.026 Recovery = 102.98%						
Si 251.611†	166865.0	4.86 mg/L	0.061	4.86 mg/L	0.061	1.25%
QC value within limits for Si 251.611 Recovery = 97.26%						
Sn 189.927†	5568.6	1.02 mg/L	0.008	1.02 mg/L	0.008	0.80%
QC value within limits for Sn 189.927 Recovery = 101.62%						
Ti 334.940†	745861.8	0.999 mg/L	0.0049	0.999 mg/L	0.0049	0.49%
QC value within limits for Ti 334.940 Recovery = 99.87%						
Tl 190.801†	789.3	0.518 mg/L	0.0063	0.518 mg/L	0.0063	1.22%
QC value within limits for Tl 190.801 Recovery = 103.58%						
V 290.880†	154165.5	0.997 mg/L	0.0140	0.997 mg/L	0.0140	1.40%
QC value within limits for V 290.880 Recovery = 99.66%						
Zn 206.200†	31049.2	0.994 mg/L	0.0100	0.994 mg/L	0.0100	1.00%
QC value within limits for Zn 206.200 Recovery = 99.37%						
K 766.490†	137263.4	50.9 mg/L	0.27	50.9 mg/L	0.27	0.54%
QC value within limits for K 766.490 Recovery = 101.77%						
Na 589.592†	666765.2	50.0 mg/L	1.38	50.0 mg/L	1.38	2.76%
QC value within limits for Na 589.592 Recovery = 100.02%						
Sr 407.771†	1553306.0	1.03 mg/L	0.015	1.03 mg/L	0.015	1.43%
QC value within limits for Sr 407.771 Recovery = 102.89%						
Li 670.784†	84227.4	1.04 mg/L	0.015	1.04 mg/L	0.015	1.40%
QC value within limits for Li 670.784 Recovery = 104.12%						

QC Failed. Continue with analysis.

Sequence No.: 70 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/15/2011 8:51:22 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	5014211.4						8814.26	0.18%
YRADIAL	303651.1						5705.27	1.88%
Ga 417.206	1336501.5						4053.05	0.30%
GaRADIAL	66216.4						1354.01	2.04%
Ag 328.068†	-922.3	-0.00375	mg/L	0.000488	-0.00375	mg/L	0.000488	13.00%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	55.8	0.00233	mg/L	0.014238	0.00233	mg/L	0.014238	610.90%

Approved: April 18, 2011

QC value within limits for Al 396.153 Recovery = Not calculated

As 188.979†	0.6	0.00013 mg/L	0.003469	0.00013 mg/L	0.003469	>999.9%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	4.9	0.00017 mg/L	0.000019	0.00017 mg/L	0.000019	11.27%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	98.4	0.00018 mg/L	0.000010	0.00018 mg/L	0.000010	5.70%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	184.7	0.00445 mg/L	0.000284	0.00445 mg/L	0.000284	6.38%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-0.6	0.0119 mg/L	0.04698	0.0119 mg/L	0.04698	394.43%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-2.9	-0.00020 mg/L	0.000062	-0.00020 mg/L	0.000062	30.46%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-10.6	-0.00025 mg/L	0.000101	-0.00025 mg/L	0.000101	40.42%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	44.7	0.00023 mg/L	0.000167	0.00023 mg/L	0.000167	73.67%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-97.9	-0.00106 mg/L	0.000653	-0.00106 mg/L	0.000653	61.28%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	0.7	-0.00355 mg/L	0.006274	-0.00355 mg/L	0.006274	176.59%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-2.3	-0.00547 mg/L	0.002575	-0.00547 mg/L	0.002575	47.07%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	26.6	-0.00004 mg/L	0.000018	-0.00004 mg/L	0.000018	48.37%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-5.0	0.00013 mg/L	0.000470	0.00013 mg/L	0.000470	374.51%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	4.1	-0.00004 mg/L	0.000302	-0.00004 mg/L	0.000302	754.19%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	3.0	0.00164 mg/L	0.000424	0.00164 mg/L	0.000424	25.90%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	4.7	-0.00016 mg/L	0.002262	-0.00016 mg/L	0.002262	>999.9%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	0.3	-0.00296 mg/L	0.001557	-0.00296 mg/L	0.001557	52.53%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-17.2	0.00030 mg/L	0.000334	0.00030 mg/L	0.000334	113.10%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-0.5	0.00054 mg/L	0.000575	0.00054 mg/L	0.000575	106.33%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-138.3	-0.00019 mg/L	0.000113	-0.00019 mg/L	0.000113	58.37%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	1.5	-0.00165 mg/L	0.001700	-0.00165 mg/L	0.001700	103.15%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	-52.7	0.00001 mg/L	0.000596	0.00001 mg/L	0.000596	>999.9%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	12.5	0.00070 mg/L	0.000188	0.00070 mg/L	0.000188	27.09%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	202.4	0.0752 mg/L	0.04236	0.0752 mg/L	0.04236	56.30%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	936.9	0.0720 mg/L	0.00437	0.0720 mg/L	0.00437	6.06%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	-8.6	-0.00004 mg/L	0.000031	-0.00004 mg/L	0.000031	75.23%
QC value within limits for Sr 407.771 Recovery = Not calculated								
Li 670.784†	99.7	0.00047 mg/L	0.001152	0.00047 mg/L	0.001152	243.37%
QC value within limits for Li 670.784 Recovery = Not calculated								

All analyte(s) passed QC.

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Sequence No.: 71 **Autosampler Location: 101**
Sample ID: L1104047702 WG361973-01 **Date Collected: 4/15/2011 8:57:58 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104047702 WG361973-01

Analyte	**Back Pressure**	**Flow**
All	198.0 kPa	0.50 L/min

Mean Data: L1104047702 WG361973-01

Analyte	**Mean Corrected Intensity**	**Calib. Conc.**	**Units**	**Std.Dev.**	**Sample Conc.**	**Units**	**Std.Dev.**	**RSD**

Approved: April 18, 2011

Y 371.029	4766729.6					15336.20	0.32%
YRADIAL	298011.0					2582.64	0.87%
Ga 417.206	1266874.5					11647.44	0.92%
GaRADIAL	64154.2					872.44	1.36%
Ag 328.068†	-914.3	-0.00374	mg/L	0.000618	-0.00374 mg/L	0.000618	16.53%
Al 396.153†	372.0	0.0635	mg/L	0.01212	0.0635 mg/L	0.01212	19.08%
As 188.979†	4.8	0.00709	mg/L	0.002739	0.00709 mg/L	0.002739	38.66%
Ba 233.527†	8297.6	0.149	mg/L	0.0016	0.149 mg/L	0.0016	1.07%
Be 234.861†	20.8	0.00004	mg/L	0.000035	0.00004 mg/L	0.000035	97.36%
B 249.677†	6387.6	0.119	mg/L	0.0009	0.119 mg/L	0.0009	0.79%
Ca 227.546†	2148.2	23.0	mg/L	0.22	23.0 mg/L	0.22	0.95%
Cd 228.802†	141.4	0.00917	mg/L	0.000047	0.00917 mg/L	0.000047	0.52%
Co 228.616†	-18.5	-0.00075	mg/L	0.000029	-0.00075 mg/L	0.000029	3.92%
Cr 267.716†	124.9	0.00090	mg/L	0.000055	0.00090 mg/L	0.000055	6.13%
Cu 327.393†	-26.5	-0.00053	mg/L	0.000474	-0.00053 mg/L	0.000474	89.45%
Fe 239.562†	10.1	0.0282	mg/L	0.00338	0.0282 mg/L	0.00338	11.96%
Mg 279.077†	1194.1	1.64	mg/L	0.013	1.64 mg/L	0.013	0.78%
Mn 257.610†	35224.5	0.0753	mg/L	0.00114	0.0753 mg/L	0.00114	1.51%
Mo 202.031†	-16.4	-0.00077	mg/L	0.000315	-0.00077 mg/L	0.000315	40.89%
Ni 231.604†	60.3	0.00171	mg/L	0.000117	0.00171 mg/L	0.000117	6.84%
Pb 220.353†	28.1	0.00748	mg/L	0.000190	0.00748 mg/L	0.000190	2.55%
Sb 206.836†	16.3	0.00824	mg/L	0.003203	0.00824 mg/L	0.003203	38.89%
Se 196.026†	-7.6	-0.00355	mg/L	0.004385	-0.00355 mg/L	0.004385	123.44%
Si 251.611†	22920.7	0.671	mg/L	0.0080	0.671 mg/L	0.0080	1.20%
Sn 189.927†	5.7	0.00167	mg/L	0.000426	0.00167 mg/L	0.000426	25.42%
Ti 334.940†	1854.7	0.00270	mg/L	0.000047	0.00270 mg/L	0.000047	1.74%
Tl 190.801†	41.1	0.0220	mg/L	0.00450	0.0220 mg/L	0.00450	20.47%
V 290.880†	156.6	0.00135	mg/L	0.000877	0.00135 mg/L	0.000877	64.75%
Zn 206.200†	29767.4	0.951	mg/L	0.0098	0.951 mg/L	0.0098	1.03%
K 766.490†	3427.9	1.10	mg/L	0.045	1.10 mg/L	0.045	4.06%
Na 589.592†	1791585.9	145	mg/L	2.3	145 mg/L	2.3	1.55%
Sr 407.771†	100447.7	0.0666	mg/L	0.00030	0.0666 mg/L	0.00030	0.45%
Li 670.784†	189.6	0.00159	mg/L	0.000739	0.00159 mg/L	0.000739	46.59%

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Sequence No.: 72 **Autosampler Location: 102**
Sample ID: L1104047702S WG361973-04 **Date Collected: 4/15/2011 9:04:43 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104047702S WG361973-04

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: L1104047702S WG361973-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4745468.5						30437.55	0.64%
YRADIAL	295802.8						3975.21	1.34%
Ga 417.206	1267618.4						12237.31	0.97%
GaRADIAL	65252.8						358.00	0.55%
Ag 328.068†	38818.2	0.187	mg/L	0.0017	0.187	mg/L	0.0017	0.88%
Al 396.153†	26416.2	5.10	mg/L	0.017	5.10	mg/L	0.017	0.32%
As 188.979†	127.3	0.225	mg/L	0.0037	0.225	mg/L	0.0037	1.64%
Ba 233.527†	34032.1	0.611	mg/L	0.0070	0.611	mg/L	0.0070	1.14%
Be 234.861†	11982.0	0.0226	mg/L	0.00035	0.0226	mg/L	0.00035	1.56%
B 249.677†	55989.5	1.04	mg/L	0.013	1.04	mg/L	0.013	1.23%
Ca 227.546†	2641.8	28.4	mg/L	0.24	28.4	mg/L	0.24	0.85%
Cd 228.802†	506.2	0.0323	mg/L	0.00030	0.0323	mg/L	0.00030	0.93%
Co 228.616†	1682.3	0.0931	mg/L	0.00066	0.0931	mg/L	0.00066	0.70%
Cr 267.716†	28034.5	0.235	mg/L	0.0033	0.235	mg/L	0.0033	1.39%
Cu 327.393†	35789.2	0.236	mg/L	0.0029	0.236	mg/L	0.0029	1.22%
Fe 239.562†	626.9	2.11	mg/L	0.043	2.11	mg/L	0.043	2.04%
Mg 279.077†	4652.4	6.41	mg/L	0.099	6.41	mg/L	0.099	1.54%
Mn 257.610†	148768.7	0.316	mg/L	0.0036	0.316	mg/L	0.0036	1.15%
Mo 202.031†	5948.0	0.478	mg/L	0.0032	0.478	mg/L	0.0032	0.67%
Ni 231.604†	7555.9	0.237	mg/L	0.0015	0.237	mg/L	0.0015	0.62%
Pb 220.353†	1241.0	0.239	mg/L	0.0031	0.239	mg/L	0.0031	1.29%
Sb 206.836†	792.0	0.574	mg/L	0.0056	0.574	mg/L	0.0056	0.98%
Se 196.026†	230.7	0.188	mg/L	0.0015	0.188	mg/L	0.0015	0.79%

Approved: April 18, 2011

Si 251.611†	125701.0	3.67	mg/L	0.049	3.67	mg/L	0.049 1.33%
Sn 189.927†	-5.3	-0.00034	mg/L	0.000633	-0.00034	mg/L	0.000633 188.39%
Ti 334.940†	367848.2	0.493	mg/L	0.0059	0.493	mg/L	0.0059 1.19%
Tl 190.801†	391.5	0.254	mg/L	0.0040	0.254	mg/L	0.0040 1.60%
V 290.880†	74447.1	0.481	mg/L	0.0062	0.481	mg/L	0.0062 1.29%
Zn 206.200†	43449.3	1.39	mg/L	0.023	1.39	mg/L	0.023 1.63%
K 766.490†	68641.3	25.0	mg/L	0.09	25.0	mg/L	0.09 0.37%
Na 589.592†	2077755.3	173	mg/L	1.1	173	mg/L	1.1 0.66%
Sr 407.771†	836577.8	0.554	mg/L	0.0042	0.554	mg/L	0.0042 0.76%
Li 670.784†	39984.0	0.494	mg/L	0.0043	0.494	mg/L	0.0043 0.87%

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Sequence No.: 73 **Autosampler Location: 103**
Sample ID: L1104047702SD WG361973-05 **Date Collected: 4/15/2011 9:11:27 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104047702SD WG361973-05

Analyte	Back Pressure	Flow
All	197.0 kPa	0.50 L/min

Mean Data: L1104047702SD WG361973-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4673935.8						42401.59	0.91%
YRADIAL	284720.5						883.95	0.31%
Ga 417.206	1238473.5						8635.95	0.70%
GaRADIAL	63065.6						1398.59	2.22%
Ag 328.068†	40471.2	0.195	mg/L	0.0021	0.195	mg/L	0.0021	1.05%
Al 396.153†	26373.7	5.09	mg/L	0.037	5.09	mg/L	0.037	0.73%
As 188.979†	135.1	0.239	mg/L	0.0034	0.239	mg/L	0.0034	1.41%
Ba 233.527†	35607.1	0.640	mg/L	0.0041	0.640	mg/L	0.0041	0.64%
Be 234.861†	12550.9	0.0237	mg/L	0.00042	0.0237	mg/L	0.00042	1.78%
B 249.677†	59103.4	1.10	mg/L	0.014	1.10	mg/L	0.014	1.28%
Ca 227.546†	2759.5	29.7	mg/L	0.29	29.7	mg/L	0.29	0.96%
Cd 228.802†	528.1	0.0337	mg/L	0.00031	0.0337	mg/L	0.00031	0.91%
Co 228.616†	1732.9	0.0959	mg/L	0.00072	0.0959	mg/L	0.00072	0.75%
Cr 267.716†	29240.1	0.245	mg/L	0.0019	0.245	mg/L	0.0019	0.76%
Cu 327.393†	37949.5	0.251	mg/L	0.0034	0.251	mg/L	0.0034	1.35%
Fe 239.562†	603.8	2.03	mg/L	0.030	2.03	mg/L	0.030	1.49%
Mg 279.077†	4856.8	6.69	mg/L	0.088	6.69	mg/L	0.088	1.32%
Mn 257.610†	152986.1	0.325	mg/L	0.0009	0.325	mg/L	0.0009	0.29%
Mo 202.031†	6279.6	0.505	mg/L	0.0055	0.505	mg/L	0.0055	1.09%
Ni 231.604†	7900.3	0.248	mg/L	0.0032	0.248	mg/L	0.0032	1.31%
Pb 220.353†	1291.0	0.249	mg/L	0.0023	0.249	mg/L	0.0023	0.92%
Sb 206.836†	831.5	0.603	mg/L	0.0037	0.603	mg/L	0.0037	0.61%
Se 196.026†	236.5	0.193	mg/L	0.0050	0.193	mg/L	0.0050	2.61%
Si 251.611†	114766.3	3.35	mg/L	0.038	3.35	mg/L	0.038	1.14%
Sn 189.927†	-5.6	-0.00040	mg/L	0.000487	-0.00040	mg/L	0.000487	122.71%
Ti 334.940†	374469.1	0.502	mg/L	0.0036	0.502	mg/L	0.0036	0.72%
Tl 190.801†	409.5	0.265	mg/L	0.0051	0.265	mg/L	0.0051	1.94%
V 290.880†	77605.9	0.502	mg/L	0.0032	0.502	mg/L	0.0032	0.64%
Zn 206.200†	46155.8	1.47	mg/L	0.010	1.47	mg/L	0.010	0.70%
K 766.490†	71330.4	26.0	mg/L	0.04	26.0	mg/L	0.04	0.17%
Na 589.592†	2192281.0	184	mg/L	7.0	184	mg/L	7.0	3.79%
Sr 407.771†	872746.5	0.578	mg/L	0.0114	0.578	mg/L	0.0114	1.97%
Li 670.784†	41371.2	0.511	mg/L	0.0006	0.511	mg/L	0.0006	0.12%

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Sequence No.: 74 **Autosampler Location: 104**
Sample ID: PBW 3P WG361935-03 **Date Collected: 4/15/2011 9:18:11 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW 3P WG361935-03

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Approved: April 18, 2011

Mean Data: PBW 3P WG361935-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4970652.4						50546.38	1.02%
YRADIAL	309961.2						2746.60	0.89%
Ga 417.206	1346131.7						15121.88	1.12%
GaRADIAL	67731.4						559.17	0.83%
Ag 328.068†	-867.1	-0.00349	mg/L	0.000832	-0.00349	mg/L	0.000832	23.85%
Al 396.153†	27.3	-0.00318	mg/L	0.009177	-0.00318	mg/L	0.009177	288.30%
As 188.979†	-0.9	-0.00268	mg/L	0.002026	-0.00268	mg/L	0.002026	75.51%
Ba 233.527†	6.5	0.00020	mg/L	0.000030	0.00020	mg/L	0.000030	15.03%
Be 234.861†	114.5	0.00021	mg/L	0.000021	0.00021	mg/L	0.000021	10.16%
B 249.677†	336.6	0.00727	mg/L	0.000429	0.00727	mg/L	0.000429	5.90%
Ca 227.546†	-0.9	0.00845	mg/L	0.026680	0.00845	mg/L	0.026680	315.70%
Cd 228.802†	-3.5	-0.00024	mg/L	0.000083	-0.00024	mg/L	0.000083	34.93%
Co 228.616†	-10.8	-0.00026	mg/L	0.000022	-0.00026	mg/L	0.000022	8.55%
Cr 267.716†	30.6	0.00011	mg/L	0.000135	0.00011	mg/L	0.000135	123.09%
Cu 327.393†	-79.8	-0.00094	mg/L	0.000290	-0.00094	mg/L	0.000290	30.74%
Fe 239.562†	1.0	-0.00248	mg/L	0.001506	-0.00248	mg/L	0.001506	60.82%
Mg 279.077†	1.3	-0.00045	mg/L	0.004270	-0.00045	mg/L	0.004270	954.51%
Mn 257.610†	61.9	0.00004	mg/L	0.000004	0.00004	mg/L	0.000004	9.75%
Mo 202.031†	-7.5	-0.00008	mg/L	0.000207	-0.00008	mg/L	0.000207	273.25%
Ni 231.604†	3.2	-0.00007	mg/L	0.000149	-0.00007	mg/L	0.000149	217.76%
Pb 220.353†	2.7	0.00158	mg/L	0.001652	0.00158	mg/L	0.001652	104.41%
Sb 206.836†	6.1	0.00080	mg/L	0.002419	0.00080	mg/L	0.002419	303.81%
Se 196.026†	0.3	-0.00295	mg/L	0.004580	-0.00295	mg/L	0.004580	155.48%
Si 251.611†	147.4	0.00511	mg/L	0.000436	0.00511	mg/L	0.000436	8.53%
Sn 189.927†	-8.2	-0.00086	mg/L	0.000231	-0.00086	mg/L	0.000231	26.72%
Ti 334.940†	-50.4	-0.00008	mg/L	0.000063	-0.00008	mg/L	0.000063	83.70%
Tl 190.801†	-1.0	-0.00330	mg/L	0.001823	-0.00330	mg/L	0.001823	55.32%
V 290.880†	133.7	0.00121	mg/L	0.000879	0.00121	mg/L	0.000879	72.58%
Zn 206.200†	65.8	0.00240	mg/L	0.000065	0.00240	mg/L	0.000065	2.71%
K 766.490†	134.2	0.0505	mg/L	0.03691	0.0505	mg/L	0.03691	73.11%
Na 589.592†	1343.4	0.101	mg/L	0.0081	0.101	mg/L	0.0081	7.97%
Sr 407.771†	-90.8	-0.00010	mg/L	0.000054	-0.00010	mg/L	0.000054	56.76%
Li 670.784†	130.1	0.00085	mg/L	0.000572	0.00085	mg/L	0.000572	67.30%

Sequence No.: 75 **Autosampler Location: 105**
Sample ID: LCSW 3P WG361935-04 **Date Collected: 4/15/2011 9:24:50 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW 3P WG361935-04

Analyte	Back Pressure	Flow
All	198.0 kPa	0.50 L/min

Mean Data: LCSW 3P WG361935-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4762022.1						71086.15	1.49%
YRADIAL	296298.6						5995.68	2.02%
Ga 417.206	1307625.0						20633.34	1.58%
GaRADIAL	64721.8						191.63	0.30%
Ag 328.068†	39926.6	0.192	mg/L	0.0028	0.192	mg/L	0.0028	1.45%
Al 396.153†	26185.7	5.05	mg/L	0.073	5.05	mg/L	0.073	1.44%
As 188.979†	122.5	0.217	mg/L	0.0029	0.217	mg/L	0.0029	1.34%
Ba 233.527†	27579.0	0.496	mg/L	0.0060	0.496	mg/L	0.0060	1.21%
Be 234.861†	12546.5	0.0237	mg/L	0.00076	0.0237	mg/L	0.00076	3.19%
B 249.677†	52668.5	0.978	mg/L	0.0111	0.978	mg/L	0.0111	1.14%
Ca 227.546†	459.3	5.09	mg/L	0.008	5.09	mg/L	0.008	0.16%
Cd 228.802†	376.3	0.0239	mg/L	0.00048	0.0239	mg/L	0.00048	1.99%
Co 228.616†	1780.0	0.0986	mg/L	0.00113	0.0986	mg/L	0.00113	1.15%
Cr 267.716†	29158.7	0.244	mg/L	0.0025	0.244	mg/L	0.0025	1.02%
Cu 327.393†	35853.3	0.237	mg/L	0.0033	0.237	mg/L	0.0033	1.39%
Fe 239.562†	589.2	1.98	mg/L	0.013	1.98	mg/L	0.013	0.66%
Mg 279.077†	3665.3	5.05	mg/L	0.042	5.05	mg/L	0.042	0.84%
Mn 257.610†	119054.1	0.252	mg/L	0.0031	0.252	mg/L	0.0031	1.22%
Mo 202.031†	6085.0	0.489	mg/L	0.0048	0.489	mg/L	0.0048	0.98%

Approved: April 18, 2011

Ni 231.604†	7992.2	0.251	mg/L	0.0029	0.251	mg/L	0.0029	1.14%
Pb 220.353†	1296.4	0.249	mg/L	0.0034	0.249	mg/L	0.0034	1.37%
Sb 206.836†	808.2	0.586	mg/L	0.0133	0.586	mg/L	0.0133	2.27%
Se 196.026†	250.2	0.198	mg/L	0.0017	0.198	mg/L	0.0017	0.85%
Si 251.611†	84171.3	2.45	mg/L	0.037	2.45	mg/L	0.037	1.49%
Sn 189.927†	-15.6	-0.00221	mg/L	0.000277	-0.00221	mg/L	0.000277	12.49%
Ti 334.940†	371725.9	0.498	mg/L	0.0077	0.498	mg/L	0.0077	1.55%
Tl 190.801†	391.4	0.256	mg/L	0.0045	0.256	mg/L	0.0045	1.77%
V 290.880†	76286.4	0.493	mg/L	0.0054	0.493	mg/L	0.0054	1.09%
Zn 206.200†	15151.8	0.485	mg/L	0.0081	0.485	mg/L	0.0081	1.67%
K 766.490†	67899.0	24.9	mg/L	0.37	24.9	mg/L	0.37	1.49%
Na 589.592†	336153.5	24.7	mg/L	0.20	24.7	mg/L	0.20	0.83%
Sr 407.771†	763310.8	0.506	mg/L	0.0050	0.506	mg/L	0.0050	1.00%
Li 670.784†	42297.1	0.522	mg/L	0.0083	0.522	mg/L	0.0083	1.59%

Sequence No.: 76 **Autosampler Location: 106**
Sample ID: L1104045201 **Date Collected: 4/15/2011 9:31:34 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104045201

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104045201

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4788116.7						27558.05	0.58%
YRADIAL	299775.5						4495.39	1.50%
Ga 417.206	1344385.5						9591.99	0.71%
GaRADIAL	66321.2						968.93	1.46%
Ag 328.068†	-564.2	-0.00209	mg/L	0.000685	-0.00209	mg/L	0.000685	32.83%
Al 396.153†	-4.5	-0.00932	mg/L	0.005124	-0.00932	mg/L	0.005124	54.95%
As 188.979†	13.0	0.0207	mg/L	0.00207	0.0207	mg/L	0.00207	10.03%
Ba 233.527†	2334.4	0.0419	mg/L	0.00005	0.0419	mg/L	0.00005	0.13%
Be 234.861†	127.3	0.00022	mg/L	0.000039	0.00022	mg/L	0.000039	17.47%
B 249.677†	7457.0	0.139	mg/L	0.0031	0.139	mg/L	0.0031	2.20%
Ca 227.546†	7525.6	80.4	mg/L	0.58	80.4	mg/L	0.58	0.72%
Cd 228.802†	-0.3	-0.00010	mg/L	0.000187	-0.00010	mg/L	0.000187	186.21%
Co 228.616†	-10.2	-0.00025	mg/L	0.000090	-0.00025	mg/L	0.000090	36.85%
Cr 267.716†	134.9	0.00097	mg/L	0.000061	0.00097	mg/L	0.000061	6.25%
Cu 327.393†	288.9	0.00149	mg/L	0.000582	0.00149	mg/L	0.000582	38.96%
Fe 239.562†	21.5	0.0663	mg/L	0.01393	0.0663	mg/L	0.01393	21.01%
Mg 279.077†	6786.2	9.34	mg/L	0.107	9.34	mg/L	0.107	1.15%
Mn 257.610†	14124.7	0.0317	mg/L	0.00041	0.0317	mg/L	0.00041	1.29%
Mo 202.031†	-6.8	-0.00001	mg/L	0.000452	-0.00001	mg/L	0.000452	>999.9%
Ni 231.604†	14.7	0.00026	mg/L	0.000288	0.00026	mg/L	0.000288	111.97%
Pb 220.353†	-11.3	0.00278	mg/L	0.002031	0.00278	mg/L	0.002031	72.97%
Sb 206.836†	17.9	0.00941	mg/L	0.003087	0.00941	mg/L	0.003087	32.79%
Se 196.026†	-25.3	-0.00329	mg/L	0.003368	-0.00329	mg/L	0.003368	102.21%
Si 251.611†	210615.9	6.16	mg/L	0.130	6.16	mg/L	0.130	2.11%
Sn 189.927†	-9.5	-0.00111	mg/L	0.000886	-0.00111	mg/L	0.000886	79.67%
Ti 334.940†	-744.6	-0.00020	mg/L	0.000291	-0.00020	mg/L	0.000291	144.50%
Tl 190.801†	92.4	0.0498	mg/L	0.00367	0.0498	mg/L	0.00367	7.37%
V 290.880†	-57.3	-0.00002	mg/L	0.000585	-0.00002	mg/L	0.000585	>999.9%
Zn 206.200†	670.9	0.0217	mg/L	0.00031	0.0217	mg/L	0.00031	1.41%
K 766.490†	24895.2	8.97	mg/L	0.126	8.97	mg/L	0.126	1.41%
Na 589.592†	1203420.7	93.5	mg/L	1.64	93.5	mg/L	1.64	1.75%
Sr 407.771†	285353.3	0.189	mg/L	0.0006	0.189	mg/L	0.0006	0.32%
Li 670.784†	697.8	0.00787	mg/L	0.000954	0.00787	mg/L	0.000954	12.12%

Sequence No.: 77 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/15/2011 9:38:18 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 18, 2011

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4763274.6						62704.13	1.32%
YRADIAL	296862.6						3317.02	1.12%
Ga 417.206	1294808.3						16442.31	1.27%
GaRADIAL	65527.4						872.34	1.33%
Ag 328.068†	78839.2	0.379	mg/L	0.0007	0.379	mg/L	0.0007	0.18%
QC value within limits for Ag 328.068 Recovery = 94.73%								
Al 396.153†	50931.0	9.83	mg/L	0.022	9.83	mg/L	0.022	0.23%
QC value within limits for Al 396.153 Recovery = 98.32%								
As 188.979†	248.8	0.441	mg/L	0.0116	0.441	mg/L	0.0116	2.64%
QC value greater than the upper limit for As 188.979 Recovery = 110.26%								
Ba 233.527†	53926.7	0.969	mg/L	0.0080	0.969	mg/L	0.0080	0.82%
QC value within limits for Ba 233.527 Recovery = 96.94%								
Be 234.861†	24623.7	0.0465	mg/L	0.00014	0.0465	mg/L	0.00014	0.31%
QC value within limits for Be 234.861 Recovery = 93.03%								
B 249.677†	25874.5	0.486	mg/L	0.0005	0.486	mg/L	0.0005	0.10%
QC value within limits for B 249.677 Recovery = 97.17%								
Ca 227.546†	916.7	10.1	mg/L	0.13	10.1	mg/L	0.13	1.33%
QC value within limits for Ca 227.546 Recovery = 101.40%								
Cd 228.802†	751.4	0.0477	mg/L	0.00058	0.0477	mg/L	0.00058	1.21%
QC value within limits for Cd 228.802 Recovery = 95.44%								
Co 228.616†	3498.7	0.193	mg/L	0.0027	0.193	mg/L	0.0027	1.41%
QC value within limits for Co 228.616 Recovery = 96.74%								
Cr 267.716†	57347.0	0.481	mg/L	0.0037	0.481	mg/L	0.0037	0.77%
QC value within limits for Cr 267.716 Recovery = 96.16%								
Cu 327.393†	71017.5	0.469	mg/L	0.0012	0.469	mg/L	0.0012	0.25%
QC value within limits for Cu 327.393 Recovery = 93.83%								
Fe 239.562†	1175.9	3.96	mg/L	0.028	3.96	mg/L	0.028	0.72%
QC value within limits for Fe 239.562 Recovery = 99.01%								
Mg 279.077†	7162.9	9.87	mg/L	0.057	9.87	mg/L	0.057	0.58%
QC value within limits for Mg 279.077 Recovery = 98.66%								
Mn 257.610†	232172.3	0.491	mg/L	0.0039	0.491	mg/L	0.0039	0.79%
QC value within limits for Mn 257.610 Recovery = 98.23%								
Mo 202.031†	12097.6	0.972	mg/L	0.0158	0.972	mg/L	0.0158	1.63%
QC value within limits for Mo 202.031 Recovery = 97.21%								
Ni 231.604†	15675.7	0.492	mg/L	0.0029	0.492	mg/L	0.0029	0.60%
QC value within limits for Ni 231.604 Recovery = 98.34%								
Pb 220.353†	2555.3	0.489	mg/L	0.0073	0.489	mg/L	0.0073	1.49%
QC value within limits for Pb 220.353 Recovery = 97.86%								
Sb 206.836†	1599.2	1.16	mg/L	0.014	1.16	mg/L	0.014	1.24%
QC value within limits for Sb 206.836 Recovery = 96.95%								
Se 196.026†	491.0	0.391	mg/L	0.0041	0.391	mg/L	0.0041	1.05%
QC value within limits for Se 196.026 Recovery = 97.87%								
Si 251.611†	161494.0	4.71	mg/L	0.010	4.71	mg/L	0.010	0.21%
QC value within limits for Si 251.611 Recovery = 94.13%								
Sn 189.927†	5338.8	0.974	mg/L	0.0168	0.974	mg/L	0.0168	1.72%
QC value within limits for Sn 189.927 Recovery = 97.43%								
Ti 334.940†	724616.7	0.970	mg/L	0.0065	0.970	mg/L	0.0065	0.67%
QC value within limits for Ti 334.940 Recovery = 97.02%								
Tl 190.801†	749.6	0.492	mg/L	0.0108	0.492	mg/L	0.0108	2.19%
QC value within limits for Tl 190.801 Recovery = 98.40%								
V 290.880†	149878.1	0.969	mg/L	0.0085	0.969	mg/L	0.0085	0.87%
QC value within limits for V 290.880 Recovery = 96.89%								
Zn 206.200†	30134.9	0.964	mg/L	0.0090	0.964	mg/L	0.0090	0.94%
QC value within limits for Zn 206.200 Recovery = 96.45%								
K 766.490†	132672.5	49.1	mg/L	0.21	49.1	mg/L	0.21	0.43%
QC value within limits for K 766.490 Recovery = 98.29%								
Na 589.592†	645419.2	48.3	mg/L	0.32	48.3	mg/L	0.32	0.65%
QC value within limits for Na 589.592 Recovery = 96.69%								
Sr 407.771†	1495654.3	0.991	mg/L	0.0123	0.991	mg/L	0.0123	1.24%
QC value within limits for Sr 407.771 Recovery = 99.07%								
Li 670.784†	81960.3	1.01	mg/L	0.009	1.01	mg/L	0.009	0.87%
QC value within limits for Li 670.784 Recovery = 101.32%								

QC Failed. Continue with analysis.

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Approved: April 18, 2011

Sequence No.: 78 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/15/2011 9:44:58 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4922582.7						44664.38	0.91%
YRADIAL	308112.7						4887.96	1.59%
Ga 417.206	1312223.5						14402.01	1.10%
GaRADIAL	66811.3						479.16	0.72%
Ag 328.068†	-849.2	-0.00340	mg/L	0.000700	-0.00340	mg/L	0.000700	20.56%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	58.0	0.00275	mg/L	0.005485	0.00275	mg/L	0.005485	199.13%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.9	0.00070	mg/L	0.002291	0.00070	mg/L	0.002291	327.36%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.8	0.00007	mg/L	0.000035	0.00007	mg/L	0.000035	53.50%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	94.4	0.00017	mg/L	0.000026	0.00017	mg/L	0.000026	15.17%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	294.5	0.00646	mg/L	0.000314	0.00646	mg/L	0.000314	4.86%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-1.5	0.00320	mg/L	0.024812	0.00320	mg/L	0.024812	775.62%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-5.4	-0.00037	mg/L	0.000129	-0.00037	mg/L	0.000129	34.80%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-11.7	-0.00031	mg/L	0.000344	-0.00031	mg/L	0.000344	110.67%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	46.0	0.00024	mg/L	0.000054	0.00024	mg/L	0.000054	22.73%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-161.9	-0.00149	mg/L	0.000645	-0.00149	mg/L	0.000645	43.41%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-0.8	-0.00871	mg/L	0.004989	-0.00871	mg/L	0.004989	57.29%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	-0.4	-0.00274	mg/L	0.006831	-0.00274	mg/L	0.006831	249.70%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	15.7	-0.00006	mg/L	0.000018	-0.00006	mg/L	0.000018	28.51%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-8.1	-0.00012	mg/L	0.000718	-0.00012	mg/L	0.000718	593.84%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	13.7	0.00026	mg/L	0.000179	0.00026	mg/L	0.000179	68.56%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	3.2	0.00169	mg/L	0.000567	0.00169	mg/L	0.000567	33.63%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	6.6	0.00120	mg/L	0.000480	0.00120	mg/L	0.000480	40.14%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	2.8	-0.00096	mg/L	0.003279	-0.00096	mg/L	0.003279	342.14%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-14.5	0.00038	mg/L	0.000224	0.00038	mg/L	0.000224	59.33%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-2.7	0.00013	mg/L	0.000222	0.00013	mg/L	0.000222	169.22%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-141.5	-0.00020	mg/L	0.000031	-0.00020	mg/L	0.000031	15.75%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-2.4	-0.00420	mg/L	0.001228	-0.00420	mg/L	0.001228	29.26%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	37.2	0.00059	mg/L	0.000255	0.00059	mg/L	0.000255	43.42%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	2.8	0.00039	mg/L	0.000130	0.00039	mg/L	0.000130	33.70%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	121.9	0.0461	mg/L	0.01173	0.0461	mg/L	0.01173	25.48%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	729.1	0.0570	mg/L	0.00654	0.0570	mg/L	0.00654	11.47%
QC value within limits for Na 589.592 Recovery = Not calculated								

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Sr 407.771† -75.4 -0.00008 mg/L 0.000048 -0.00008 mg/L 0.000048 56.59%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 1.8 -0.00074 mg/L 0.001461 -0.00074 mg/L 0.001461 198.12%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

Sequence No.: 79 **Autosampler Location: 107**
Sample ID: L1104045701 **Date Collected: 4/15/2011 9:51:35 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104045701

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104045701

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4857136.0						39948.26	0.82%
YRADIAL	315017.6						6585.66	2.09%
Ga 417.206	1383302.3						21260.44	1.54%
GaRADIAL	69017.2						1092.22	1.58%
Ag 328.068†	-737.3	-0.00318	mg/L	0.000340	-0.00318	mg/L	0.000340	10.68%
Al 396.153†	243.0	0.0390	mg/L	0.00188	0.0390	mg/L	0.00188	4.83%
As 188.979†	8.4	0.0143	mg/L	0.00537	0.0143	mg/L	0.00537	37.53%
Ba 233.527†	881.2	0.0159	mg/L	0.00008	0.0159	mg/L	0.00008	0.53%
Be 234.861†	756.0	0.00024	mg/L	0.000079	0.00024	mg/L	0.000079	32.32%
B 249.677†	5573.8	0.131	mg/L	0.0018	0.131	mg/L	0.0018	1.37%
Ca 227.546†	2801.5	30.0	mg/L	0.45	30.0	mg/L	0.45	1.51%
Cd 228.802†	-2.2	-0.00020	mg/L	0.000198	-0.00020	mg/L	0.000198	99.11%
Co 228.616†	-5.4	-0.00012	mg/L	0.000275	-0.00012	mg/L	0.000275	236.42%
Cr 267.716†	134.6	0.00093	mg/L	0.000119	0.00093	mg/L	0.000119	12.79%
Cu 327.393†	-242.8	-0.00141	mg/L	0.000857	-0.00141	mg/L	0.000857	60.74%
Fe 239.562†	1685.8	5.68	mg/L	0.075	5.68	mg/L	0.075	1.31%
Mg 279.077†	5552.0	7.64	mg/L	0.091	7.64	mg/L	0.091	1.19%
Mn 257.610†	56406.2	0.120	mg/L	0.0012	0.120	mg/L	0.0012	1.02%
Mo 202.031†	-6.3	0.00033	mg/L	0.000052	0.00033	mg/L	0.000052	15.79%
Ni 231.604†	44.1	0.00120	mg/L	0.000323	0.00120	mg/L	0.000323	26.96%
Pb 220.353†	-0.5	0.00215	mg/L	0.000839	0.00215	mg/L	0.000839	38.98%
Sb 206.836†	14.3	0.00682	mg/L	0.001967	0.00682	mg/L	0.001967	28.83%
Se 196.026†	-23.2	-0.0122	mg/L	0.00302	-0.0122	mg/L	0.00302	24.70%
Si 251.611†	165796.9	4.85	mg/L	0.049	4.85	mg/L	0.049	1.02%
Sn 189.927†	-9.2	-0.00104	mg/L	0.000852	-0.00104	mg/L	0.000852	81.69%
Ti 334.940†	-481.6	-0.00035	mg/L	0.000079	-0.00035	mg/L	0.000079	22.36%
Tl 190.801†	48.0	0.0258	mg/L	0.00773	0.0258	mg/L	0.00773	29.95%
V 290.880†	-86.0	0.00022	mg/L	0.000237	0.00022	mg/L	0.000237	106.10%
Zn 206.200†	121.0	0.00403	mg/L	0.000103	0.00403	mg/L	0.000103	2.56%
K 766.490†	6861.4	2.47	mg/L	0.030	2.47	mg/L	0.030	1.20%
Na 589.592†	274975.4	20.1	mg/L	0.14	20.1	mg/L	0.14	0.70%
Sr 407.771†	91197.5	0.0592	mg/L	0.00026	0.0592	mg/L	0.00026	0.45%
Li 670.784†	24724.3	0.305	mg/L	0.0030	0.305	mg/L	0.0030	0.99%

Sequence No.: 80 **Autosampler Location: 108**
Sample ID: L1104049601 WG361935-01 **Date Collected: 4/15/2011 9:58:14 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104049601 WG361935-01

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104049601 WG361935-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4719786.9						2580.05	0.05%

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YRADIAL	298042.7					3390.13	1.14%
Ga 417.206	1337073.2					8249.76	0.62%
GaRADIAL	66191.9					1179.55	1.78%
Ag 328.068†	-473.8	-0.00166	mg/L	0.000608	-0.00166 mg/L	0.000608	36.58%
Al 396.153†	19440.8	3.75	mg/L	0.032	3.75 mg/L	0.032	0.86%
As 188.979†	15.5	0.0240	mg/L	0.00386	0.0240 mg/L	0.00386	16.13%
Ba 233.527†	5842.4	0.105	mg/L	0.0003	0.105 mg/L	0.0003	0.26%
Be 234.861†	155.9	0.00026	mg/L	0.000017	0.00026 mg/L	0.000017	6.52%
B 249.677†	10304.4	0.188	mg/L	0.0026	0.188 mg/L	0.0026	1.39%
Ca 227.546†	11141.5	119	mg/L	0.5	119 mg/L	0.5	0.40%
Cd 228.802†	28.8	0.00179	mg/L	0.000244	0.00179 mg/L	0.000244	13.65%
Co 228.616†	-7.3	-0.00011	mg/L	0.000048	-0.00011 mg/L	0.000048	43.70%
Cr 267.716†	182.3	0.00129	mg/L	0.000112	0.00129 mg/L	0.000112	8.67%
Cu 327.393†	24459.6	0.161	mg/L	0.0034	0.161 mg/L	0.0034	2.09%
Fe 239.562†	44.9	0.145	mg/L	0.0149	0.145 mg/L	0.0149	10.25%
Mg 279.077†	6629.1	9.13	mg/L	0.093	9.13 mg/L	0.093	1.02%
Mn 257.610†	4546.1	0.0113	mg/L	0.00005	0.0113 mg/L	0.00005	0.41%
Mo 202.031†	-6.4	0.00002	mg/L	0.000396	0.00002 mg/L	0.000396	>999.9%
Ni 231.604†	559.9	0.0174	mg/L	0.00041	0.0174 mg/L	0.00041	2.38%
Pb 220.353†	-0.7	0.00665	mg/L	0.001439	0.00665 mg/L	0.001439	21.63%
Sb 206.836†	26.3	0.0155	mg/L	0.00131	0.0155 mg/L	0.00131	8.43%
Se 196.026†	-30.6	0.00189	mg/L	0.003024	0.00189 mg/L	0.003024	160.31%
Si 251.611†	287786.5	8.41	mg/L	0.084	8.41 mg/L	0.084	1.00%
Sn 189.927†	29.4	0.00599	mg/L	0.000184	0.00599 mg/L	0.000184	3.07%
Ti 334.940†	57.6	0.00126	mg/L	0.000175	0.00126 mg/L	0.000175	13.91%
Tl 190.801†	101.4	0.0521	mg/L	0.00417	0.0521 mg/L	0.00417	8.00%
V 290.880†	-10.0	0.00028	mg/L	0.000606	0.00028 mg/L	0.000606	213.39%
Zn 206.200†	7550.7	0.241	mg/L	0.0010	0.241 mg/L	0.0010	0.42%
K 766.490†	5282.6	1.90	mg/L	0.009	1.90 mg/L	0.009	0.50%
Na 589.592†	294959.6	21.6	mg/L	0.18	21.6 mg/L	0.18	0.82%
Sr 407.771†	270829.8	0.179	mg/L	0.0019	0.179 mg/L	0.0019	1.06%
Li 670.784†	598.1	0.00664	mg/L	0.000667	0.00664 mg/L	0.000667	10.05%

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Sequence No.: 81 **Autosampler Location: 109**
Sample ID: L1104049601DU WG361935-05 **Date Collected: 4/15/2011 10:04:57 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104049601DU WG361935-05

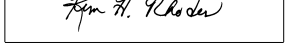
Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: L1104049601DU WG361935-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4636095.5						37582.21	0.81%
YRADIAL	301869.3						6367.80	2.11%
Ga 417.206	1305935.0						16962.46	1.30%
GaRADIAL	67088.1						253.84	0.38%
Ag 328.068†	-450.6	-0.00155	mg/L	0.000358	-0.00155	mg/L	0.000358	23.07%
Al 396.153†	19548.3	3.77	mg/L	0.011	3.77	mg/L	0.011	0.29%
As 188.979†	15.5	0.0237	mg/L	0.00734	0.0237	mg/L	0.00734	30.90%
Ba 233.527†	6002.3	0.108	mg/L	0.0009	0.108	mg/L	0.0009	0.82%
Be 234.861†	138.5	0.00022	mg/L	0.000010	0.00022	mg/L	0.000010	4.64%
B 249.677†	10594.7	0.193	mg/L	0.0030	0.193	mg/L	0.0030	1.55%
Ca 227.546†	11447.8	122	mg/L	1.9	122	mg/L	1.9	1.52%
Cd 228.802†	35.1	0.00219	mg/L	0.000126	0.00219	mg/L	0.000126	5.73%
Co 228.616†	-8.5	-0.00018	mg/L	0.000326	-0.00018	mg/L	0.000326	183.83%
Cr 267.716†	160.4	0.00111	mg/L	0.000044	0.00111	mg/L	0.000044	3.99%
Cu 327.393†	24893.1	0.164	mg/L	0.0027	0.164	mg/L	0.0027	1.63%
Fe 239.562†	44.0	0.142	mg/L	0.0133	0.142	mg/L	0.0133	9.38%
Mg 279.077†	6632.2	9.13	mg/L	0.089	9.13	mg/L	0.089	0.97%
Mn 257.610†	4673.3	0.0116	mg/L	0.00011	0.0116	mg/L	0.00011	0.92%
Mo 202.031†	-5.6	0.00009	mg/L	0.000376	0.00009	mg/L	0.000376	429.40%
Ni 231.604†	126.5	0.00376	mg/L	0.000249	0.00376	mg/L	0.000249	6.63%
Pb 220.353†	8.9	0.00861	mg/L	0.001237	0.00861	mg/L	0.001237	14.37%
Sb 206.836†	29.7	0.0180	mg/L	0.00045	0.0180	mg/L	0.00045	2.51%
Se 196.026†	-32.7	0.00099	mg/L	0.006436	0.00099	mg/L	0.006436	653.38%
Si 251.611†	294264.8	8.60	mg/L	0.090	8.60	mg/L	0.090	1.05%



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Sn 189.927†	38.1	0.00758 mg/L	0.000611	0.00758 mg/L	0.000611	8.05%
Ti 334.940†	1406.6	0.00310 mg/L	0.001678	0.00310 mg/L	0.001678	54.18%
Tl 190.801†	106.2	0.0549 mg/L	0.00346	0.0549 mg/L	0.00346	6.30%
V 290.880†	30.9	0.00055 mg/L	0.001492	0.00055 mg/L	0.001492	272.46%
Zn 206.200†	7839.2	0.251 mg/L	0.0020	0.251 mg/L	0.0020	0.79%
K 766.490†	5194.1	1.87 mg/L	0.014	1.87 mg/L	0.014	0.76%
Na 589.592†	296588.6	21.8 mg/L	0.28	21.8 mg/L	0.28	1.30%
Sr 407.771†	273453.5	0.181 mg/L	0.0005	0.181 mg/L	0.0005	0.27%
Li 670.784†	397.0	0.00415 mg/L	0.001852	0.00415 mg/L	0.001852	44.60%

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Sequence No.: 82 **Autosampler Location: 110**
Sample ID: L1104049601S WG361935-06 **Date Collected: 4/15/2011 10:11:37 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104049601S WG361935-06

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: L1104049601S WG361935-06

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4667591.7						42175.35	0.90%
YRADIAL	297721.4						2726.44	0.92%
Ga 417.206	1296489.4						18805.45	1.45%
GaRADIAL	66525.2						1062.58	1.60%
Ag 328.068†	40410.3	0.195	mg/L	0.0030	0.195	mg/L	0.0030	1.54%
Al 396.153†	44501.1	8.59	mg/L	0.048	8.59	mg/L	0.048	0.56%
As 188.979†	135.8	0.238	mg/L	0.0041	0.238	mg/L	0.0041	1.71%
Ba 233.527†	32783.7	0.589	mg/L	0.0076	0.589	mg/L	0.0076	1.29%
Be 234.861†	12890.3	0.0243	mg/L	0.00035	0.0243	mg/L	0.00035	1.45%
B 249.677†	64213.1	1.19	mg/L	0.015	1.19	mg/L	0.015	1.30%
Ca 227.546†	11892.0	127	mg/L	1.7	127	mg/L	1.7	1.31%
Cd 228.802†	408.0	0.0259	mg/L	0.00046	0.0259	mg/L	0.00046	1.77%
Co 228.616†	1727.2	0.0956	mg/L	0.00112	0.0956	mg/L	0.00112	1.18%
Cr 267.716†	29098.9	0.244	mg/L	0.0031	0.244	mg/L	0.0031	1.29%
Cu 327.393†	61010.8	0.402	mg/L	0.0047	0.402	mg/L	0.0047	1.17%
Fe 239.562†	628.1	2.11	mg/L	0.028	2.11	mg/L	0.028	1.34%
Mg 279.077†	10025.0	13.8	mg/L	0.17	13.8	mg/L	0.17	1.22%
Mn 257.610†	123150.6	0.262	mg/L	0.0032	0.262	mg/L	0.0032	1.22%
Mo 202.031†	6111.4	0.491	mg/L	0.0047	0.491	mg/L	0.0047	0.96%
Ni 231.604†	7781.5	0.244	mg/L	0.0024	0.244	mg/L	0.0024	0.98%
Pb 220.353†	1265.3	0.249	mg/L	0.0026	0.249	mg/L	0.0026	1.06%
Sb 206.836†	833.9	0.605	mg/L	0.0062	0.605	mg/L	0.0062	1.03%
Se 196.026†	213.7	0.199	mg/L	0.0053	0.199	mg/L	0.0053	2.68%
Si 251.611†	378102.6	11.0	mg/L	0.09	11.0	mg/L	0.09	0.84%
Sn 189.927†	23.3	0.00488	mg/L	0.000993	0.00488	mg/L	0.000993	20.36%
Ti 334.940†	378201.9	0.508	mg/L	0.0064	0.508	mg/L	0.0064	1.25%
Tl 190.801†	474.4	0.298	mg/L	0.0041	0.298	mg/L	0.0041	1.38%
V 290.880†	77154.6	0.499	mg/L	0.0058	0.499	mg/L	0.0058	1.17%
Zn 206.200†	23037.3	0.737	mg/L	0.0143	0.737	mg/L	0.0143	1.94%
K 766.490†	72088.1	26.4	mg/L	0.31	26.4	mg/L	0.31	1.16%
Na 589.592†	613486.9	45.9	mg/L	1.21	45.9	mg/L	1.21	2.64%
Sr 407.771†	1020556.7	0.676	mg/L	0.0095	0.676	mg/L	0.0095	1.41%
Li 670.784†	41988.9	0.519	mg/L	0.0043	0.519	mg/L	0.0043	0.83%

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Sequence No.: 83 **Autosampler Location: 111**
Sample ID: L1104045702 **Date Collected: 4/15/2011 10:18:20 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104045702

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Approved: April 18, 2011

Mean Data: L1104045702

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4904219.6						11711.83	0.24%
YRADIAL	311018.2						3989.03	1.28%
Ga 417.206	1398509.1						5495.41	0.39%
GaRADIAL	68700.3						749.56	1.09%
Ag 328.068†	-762.9	-0.00328	mg/L	0.000365	-0.00328	mg/L	0.000365	11.15%
Al 396.153†	206.7	0.0319	mg/L	0.00120	0.0319	mg/L	0.00120	3.75%
As 188.979†	6.2	0.0103	mg/L	0.00269	0.0103	mg/L	0.00269	26.15%
Ba 233.527†	901.1	0.0162	mg/L	0.00010	0.0162	mg/L	0.00010	0.60%
Be 234.861†	685.5	0.00022	mg/L	0.000104	0.00022	mg/L	0.000104	46.54%
B 249.677†	6091.7	0.138	mg/L	0.0009	0.138	mg/L	0.0009	0.64%
Ca 227.546†	2769.6	29.6	mg/L	0.15	29.6	mg/L	0.15	0.52%
Cd 228.802†	-2.1	-0.00018	mg/L	0.000207	-0.00018	mg/L	0.000207	116.50%
Co 228.616†	-9.0	-0.00030	mg/L	0.000368	-0.00030	mg/L	0.000368	121.81%
Cr 267.716†	152.2	0.00108	mg/L	0.000121	0.00108	mg/L	0.000121	11.27%
Cu 327.393†	-242.3	-0.00147	mg/L	0.000383	-0.00147	mg/L	0.000383	26.02%
Fe 239.562†	1527.6	5.15	mg/L	0.084	5.15	mg/L	0.084	1.63%
Mg 279.077†	6263.6	8.62	mg/L	0.104	8.62	mg/L	0.104	1.20%
Mn 257.610†	58430.0	0.124	mg/L	0.0014	0.124	mg/L	0.0014	1.12%
Mo 202.031†	-7.8	0.00018	mg/L	0.000272	0.00018	mg/L	0.000272	150.20%
Ni 231.604†	38.8	0.00103	mg/L	0.000334	0.00103	mg/L	0.000334	32.48%
Pb 220.353†	-6.7	0.00099	mg/L	0.001017	0.00099	mg/L	0.001017	102.90%
Sb 206.836†	16.4	0.00833	mg/L	0.001740	0.00833	mg/L	0.001740	20.88%
Se 196.026†	-19.0	-0.00912	mg/L	0.001723	-0.00912	mg/L	0.001723	18.89%
Si 251.611†	175137.5	5.12	mg/L	0.048	5.12	mg/L	0.048	0.94%
Sn 189.927†	-11.6	-0.00149	mg/L	0.000716	-0.00149	mg/L	0.000716	48.18%
Ti 334.940†	-354.2	-0.00019	mg/L	0.000021	-0.00019	mg/L	0.000021	11.33%
Tl 190.801†	49.6	0.0269	mg/L	0.00315	0.0269	mg/L	0.00315	11.72%
V 290.880†	-37.6	0.00050	mg/L	0.000413	0.00050	mg/L	0.000413	83.27%
Zn 206.200†	82.0	0.00280	mg/L	0.000183	0.00280	mg/L	0.000183	6.55%
K 766.490†	7330.7	2.64	mg/L	0.011	2.64	mg/L	0.011	0.40%
Na 589.592†	283144.7	20.8	mg/L	0.24	20.8	mg/L	0.24	1.14%
Sr 407.771†	97994.8	0.0638	mg/L	0.00064	0.0638	mg/L	0.00064	1.01%
Li 670.784†	25704.6	0.317	mg/L	0.0035	0.317	mg/L	0.0035	1.11%

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Sequence No.: 84 **Autosampler Location: 112**
Sample ID: L1104045702PS WG362020-01 **Date Collected: 4/15/2011 10:25:00 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104045702PS WG362020-01

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: L1104045702PS WG362020-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4697890.5						38000.70	0.81%
YRADIAL	304866.3						2099.75	0.69%
Ga 417.206	1317555.5						32306.83	2.45%
GaRADIAL	66920.2						1145.44	1.71%
Ag 328.068†	39946.0	0.192	mg/L	0.0044	0.192	mg/L	0.0044	2.27%
Al 396.153†	26886.2	5.19	mg/L	0.006	5.19	mg/L	0.006	0.11%
As 188.979†	131.1	0.232	mg/L	0.0051	0.232	mg/L	0.0051	2.21%
Ba 233.527†	28421.4	0.511	mg/L	0.0050	0.511	mg/L	0.0050	0.98%
Be 234.861†	13166.6	0.0239	mg/L	0.00037	0.0239	mg/L	0.00037	1.54%
B 249.677†	58573.8	1.11	mg/L	0.028	1.11	mg/L	0.028	2.50%
Ca 227.546†	3123.7	33.6	mg/L	0.86	33.6	mg/L	0.86	2.56%
Cd 228.802†	377.4	0.0239	mg/L	0.00072	0.0239	mg/L	0.00072	3.03%
Co 228.616†	1813.6	0.100	mg/L	0.0011	0.100	mg/L	0.0011	1.13%
Cr 267.716†	29698.7	0.249	mg/L	0.0029	0.249	mg/L	0.0029	1.17%
Cu 327.393†	36290.9	0.240	mg/L	0.0057	0.240	mg/L	0.0057	2.39%
Fe 239.562†	1973.1	6.65	mg/L	0.128	6.65	mg/L	0.128	1.92%
Mg 279.077†	9300.4	12.8	mg/L	0.18	12.8	mg/L	0.18	1.39%
Mn 257.610†	172707.8	0.366	mg/L	0.0014	0.366	mg/L	0.0014	0.38%
Mo 202.031†	6156.8	0.495	mg/L	0.0038	0.495	mg/L	0.0038	0.77%
Ni 231.604†	8024.9	0.252	mg/L	0.0012	0.252	mg/L	0.0012	0.47%

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Pb 220.353†	1305.4	0.252	mg/L	0.0014	0.252	mg/L	0.0014	0.55%
Sb 206.836†	824.9	0.598	mg/L	0.0162	0.598	mg/L	0.0162	2.70%
Se 196.026†	233.6	0.193	mg/L	0.0040	0.193	mg/L	0.0040	2.06%
Si 251.611†	248252.8	7.25	mg/L	0.094	7.25	mg/L	0.094	1.29%
Sn 189.927†	-20.2	-0.00305	mg/L	0.000152	-0.00305	mg/L	0.000152	4.97%
Ti 334.940†	373581.0	0.500	mg/L	0.0031	0.500	mg/L	0.0031	0.62%
Tl 190.801†	440.7	0.285	mg/L	0.0040	0.285	mg/L	0.0040	1.41%
V 290.880†	77850.1	0.504	mg/L	0.0057	0.504	mg/L	0.0057	1.12%
Zn 206.200†	15162.9	0.485	mg/L	0.0039	0.485	mg/L	0.0039	0.81%
K 766.490†	75329.9	27.6	mg/L	0.16	27.6	mg/L	0.16	0.60%
Na 589.592†	597914.2	44.7	mg/L	0.58	44.7	mg/L	0.58	1.31%
Sr 407.771†	872575.8	0.577	mg/L	0.0067	0.577	mg/L	0.0067	1.16%
Li 670.784†	67181.3	0.830	mg/L	0.0054	0.830	mg/L	0.0054	0.65%

Sequence No.: 85 **Autosampler Location: 113**
Sample ID: L1104045702DL WG362020-02 **Date Collected: 4/15/2011 10:31:41 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104045702DL WG362020-02

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: L1104045702DL WG362020-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4950113.0						60654.01	1.23%
YRADIAL	308599.6						5020.55	1.63%
Ga 417.206	1383555.6						30172.74	2.18%
GaRADIAL	67997.9						628.56	0.92%
Ag 328.068†	-876.7	-0.00359	mg/L	0.000443	-0.00359	mg/L	0.000443	12.34%
Al 396.153†	122.1	0.0153	mg/L	0.01068	0.0153	mg/L	0.01068	70.04%
As 188.979†	0.1	-0.00082	mg/L	0.001527	-0.00082	mg/L	0.001527	185.06%
Ba 233.527†	180.5	0.00332	mg/L	0.000042	0.00332	mg/L	0.000042	1.27%
Be 234.861†	218.1	0.00019	mg/L	0.000044	0.00019	mg/L	0.000044	22.85%
B 249.677†	1543.5	0.0343	mg/L	0.00113	0.0343	mg/L	0.00113	3.29%
Ca 227.546†	548.5	5.88	mg/L	0.080	5.88	mg/L	0.080	1.35%
Cd 228.802†	-3.3	-0.00022	mg/L	0.000030	-0.00022	mg/L	0.000030	13.53%
Co 228.616†	-9.7	-0.00023	mg/L	0.000210	-0.00023	mg/L	0.000210	90.92%
Cr 267.716†	65.1	0.00039	mg/L	0.000099	0.00039	mg/L	0.000099	25.61%
Cu 327.393†	-95.9	-0.00094	mg/L	0.000200	-0.00094	mg/L	0.000200	21.16%
Fe 239.562†	301.9	1.01	mg/L	0.011	1.01	mg/L	0.011	1.05%
Mg 279.077†	1249.3	1.72	mg/L	0.025	1.72	mg/L	0.025	1.48%
Mn 257.610†	11746.4	0.0248	mg/L	0.00018	0.0248	mg/L	0.00018	0.74%
Mo 202.031†	-8.7	-0.00012	mg/L	0.000448	-0.00012	mg/L	0.000448	377.79%
Ni 231.604†	14.5	0.00028	mg/L	0.000139	0.00028	mg/L	0.000139	49.56%
Pb 220.353†	-3.3	0.00069	mg/L	0.001557	0.00069	mg/L	0.001557	226.34%
Sb 206.836†	6.4	0.00102	mg/L	0.000455	0.00102	mg/L	0.000455	44.59%
Se 196.026†	-2.1	-0.00306	mg/L	0.002800	-0.00306	mg/L	0.002800	91.62%
Si 251.611†	34868.9	1.02	mg/L	0.017	1.02	mg/L	0.017	1.64%
Sn 189.927†	-8.5	-0.00092	mg/L	0.000375	-0.00092	mg/L	0.000375	40.95%
Ti 334.940†	-158.9	-0.00016	mg/L	0.000095	-0.00016	mg/L	0.000095	58.39%
Tl 190.801†	11.6	0.00435	mg/L	0.003479	0.00435	mg/L	0.003479	79.92%
V 290.880†	65.6	0.00085	mg/L	0.000470	0.00085	mg/L	0.000470	55.43%
Zn 206.200†	62.6	0.00227	mg/L	0.000079	0.00227	mg/L	0.000079	3.49%
K 766.490†	1565.0	0.565	mg/L	0.0329	0.565	mg/L	0.0329	5.82%
Na 589.592†	57564.3	4.17	mg/L	0.040	4.17	mg/L	0.040	0.97%
Sr 407.771†	19291.2	0.0125	mg/L	0.00003	0.0125	mg/L	0.00003	0.25%
Li 670.784†	5111.0	0.0625	mg/L	0.00029	0.0625	mg/L	0.00029	0.46%

Sequence No.: 86 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/15/2011 10:38:21 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Approved: April 18, 2011

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4744131.4						32326.48	0.68%
YRADIAL	296752.2						5531.02	1.86%
Ga 417.206	1281767.1						22665.72	1.77%
GaRADIAL	66143.4						815.56	1.23%
Ag 328.068†	79300.2	0.381	mg/L	0.0091	0.381	mg/L	0.0091	2.38%
QC value within limits for Ag 328.068 Recovery = 95.28%								
Al 396.153†	51041.8	9.85	mg/L	0.035	9.85	mg/L	0.035	0.35%
QC value within limits for Al 396.153 Recovery = 98.53%								
As 188.979†	252.5	0.448	mg/L	0.0124	0.448	mg/L	0.0124	2.77%
QC value greater than the upper limit for As 188.979 Recovery = 111.90%								
Ba 233.527†	53737.0	0.966	mg/L	0.0187	0.966	mg/L	0.0187	1.93%
QC value within limits for Ba 233.527 Recovery = 96.60%								
Be 234.861†	24724.4	0.0467	mg/L	0.00142	0.0467	mg/L	0.00142	3.04%
QC value within limits for Be 234.861 Recovery = 93.40%								
B 249.677†	25922.6	0.487	mg/L	0.0119	0.487	mg/L	0.0119	2.45%
QC value within limits for B 249.677 Recovery = 97.35%								
Ca 227.546†	940.3	10.4	mg/L	0.16	10.4	mg/L	0.16	1.51%
QC value within limits for Ca 227.546 Recovery = 103.90%								
Cd 228.802†	763.9	0.0485	mg/L	0.00081	0.0485	mg/L	0.00081	1.66%
QC value within limits for Cd 228.802 Recovery = 97.02%								
Co 228.616†	3509.0	0.194	mg/L	0.0011	0.194	mg/L	0.0011	0.55%
QC value within limits for Co 228.616 Recovery = 97.03%								
Cr 267.716†	57131.8	0.479	mg/L	0.0092	0.479	mg/L	0.0092	1.93%
QC value within limits for Cr 267.716 Recovery = 95.80%								
Cu 327.393†	71345.4	0.471	mg/L	0.0122	0.471	mg/L	0.0122	2.58%
QC value within limits for Cu 327.393 Recovery = 94.26%								
Fe 239.562†	1179.3	3.97	mg/L	0.051	3.97	mg/L	0.051	1.28%
QC value within limits for Fe 239.562 Recovery = 99.29%								
Mg 279.077†	7165.1	9.87	mg/L	0.150	9.87	mg/L	0.150	1.52%
QC value within limits for Mg 279.077 Recovery = 98.69%								
Mn 257.610†	231243.1	0.489	mg/L	0.0115	0.489	mg/L	0.0115	2.36%
QC value within limits for Mn 257.610 Recovery = 97.84%								
Mo 202.031†	12136.7	0.975	mg/L	0.0049	0.975	mg/L	0.0049	0.50%
QC value within limits for Mo 202.031 Recovery = 97.53%								
Ni 231.604†	15566.1	0.488	mg/L	0.0099	0.488	mg/L	0.0099	2.03%
QC value within limits for Ni 231.604 Recovery = 97.65%								
Pb 220.353†	2555.9	0.489	mg/L	0.0012	0.489	mg/L	0.0012	0.24%
QC value within limits for Pb 220.353 Recovery = 97.89%								
Sb 206.836†	1614.5	1.17	mg/L	0.022	1.17	mg/L	0.022	1.85%
QC value within limits for Sb 206.836 Recovery = 97.88%								
Se 196.026†	495.2	0.395	mg/L	0.0079	0.395	mg/L	0.0079	2.01%
QC value within limits for Se 196.026 Recovery = 98.73%								
Si 251.611†	161898.2	4.72	mg/L	0.126	4.72	mg/L	0.126	2.66%
QC value within limits for Si 251.611 Recovery = 94.37%								
Sn 189.927†	5366.2	0.979	mg/L	0.0059	0.979	mg/L	0.0059	0.61%
QC value within limits for Sn 189.927 Recovery = 97.93%								
Ti 334.940†	725231.5	0.971	mg/L	0.0071	0.971	mg/L	0.0071	0.73%
QC value within limits for Ti 334.940 Recovery = 97.10%								
Tl 190.801†	760.8	0.499	mg/L	0.0023	0.499	mg/L	0.0023	0.47%
QC value within limits for Tl 190.801 Recovery = 99.84%								
V 290.880†	149637.5	0.967	mg/L	0.0227	0.967	mg/L	0.0227	2.34%
QC value within limits for V 290.880 Recovery = 96.74%								
Zn 206.200†	29955.8	0.959	mg/L	0.0153	0.959	mg/L	0.0153	1.60%
QC value within limits for Zn 206.200 Recovery = 95.87%								
K 766.490†	132681.9	49.1	mg/L	0.34	49.1	mg/L	0.34	0.69%
QC value within limits for K 766.490 Recovery = 98.30%								
Na 589.592†	644563.2	48.3	mg/L	1.08	48.3	mg/L	1.08	2.24%
QC value within limits for Na 589.592 Recovery = 96.56%								
Sr 407.771†	1514207.4	1.00	mg/L	0.034	1.00	mg/L	0.034	3.42%
QC value within limits for Sr 407.771 Recovery = 100.30%								
Li 670.784†	82150.6	1.02	mg/L	0.001	1.02	mg/L	0.001	0.06%
QC value within limits for Li 670.784 Recovery = 101.55%								

QC Failed. Continue with analysis.

Sequence No.: 87 **Autosampler Location: 1**

Approved: April 18, 2011

Sample ID: CCB **Date Collected: 4/15/2011 10:45:03 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	199.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4984256.2						21681.82	0.44%
YRADIAL	306082.3						2374.81	0.78%
Ga 417.206	1331356.5						5700.43	0.43%
GaRADIAL	66697.1						1480.35	2.22%
Ag 328.068†	-940.7	-0.00384	mg/L	0.000427	-0.00384	mg/L	0.000427	11.12%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	69.3	0.00495	mg/L	0.005439	0.00495	mg/L	0.005439	109.80%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-0.5	-0.00197	mg/L	0.002811	-0.00197	mg/L	0.002811	142.64%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	3.7	0.00014	mg/L	0.000062	0.00014	mg/L	0.000062	42.94%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	102.4	0.00019	mg/L	0.000021	0.00019	mg/L	0.000021	11.23%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	335.1	0.00721	mg/L	0.000210	0.00721	mg/L	0.000210	2.92%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	-1.6	0.00143	mg/L	0.046386	0.00143	mg/L	0.046386	>999.9%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-6.0	-0.00040	mg/L	0.000224	-0.00040	mg/L	0.000224	56.02%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-10.1	-0.00023	mg/L	0.000139	-0.00023	mg/L	0.000139	61.56%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	47.6	0.00025	mg/L	0.000090	0.00025	mg/L	0.000090	35.91%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-130.0	-0.00128	mg/L	0.000023	-0.00128	mg/L	0.000023	1.82%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-0.7	-0.00829	mg/L	0.005360	-0.00829	mg/L	0.005360	64.65%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	0.1	-0.00210	mg/L	0.005000	-0.00210	mg/L	0.005000	237.98%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	23.7	-0.00005	mg/L	0.000002	-0.00005	mg/L	0.000002	3.75%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-11.3	-0.00038	mg/L	0.000307	-0.00038	mg/L	0.000307	81.95%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	0.4	-0.00015	mg/L	0.000076	-0.00015	mg/L	0.000076	49.16%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	3.8	0.00178	mg/L	0.001342	0.00178	mg/L	0.001342	75.31%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	2.5	-0.00176	mg/L	0.003197	-0.00176	mg/L	0.003197	181.97%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-1.2	-0.00419	mg/L	0.003336	-0.00419	mg/L	0.003336	79.65%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	-28.4	-0.00003	mg/L	0.000136	-0.00003	mg/L	0.000136	540.82%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-2.1	0.00024	mg/L	0.000192	0.00024	mg/L	0.000192	79.90%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-26.6	-0.00004	mg/L	0.000019	-0.00004	mg/L	0.000019	42.38%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-1.5	-0.00362	mg/L	0.003169	-0.00362	mg/L	0.003169	87.66%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	58.5	0.00072	mg/L	0.000472	0.00072	mg/L	0.000472	65.15%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	3.1	0.00040	mg/L	0.000093	0.00040	mg/L	0.000093	23.41%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	105.9	0.0403	mg/L	0.03673	0.0403	mg/L	0.03673	91.20%
QC value within limits for K 766.490 Recovery = Not calculated								
Na 589.592†	521.0	0.0420	mg/L	0.01061	0.0420	mg/L	0.01061	25.26%
QC value within limits for Na 589.592 Recovery = Not calculated								
Sr 407.771†	14.8	-0.00002	mg/L	0.000008	-0.00002	mg/L	0.000008	34.44%

Approved: April 18, 2011

QC value within limits for Sr 407.771 Recovery = Not calculated

Li 670.784†	29.5	-0.00040 mg/L	0.001275	-0.00040 mg/L	0.001275	322.61%

QC value within limits for Li 670.784 Recovery = Not calculated

All analyte(s) passed QC.

Sequence No.: 88 **Autosampler Location: 114**
Sample ID: L1104049602 **Date Collected: 4/15/2011 10:51:38 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104049602

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: L1104049602

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4771559.2						35841.96	0.75%
YRADIAL	304004.4						3422.63	1.13%
Ga 417.206	1374478.3						10115.89	0.74%
GaRADIAL	68419.8						934.88	1.37%
Ag 328.068†	-447.7	-0.00153	mg/L	0.000750	-0.00153	mg/L	0.000750	49.16%
Al 396.153†	65.6	0.00422	mg/L	0.016145	0.00422	mg/L	0.016145	382.29%
As 188.979†	14.6	0.0228	mg/L	0.00434	0.0228	mg/L	0.00434	19.02%
Ba 233.527†	3543.8	0.0636	mg/L	0.00033	0.0636	mg/L	0.00033	0.52%
Be 234.861†	140.2	0.00025	mg/L	0.000033	0.00025	mg/L	0.000033	13.19%
B 249.677†	10599.8	0.197	mg/L	0.0009	0.197	mg/L	0.0009	0.48%
Ca 227.546†	10718.3	114	mg/L	0.9	114	mg/L	0.9	0.78%
Cd 228.802†	-4.1	-0.00036	mg/L	0.000213	-0.00036	mg/L	0.000213	59.74%
Co 228.616†	-11.2	-0.00030	mg/L	0.000347	-0.00030	mg/L	0.000347	114.27%
Cr 267.716†	77.1	0.00050	mg/L	0.000054	0.00050	mg/L	0.000054	10.79%
Cu 327.393†	8698.6	0.0569	mg/L	0.00127	0.0569	mg/L	0.00127	2.23%
Fe 239.562†	13.3	0.0386	mg/L	0.00637	0.0386	mg/L	0.00637	16.48%
Mg 279.077†	6404.8	8.82	mg/L	0.079	8.82	mg/L	0.079	0.90%
Mn 257.610†	2127.8	0.00601	mg/L	0.000014	0.00601	mg/L	0.000014	0.23%
Mo 202.031†	-1.8	0.00039	mg/L	0.000319	0.00039	mg/L	0.000319	82.50%
Ni 231.604†	0.4	-0.00020	mg/L	0.000127	-0.00020	mg/L	0.000127	63.14%
Pb 220.353†	-16.1	0.00348	mg/L	0.000872	0.00348	mg/L	0.000872	25.03%
Sb 206.836†	21.5	0.0120	mg/L	0.00054	0.0120	mg/L	0.00054	4.48%
Se 196.026†	-28.9	0.00237	mg/L	0.003566	0.00237	mg/L	0.003566	150.57%
Si 251.611†	264462.2	7.73	mg/L	0.071	7.73	mg/L	0.071	0.92%
Sn 189.927†	-15.7	-0.00223	mg/L	0.001157	-0.00223	mg/L	0.001157	51.83%
Ti 334.940†	-1228.8	-0.00051	mg/L	0.000138	-0.00051	mg/L	0.000138	27.19%
Tl 190.801†	108.3	0.0569	mg/L	0.00520	0.0569	mg/L	0.00520	9.13%
V 290.880†	-192.9	-0.00090	mg/L	0.001162	-0.00090	mg/L	0.001162	128.39%
Zn 206.200†	203.5	0.00681	mg/L	0.000107	0.00681	mg/L	0.000107	1.57%
K 766.490†	4484.4	1.61	mg/L	0.050	1.61	mg/L	0.050	3.12%
Na 589.592†	231553.8	16.9	mg/L	0.22	16.9	mg/L	0.22	1.30%
Sr 407.771†	267010.8	0.177	mg/L	0.0018	0.177	mg/L	0.0018	1.00%
Li 670.784†	482.8	0.00521	mg/L	0.001008	0.00521	mg/L	0.001008	19.34%

Sequence No.: 89 **Autosampler Location: 115**
Sample ID: L1104049603 **Date Collected: 4/15/2011 10:58:22 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104049603

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: L1104049603

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4639053.1						9826.95	0.21%
YRADIAL	306204.0						2360.53	0.77%

Approved: April 18, 2011

Ga 417.206	1307071.7					8684.62	0.66%
GaRADIAL	67653.2					892.15	1.32%
Ag 328.068†	-842.8	-0.00337	mg/L	0.000350	-0.00337 mg/L	0.000350	10.39%
Al 396.153†	-8.4	-0.0101	mg/L	0.00398	-0.0101 mg/L	0.00398	39.30%
As 188.979†	15.1	0.0257	mg/L	0.00443	0.0257 mg/L	0.00443	17.22%
Ba 233.527†	41.7	0.00083	mg/L	0.000004	0.00083 mg/L	0.000004	0.50%
Be 234.861†	119.9	0.00022	mg/L	0.000012	0.00022 mg/L	0.000012	5.67%
B 249.677†	233846.3	4.32	mg/L	0.022	4.32 mg/L	0.022	0.51%
Ca 227.546†	1471.4	15.7	mg/L	0.10	15.7 mg/L	0.10	0.64%
Cd 228.802†	-1.8	-0.00021	mg/L	0.000053	-0.00021 mg/L	0.000053	25.24%
Co 228.616†	-12.3	-0.00035	mg/L	0.000168	-0.00035 mg/L	0.000168	48.48%
Cr 267.716†	459.9	0.00371	mg/L	0.000104	0.00371 mg/L	0.000104	2.81%
Cu 327.393†	685.1	0.00409	mg/L	0.000159	0.00409 mg/L	0.000159	3.89%
Fe 239.562†	7.7	0.0199	mg/L	0.00220	0.0199 mg/L	0.00220	11.03%
Mg 279.077†	3075.5	4.23	mg/L	0.029	4.23 mg/L	0.029	0.68%
Mn 257.610†	1128.4	0.00741	mg/L	0.000096	0.00741 mg/L	0.000096	1.29%
Mo 202.031†	24.8	0.00252	mg/L	0.000431	0.00252 mg/L	0.000431	17.10%
Ni 231.604†	56.8	0.00160	mg/L	0.000283	0.00160 mg/L	0.000283	17.63%
Pb 220.353†	2.4	0.00230	mg/L	0.000704	0.00230 mg/L	0.000704	30.62%
Sb 206.836†	10.9	0.00435	mg/L	0.000569	0.00435 mg/L	0.000569	13.10%
Se 196.026†	27.9	0.0230	mg/L	0.00491	0.0230 mg/L	0.00491	21.36%
Si 251.611†	314624.2	9.20	mg/L	0.123	9.20 mg/L	0.123	1.34%
Sn 189.927†	-8.8	-0.00097	mg/L	0.000957	-0.00097 mg/L	0.000957	98.46%
Ti 334.940†	402.6	0.00069	mg/L	0.000064	0.00069 mg/L	0.000064	9.34%
Tl 190.801†	26.5	0.0130	mg/L	0.00408	0.0130 mg/L	0.00408	31.35%
V 290.880†	375.8	0.00277	mg/L	0.000361	0.00277 mg/L	0.000361	13.02%
Zn 206.200†	163.1	0.00552	mg/L	0.000079	0.00552 mg/L	0.000079	1.44%
K 766.490†	12795.1	4.33	mg/L	0.063	4.33 mg/L	0.063	1.45%
Na 589.592†	3385267.5	326	mg/L	7.9	326 mg/L	7.9	2.44%
Sr 407.771†	17340.1	0.0115	mg/L	0.00004	0.0115 mg/L	0.00004	0.34%
Li 670.784†	899.8	0.0104	mg/L	0.00084	0.0104 mg/L	0.00084	8.14%

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Sequence No.: 90 **Autosampler Location: 116**
Sample ID: L1104049604 **Date Collected: 4/15/2011 11:05:07 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104049604

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: L1104049604

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4723074.6						22156.27	0.47%
YRADIAL	297636.8						1986.99	0.67%
Ga 417.206	1355719.5						17581.63	1.30%
GaRADIAL	67182.8						521.65	0.78%
Ag 328.068†	-382.3	-0.00121	mg/L	0.001151	-0.00121	mg/L	0.001151	94.98%
Al 396.153†	212.3	0.0326	mg/L	0.00377	0.0326	mg/L	0.00377	11.56%
As 188.979†	13.8	0.0215	mg/L	0.00261	0.0215	mg/L	0.00261	12.13%
Ba 233.527†	3500.2	0.0628	mg/L	0.00037	0.0628	mg/L	0.00037	0.58%
Be 234.861†	130.3	0.00023	mg/L	0.000027	0.00023	mg/L	0.000027	11.70%
B 249.677†	11052.3	0.206	mg/L	0.0015	0.206	mg/L	0.0015	0.71%
Ca 227.546†	10853.9	116	mg/L	1.5	116	mg/L	1.5	1.27%
Cd 228.802†	-0.8	-0.00014	mg/L	0.000167	-0.00014	mg/L	0.000167	120.14%
Co 228.616†	-12.6	-0.00038	mg/L	0.000244	-0.00038	mg/L	0.000244	63.46%
Cr 267.716†	346.2	0.00275	mg/L	0.000059	0.00275	mg/L	0.000059	2.14%
Cu 327.393†	4809.7	0.0313	mg/L	0.00103	0.0313	mg/L	0.00103	3.30%
Fe 239.562†	16.0	0.0477	mg/L	0.00911	0.0477	mg/L	0.00911	19.08%
Mg 279.077†	6538.1	9.00	mg/L	0.040	9.00	mg/L	0.040	0.45%
Mn 257.610†	2491.3	0.00679	mg/L	0.000035	0.00679	mg/L	0.000035	0.52%
Mo 202.031†	-7.8	-0.00009	mg/L	0.000397	-0.00009	mg/L	0.000397	427.93%
Ni 231.604†	37.1	0.00095	mg/L	0.000336	0.00095	mg/L	0.000336	35.25%
Pb 220.353†	-13.7	0.00402	mg/L	0.001087	0.00402	mg/L	0.001087	27.02%
Sb 206.836†	20.8	0.0115	mg/L	0.00120	0.0115	mg/L	0.00120	10.45%
Se 196.026†	-29.0	0.00267	mg/L	0.004387	0.00267	mg/L	0.004387	164.53%
Si 251.611†	268527.4	7.85	mg/L	0.088	7.85	mg/L	0.088	1.12%
Sn 189.927†	-7.1	-0.00067	mg/L	0.000190	-0.00067	mg/L	0.000190	28.40%

Approved: April 18, 2011

Ti 334.940†	-1137.5	-0.00037	mg/L	0.000125	-0.00037	mg/L	0.000125 33.61%
Tl 190.801†	110.8	0.0584	mg/L	0.00883	0.0584	mg/L	0.00883 15.12%
V 290.880†	-131.3	-0.00051	mg/L	0.000683	-0.00051	mg/L	0.000683 134.89%
Zn 206.200†	201.4	0.00674	mg/L	0.000241	0.00674	mg/L	0.000241 3.58%
K 766.490†	4575.9	1.65	mg/L	0.025	1.65	mg/L	0.025 1.50%
Na 589.592†	236732.2	17.3	mg/L	0.17	17.3	mg/L	0.17 0.98%
Sr 407.771†	271869.6	0.180	mg/L	0.0014	0.180	mg/L	0.0014 0.75%
Li 670.784†	263.1	0.00250	mg/L	0.000991	0.00250	mg/L	0.000991 39.74%

Sequence No.: 91 **Autosampler Location: 117**
Sample ID: L1104049701 **Date Collected: 4/15/2011 11:11:47 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104049701

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: L1104049701

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4383814.6						27269.75	0.62%
YRADIAL	286818.6						6759.17	2.36%
Ga 417.206	1246141.4						9339.06	0.75%
GaRADIAL	64662.1						856.67	1.32%
Ag 328.068†	-565.2	-0.00256	mg/L	0.000615	-0.00256	mg/L	0.000615	24.02%
Al 396.153†	1890.2	0.355	mg/L	0.0049	0.355	mg/L	0.0049	1.36%
As 188.979†	13.0	0.0215	mg/L	0.00722	0.0215	mg/L	0.00722	33.53%
Ba 233.527†	1116.4	0.0202	mg/L	0.00014	0.0202	mg/L	0.00014	0.72%
Be 234.861†	844.8	0.00038	mg/L	0.000069	0.00038	mg/L	0.000069	18.11%
B 249.677†	6625.8	0.156	mg/L	0.0006	0.156	mg/L	0.0006	0.41%
Ca 227.546†	4414.6	47.3	mg/L	0.25	47.3	mg/L	0.25	0.52%
Cd 228.802†	5.7	0.00033	mg/L	0.000186	0.00033	mg/L	0.000186	55.75%
Co 228.616†	10.5	0.00073	mg/L	0.000284	0.00073	mg/L	0.000284	39.10%
Cr 267.716†	5034.0	0.0421	mg/L	0.00080	0.0421	mg/L	0.00080	1.91%
Cu 327.393†	237296.3	1.56	mg/L	0.015	1.56	mg/L	0.015	0.95%
Fe 239.562†	2097.3	7.07	mg/L	0.082	7.07	mg/L	0.082	1.16%
Mg 279.077†	6258.9	8.62	mg/L	0.124	8.62	mg/L	0.124	1.44%
Mn 257.610†	24155.3	0.0520	mg/L	0.00046	0.0520	mg/L	0.00046	0.89%
Mo 202.031†	2159.8	0.174	mg/L	0.0006	0.174	mg/L	0.0006	0.33%
Ni 231.604†	3123.4	0.0978	mg/L	0.00071	0.0978	mg/L	0.00071	0.73%
Pb 220.353†	320.8	0.0634	mg/L	0.00224	0.0634	mg/L	0.00224	3.54%
Sb 206.836†	18.0	0.0106	mg/L	0.00267	0.0106	mg/L	0.00267	25.26%
Se 196.026†	-26.8	-0.0103	mg/L	0.00286	-0.0103	mg/L	0.00286	27.68%
Si 251.611†	87199.7	2.55	mg/L	0.018	2.55	mg/L	0.018	0.69%
Sn 189.927†	1481.9	0.271	mg/L	0.0018	0.271	mg/L	0.0018	0.67%
Ti 334.940†	10082.8	0.0140	mg/L	0.00012	0.0140	mg/L	0.00012	0.84%
Tl 190.801†	67.8	0.0369	mg/L	0.00387	0.0369	mg/L	0.00387	10.49%
V 290.880†	980.6	0.00712	mg/L	0.000645	0.00712	mg/L	0.000645	9.05%
Zn 206.200†	21485.4	0.686	mg/L	0.0094	0.686	mg/L	0.0094	1.37%
K 766.490†	62912.9	23.1	mg/L	0.22	23.1	mg/L	0.22	0.97%
Na 589.592†	Saturated2							
Sr 407.771†	282424.6	0.186	mg/L	0.0018	0.186	mg/L	0.0018	0.95%
Li 670.784†	9363.9	0.115	mg/L	0.0008	0.115	mg/L	0.0008	0.67%

Sequence No.: 92 **Autosampler Location: 118**
Sample ID: L1104049702 **Date Collected: 4/15/2011 11:18:27 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104049702

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: L1104049702

Approved: April 18, 2011

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4069050.4						32946.65	0.81%
YRADIAL	282927.9						5745.18	2.03%
Ga 417.206	1184178.5						7070.49	0.60%
GaRADIAL	63315.7						791.67	1.25%
Ag 328.068†	-332.7	-0.00115	mg/L	0.000441	-0.00115	mg/L	0.000441	38.50%
Al 396.153†	1024.8	0.190	mg/L	0.0131	0.190	mg/L	0.0131	6.90%
As 188.979†	14.4	0.0220	mg/L	0.00635	0.0220	mg/L	0.00635	28.92%
Ba 233.527†	5003.3	0.0898	mg/L	0.00100	0.0898	mg/L	0.00100	1.12%
Be 234.861†	196.0	0.00019	mg/L	0.000015	0.00019	mg/L	0.000015	7.94%
B 249.677†	2692.7	0.0549	mg/L	0.00031	0.0549	mg/L	0.00031	0.57%
Ca 227.546†	13842.3	148	mg/L	0.8	148	mg/L	0.8	0.54%
Cd 228.802†	3.2	0.00013	mg/L	0.000143	0.00013	mg/L	0.000143	106.77%
Co 228.616†	-3.9	0.00005	mg/L	0.000279	0.00005	mg/L	0.000279	507.47%
Cr 267.716†	1509.6	0.0125	mg/L	0.00021	0.0125	mg/L	0.00021	1.70%
Cu 327.393†	15642.1	0.103	mg/L	0.0027	0.103	mg/L	0.0027	2.60%
Fe 239.562†	275.4	0.923	mg/L	0.0263	0.923	mg/L	0.0263	2.86%
Mg 279.077†	14516.7	20.0	mg/L	0.42	20.0	mg/L	0.42	2.12%
Mn 257.610†	47151.2	0.101	mg/L	0.0022	0.101	mg/L	0.0022	2.22%
Mo 202.031†	30.7	0.00306	mg/L	0.000277	0.00306	mg/L	0.000277	9.07%
Ni 231.604†	1004.3	0.0313	mg/L	0.00014	0.0313	mg/L	0.00014	0.46%
Pb 220.353†	8.9	0.00975	mg/L	0.000573	0.00975	mg/L	0.000573	5.87%
Sb 206.836†	31.4	0.0192	mg/L	0.00148	0.0192	mg/L	0.00148	7.72%
Se 196.026†	-38.0	0.00372	mg/L	0.005203	0.00372	mg/L	0.005203	139.71%
Si 251.611†	89179.6	2.61	mg/L	0.038	2.61	mg/L	0.038	1.44%
Sn 189.927†	4.5	0.00145	mg/L	0.001503	0.00145	mg/L	0.001503	103.84%
Ti 334.940†	3096.6	0.00561	mg/L	0.001355	0.00561	mg/L	0.001355	24.13%
Tl 190.801†	114.4	0.0581	mg/L	0.00203	0.0581	mg/L	0.00203	3.50%
V 290.880†	294.7	0.00231	mg/L	0.001170	0.00231	mg/L	0.001170	50.58%
Zn 206.200†	7028.8	0.225	mg/L	0.0020	0.225	mg/L	0.0020	0.88%
K 766.490†	174165.6	65.0	mg/L	0.73	65.0	mg/L	0.73	1.12%
Na 589.592†	Saturated2							
Sr 407.771†	1138920.1	0.755	mg/L	0.0091	0.755	mg/L	0.0091	1.21%
Li 670.784†	2182.4	0.0262	mg/L	0.00193	0.0262	mg/L	0.00193	7.36%

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Sequence No.: 93 **Autosampler Location: 119**
Sample ID: L1104049801 **Date Collected: 4/15/2011 11:25:12 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104049801

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: L1104049801

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4584834.9						59471.86	1.30%
YRADIAL	296451.1						3671.53	1.24%
Ga 417.206	1318162.0						15708.84	1.19%
GaRADIAL	67509.8						346.27	0.51%
Ag 328.068†	-439.7	-0.00163	mg/L	0.000408	-0.00163	mg/L	0.000408	24.98%
Al 396.153†	980.2	0.181	mg/L	0.0060	0.181	mg/L	0.0060	3.30%
As 188.979†	14.6	0.0228	mg/L	0.00351	0.0228	mg/L	0.00351	15.35%
Ba 233.527†	2330.9	0.0419	mg/L	0.00087	0.0419	mg/L	0.00087	2.08%
Be 234.861†	354.5	0.00031	mg/L	0.000028	0.00031	mg/L	0.000028	8.80%
B 249.677†	6604.6	0.131	mg/L	0.0015	0.131	mg/L	0.0015	1.12%
Ca 227.546†	11766.5	126	mg/L	1.5	126	mg/L	1.5	1.17%
Cd 228.802†	-4.4	-0.00038	mg/L	0.000115	-0.00038	mg/L	0.000115	30.71%
Co 228.616†	-1.0	0.00022	mg/L	0.000378	0.00022	mg/L	0.000378	174.22%
Cr 267.716†	498.4	0.00401	mg/L	0.000107	0.00401	mg/L	0.000107	2.67%
Cu 327.393†	-241.6	-0.00180	mg/L	0.000136	-0.00180	mg/L	0.000136	7.56%
Fe 239.562†	520.7	1.75	mg/L	0.020	1.75	mg/L	0.020	1.13%
Mg 279.077†	31339.7	43.2	mg/L	0.09	43.2	mg/L	0.09	0.20%
Mn 257.610†	23317.4	0.0514	mg/L	0.00097	0.0514	mg/L	0.00097	1.88%
Mo 202.031†	118.2	0.0101	mg/L	0.00023	0.0101	mg/L	0.00023	2.32%
Ni 231.604†	111.5	0.00329	mg/L	0.000358	0.00329	mg/L	0.000358	10.88%
Pb 220.353†	-9.4	0.00530	mg/L	0.000294	0.00530	mg/L	0.000294	5.55%

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Sb 206.836†	24.9	0.0145	mg/L	0.00196	0.0145	mg/L	0.00196 13.46%
Se 196.026†	-35.0	0.00092	mg/L	0.003816	0.00092	mg/L	0.003816 413.77%
Si 251.611†	181238.5	5.30	mg/L	0.101	5.30	mg/L	0.101 1.90%
Sn 189.927†	-7.9	-0.00082	mg/L	0.001741	-0.00082	mg/L	0.001741 212.99%
Ti 334.940†	2753.5	0.00493	mg/L	0.000412	0.00493	mg/L	0.000412 8.35%
Tl 190.801†	111.0	0.0578	mg/L	0.00457	0.0578	mg/L	0.00457 7.91%
V 290.880†	335.0	0.00263	mg/L	0.000961	0.00263	mg/L	0.000961 36.47%
Zn 206.200†	339.5	0.0111	mg/L	0.00032	0.0111	mg/L	0.00032 2.86%
K 766.490†	28145.4	10.1	mg/L	0.06	10.1	mg/L	0.06 0.56%
Na 589.592†	2207117.3	186	mg/L	3.4	186	mg/L	3.4 1.81%
Sr 407.771†	736334.7	0.488	mg/L	0.0062	0.488	mg/L	0.0062 1.27%
Li 670.784†	1259.0	0.0148	mg/L	0.00108	0.0148	mg/L	0.00108 7.27%

Sequence No.: 94 **Autosampler Location: 120**
Sample ID: L1104050601 **Date Collected: 4/15/2011 11:31:56 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104050601

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: L1104050601

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4602225.4						40717.65	0.88%
YRADIAL	303013.4						5124.56	1.69%
Ga 417.206	1322619.8						10381.58	0.78%
GaRADIAL	67875.0						1520.38	2.24%
Ag 328.068†	-888.3	-0.00361	mg/L	0.000188	-0.00361	mg/L	0.000188	5.21%
Al 396.153†	508.6	0.0899	mg/L	0.01036	0.0899	mg/L	0.01036	11.53%
As 188.979†	7.6	0.0124	mg/L	0.00227	0.0124	mg/L	0.00227	18.34%
Ba 233.527†	626.2	0.0113	mg/L	0.00012	0.0113	mg/L	0.00012	1.05%
Be 234.861†	142.4	0.00024	mg/L	0.000007	0.00024	mg/L	0.000007	2.91%
B 249.677†	9020.5	0.168	mg/L	0.0024	0.168	mg/L	0.0024	1.42%
Ca 227.546†	1659.7	17.7	mg/L	0.15	17.7	mg/L	0.15	0.86%
Cd 228.802†	-1.5	-0.00015	mg/L	0.000070	-0.00015	mg/L	0.000070	47.22%
Co 228.616†	3.6	0.00053	mg/L	0.000185	0.00053	mg/L	0.000185	34.66%
Cr 267.716†	591.7	0.00481	mg/L	0.000067	0.00481	mg/L	0.000067	1.38%
Cu 327.393†	1441.1	0.00853	mg/L	0.000875	0.00853	mg/L	0.000875	10.26%
Fe 239.562†	44.2	0.143	mg/L	0.0042	0.143	mg/L	0.0042	2.93%
Mg 279.077†	9087.5	12.5	mg/L	0.44	12.5	mg/L	0.44	3.50%
Mn 257.610†	5348.9	0.0198	mg/L	0.00050	0.0198	mg/L	0.00050	2.54%
Mo 202.031†	29.0	0.00286	mg/L	0.000201	0.00286	mg/L	0.000201	7.03%
Ni 231.604†	331.1	0.0102	mg/L	0.00007	0.0102	mg/L	0.00007	0.64%
Pb 220.353†	-3.4	0.00129	mg/L	0.000319	0.00129	mg/L	0.000319	24.71%
Sb 206.836†	10.7	0.00419	mg/L	0.002795	0.00419	mg/L	0.002795	66.69%
Se 196.026†	-7.2	-0.00447	mg/L	0.002654	-0.00447	mg/L	0.002654	59.41%
Si 251.611†	140912.6	4.12	mg/L	0.049	4.12	mg/L	0.049	1.19%
Sn 189.927†	1.2	0.00085	mg/L	0.000331	0.00085	mg/L	0.000331	38.74%
Ti 334.940†	-138.1	-0.00002	mg/L	0.000111	-0.00002	mg/L	0.000111	655.16%
Tl 190.801†	34.5	0.0181	mg/L	0.00290	0.0181	mg/L	0.00290	16.07%
V 290.880†	156.3	0.00136	mg/L	0.000749	0.00136	mg/L	0.000749	54.91%
Zn 206.200†	2220.7	0.0712	mg/L	0.00061	0.0712	mg/L	0.00061	0.86%
K 766.490†	50668.5	18.0	mg/L	0.06	18.0	mg/L	0.06	0.34%
Na 589.592†	4325679.3	524	mg/L	41.1	524	mg/L	41.1	7.84%
Sr 407.771†	106103.5	0.0703	mg/L	0.00020	0.0703	mg/L	0.00020	0.28%
Li 670.784†	297329.0	3.68	mg/L	0.032	3.68	mg/L	0.032	0.87%

Sequence No.: 95 **Autosampler Location: 121**
Sample ID: L1104050603 **Date Collected: 4/15/2011 11:38:44 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104050603

Analyte	Back Pressure	Flow

Approved: April 18, 2011

All	200.0 kPa	0.50 L/min

Mean Data: L1104050603

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4616557.4						43875.82	0.95%
YRADIAL	301804.2						4662.81	1.54%
Ga 417.206	1313372.6						21893.71	1.67%
GaRADIAL	67089.6						150.68	0.22%
Ag 328.068†	-872.6	-0.00355	mg/L	0.000387	-0.00355	mg/L	0.000387	10.93%
Al 396.153†	1956.6	0.370	mg/L	0.0135	0.370	mg/L	0.0135	3.65%
As 188.979†	6.6	0.0106	mg/L	0.00227	0.0106	mg/L	0.00227	21.39%
Ba 233.527†	1334.8	0.0240	mg/L	0.00012	0.0240	mg/L	0.00012	0.49%
Be 234.861†	168.2	0.00023	mg/L	0.000023	0.00023	mg/L	0.000023	10.08%
B 249.677†	12357.5	0.231	mg/L	0.0034	0.231	mg/L	0.0034	1.47%
Ca 227.546†	1129.7	12.1	mg/L	0.20	12.1	mg/L	0.20	1.65%
Cd 228.802†	-1.2	-0.00012	mg/L	0.000098	-0.00012	mg/L	0.000098	80.12%
Co 228.616†	-6.3	-0.00003	mg/L	0.000135	-0.00003	mg/L	0.000135	466.02%
Cr 267.716†	815.8	0.00668	mg/L	0.000096	0.00668	mg/L	0.000096	1.44%
Cu 327.393†	812.2	0.00385	mg/L	0.000461	0.00385	mg/L	0.000461	11.97%
Fe 239.562†	119.5	0.397	mg/L	0.0035	0.397	mg/L	0.0035	0.89%
Mg 279.077†	8361.1	11.5	mg/L	0.13	11.5	mg/L	0.13	1.09%
Mn 257.610†	4277.4	0.0192	mg/L	0.00013	0.0192	mg/L	0.00013	0.67%
Mo 202.031†	29.1	0.00289	mg/L	0.000111	0.00289	mg/L	0.000111	3.84%
Ni 231.604†	278.7	0.00857	mg/L	0.000195	0.00857	mg/L	0.000195	2.27%
Pb 220.353†	5.3	0.00266	mg/L	0.000295	0.00266	mg/L	0.000295	11.09%
Sb 206.836†	7.0	0.00150	mg/L	0.001367	0.00150	mg/L	0.001367	90.94%
Se 196.026†	-9.1	-0.00737	mg/L	0.002658	-0.00737	mg/L	0.002658	36.09%
Si 251.611†	139205.5	4.07	mg/L	0.060	4.07	mg/L	0.060	1.49%
Sn 189.927†	-3.2	0.00005	mg/L	0.001161	0.00005	mg/L	0.001161	>999.9%
Ti 334.940†	61.9	0.00019	mg/L	0.000047	0.00019	mg/L	0.000047	24.21%
Tl 190.801†	24.9	0.0124	mg/L	0.00562	0.0124	mg/L	0.00562	45.45%
V 290.880†	51.9	0.00071	mg/L	0.000235	0.00071	mg/L	0.000235	33.18%
Zn 206.200†	1722.9	0.0553	mg/L	0.00048	0.0553	mg/L	0.00048	0.87%
K 766.490†	10077.2	3.25	mg/L	0.056	3.25	mg/L	0.056	1.71%
Na 589.592†	3908214.9	413	mg/L	5.2	413	mg/L	5.2	1.27%
Sr 407.771†	67658.9	0.0447	mg/L	0.00021	0.0447	mg/L	0.00021	0.48%
Li 670.784†	592416.4	7.33	mg/L	0.072	7.33	mg/L	0.072	0.98%

Sequence No.: 96 **Autosampler Location: 122**
Sample ID: L1104051202 WG361935-02 **Date Collected: 4/15/2011 11:45:32 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104051202 WG361935-02

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: L1104051202 WG361935-02

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4403604.4						49758.24	1.13%
YRADIAL	288144.5						8389.49	2.91%
Ga 417.206	1219403.7						24991.28	2.05%
GaRADIAL	64034.5						2468.55	3.86%
Ag 328.068†	-771.9	-0.00332	mg/L	0.000404	-0.00332	mg/L	0.000404	12.19%
Al 396.153†	5.6	-0.00762	mg/L	0.018227	-0.00762	mg/L	0.018227	239.19%
As 188.979†	8.8	0.0144	mg/L	0.00160	0.0144	mg/L	0.00160	11.16%
Ba 233.527†	30908.3	0.554	mg/L	0.0038	0.554	mg/L	0.0038	0.69%
Be 234.861†	94.9	0.00020	mg/L	0.000035	0.00020	mg/L	0.000035	17.62%
B 249.677†	12182.5	0.226	mg/L	0.0030	0.226	mg/L	0.0030	1.31%
Ca 227.546†	1565.3	16.7	mg/L	0.31	16.7	mg/L	0.31	1.87%
Cd 228.802†	-2.6	-0.00023	mg/L	0.000074	-0.00023	mg/L	0.000074	32.17%
Co 228.616†	-23.9	-0.00118	mg/L	0.000249	-0.00118	mg/L	0.000249	21.09%
Cr 267.716†	122.1	0.00087	mg/L	0.000031	0.00087	mg/L	0.000031	3.56%
Cu 327.393†	-274.4	-0.00223	mg/L	0.000707	-0.00223	mg/L	0.000707	31.77%
Fe 239.562†	3.8	0.00672	mg/L	0.003659	0.00672	mg/L	0.003659	54.46%
Mg 279.077†	3535.6	4.87	mg/L	0.285	4.87	mg/L	0.285	5.85%

Approved: April 18, 2011

Mn 257.610†	5371.0	0.0127	mg/L	0.00005	0.0127	mg/L	0.00005	0.41%
Mo 202.031†	213.4	0.0177	mg/L	0.00016	0.0177	mg/L	0.00016	0.90%
Ni 231.604†	25.1	0.00061	mg/L	0.000277	0.00061	mg/L	0.000277	45.55%
Pb 220.353†	-2.9	0.00142	mg/L	0.001441	0.00142	mg/L	0.001441	101.57%
Sb 206.836†	13.2	0.00611	mg/L	0.001795	0.00611	mg/L	0.001795	29.37%
Se 196.026†	-4.6	-0.00271	mg/L	0.002632	-0.00271	mg/L	0.002632	96.96%
Si 251.611†	66040.4	1.93	mg/L	0.031	1.93	mg/L	0.031	1.59%
Sn 189.927†	-9.2	-0.00105	mg/L	0.000594	-0.00105	mg/L	0.000594	56.40%
Ti 334.940†	-357.5	-0.00032	mg/L	0.000083	-0.00032	mg/L	0.000083	25.83%
Tl 190.801†	26.9	0.0132	mg/L	0.00519	0.0132	mg/L	0.00519	39.23%
V 290.880†	864.9	0.00590	mg/L	0.001490	0.00590	mg/L	0.001490	25.24%
Zn 206.200†	76.0	0.00272	mg/L	0.000012	0.00272	mg/L	0.000012	0.44%
K 766.490†	21630.4	7.87	mg/L	0.299	7.87	mg/L	0.299	3.79%
Na 589.592†	Saturated2							
Sr 407.771†	2172441.3	1.44	mg/L	0.050	1.44	mg/L	0.050	3.44%
Li 670.784†	3723.2	0.0453	mg/L	0.00386	0.0453	mg/L	0.00386	8.52%

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Sequence No.: 97 **Autosampler Location: 123**
Sample ID: L1104051202S WG361935-07 **Date Collected: 4/15/2011 11:52:17 PM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104051202S WG361935-07

Analyte	Back Pressure	Flow
All	201.0 kPa	0.50 L/min

Mean Data: L1104051202S WG361935-07

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4364131.5						13885.53	0.32%
YRADIAL	292829.5						5273.20	1.80%
Ga 417.206	1204273.7						8490.51	0.71%
GaRADIAL	65851.0						2081.11	3.16%
Ag 328.068†	40146.1	0.193	mg/L	0.0005	0.193	mg/L	0.0005	0.28%
Al 396.153†	24501.5	4.73	mg/L	0.268	4.73	mg/L	0.268	5.67%
As 188.979†	133.8	0.236	mg/L	0.0071	0.236	mg/L	0.0071	3.01%
Ba 233.527†	56865.0	1.02	mg/L	0.008	1.02	mg/L	0.008	0.82%
Be 234.861†	12372.3	0.0234	mg/L	0.00024	0.0234	mg/L	0.00024	1.02%
B 249.677†	65167.3	1.21	mg/L	0.013	1.21	mg/L	0.013	1.09%
Ca 227.546†	2084.5	22.4	mg/L	0.21	22.4	mg/L	0.21	0.93%
Cd 228.802†	379.7	0.0241	mg/L	0.00020	0.0241	mg/L	0.00020	0.85%
Co 228.616†	1652.7	0.0913	mg/L	0.00067	0.0913	mg/L	0.00067	0.73%
Cr 267.716†	27420.0	0.230	mg/L	0.0016	0.230	mg/L	0.0016	0.69%
Cu 327.393†	35988.9	0.238	mg/L	0.0025	0.238	mg/L	0.0025	1.05%
Fe 239.562†	569.3	1.91	mg/L	0.076	1.91	mg/L	0.076	3.97%
Mg 279.077†	6885.6	9.48	mg/L	0.382	9.48	mg/L	0.382	4.03%
Mn 257.610†	117981.8	0.251	mg/L	0.0012	0.251	mg/L	0.0012	0.49%
Mo 202.031†	6159.2	0.495	mg/L	0.0026	0.495	mg/L	0.0026	0.53%
Ni 231.604†	7528.5	0.236	mg/L	0.0026	0.236	mg/L	0.0026	1.10%
Pb 220.353†	1212.7	0.234	mg/L	0.0017	0.234	mg/L	0.0017	0.73%
Sb 206.836†	812.6	0.590	mg/L	0.0051	0.590	mg/L	0.0051	0.86%
Se 196.026†	250.8	0.203	mg/L	0.0108	0.203	mg/L	0.0108	5.32%
Si 251.611†	150455.7	4.39	mg/L	0.025	4.39	mg/L	0.025	0.57%
Sn 189.927†	-16.7	-0.00241	mg/L	0.000594	-0.00241	mg/L	0.000594	24.63%
Ti 334.940†	354896.1	0.475	mg/L	0.0019	0.475	mg/L	0.0019	0.39%
Tl 190.801†	367.3	0.238	mg/L	0.0006	0.238	mg/L	0.0006	0.26%
V 290.880†	74274.3	0.480	mg/L	0.0042	0.480	mg/L	0.0042	0.88%
Zn 206.200†	14865.8	0.476	mg/L	0.0022	0.476	mg/L	0.0022	0.46%
K 766.490†	88602.1	32.6	mg/L	1.87	32.6	mg/L	1.87	5.72%
Na 589.592†	Saturated2							
Sr 407.771†	2884682.4	1.91	mg/L	0.094	1.91	mg/L	0.094	4.92%
Li 670.784†	45182.3	0.558	mg/L	0.0381	0.558	mg/L	0.0381	6.82%

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Sequence No.: 98 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/15/2011 11:59:00 PM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Approved: April 18, 2011

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	200.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4708128.9						16687.04	0.35%
YRADIAL	298701.7						6099.51	2.04%
Ga 417.206	1292167.8						14535.79	1.12%
GaRADIAL	66385.6						184.06	0.28%
Ag 328.068†	78142.2	0.376	mg/L	0.0035	0.376	mg/L	0.0035	0.94%
QC value within limits for Ag 328.068 Recovery = 93.90%								
Al 396.153†	51236.9	9.89	mg/L	0.044	9.89	mg/L	0.044	0.44%
QC value within limits for Al 396.153 Recovery = 98.91%								
As 188.979†	248.8	0.441	mg/L	0.0022	0.441	mg/L	0.0022	0.50%
QC value greater than the upper limit for As 188.979 Recovery = 110.24%								
Ba 233.527†	53682.3	0.965	mg/L	0.0013	0.965	mg/L	0.0013	0.14%
QC value within limits for Ba 233.527 Recovery = 96.50%								
Be 234.861†	24442.0	0.0462	mg/L	0.00040	0.0462	mg/L	0.00040	0.87%
QC value within limits for Be 234.861 Recovery = 92.36%								
B 249.677†	25831.7	0.485	mg/L	0.0064	0.485	mg/L	0.0064	1.33%
QC value within limits for B 249.677 Recovery = 97.00%								
Ca 227.546†	934.0	10.3	mg/L	0.08	10.3	mg/L	0.08	0.77%
QC value within limits for Ca 227.546 Recovery = 103.21%								
Cd 228.802†	751.5	0.0477	mg/L	0.00022	0.0477	mg/L	0.00022	0.46%
QC value within limits for Cd 228.802 Recovery = 95.45%								
Co 228.616†	3510.1	0.194	mg/L	0.0010	0.194	mg/L	0.0010	0.50%
QC value within limits for Co 228.616 Recovery = 97.06%								
Cr 267.716†	57009.3	0.478	mg/L	0.0023	0.478	mg/L	0.0023	0.48%
QC value within limits for Cr 267.716 Recovery = 95.60%								
Cu 327.393†	70678.6	0.467	mg/L	0.0047	0.467	mg/L	0.0047	1.00%
QC value within limits for Cu 327.393 Recovery = 93.38%								
Fe 239.562†	1175.9	3.96	mg/L	0.072	3.96	mg/L	0.072	1.81%
QC value within limits for Fe 239.562 Recovery = 99.01%								
Mg 279.077†	7130.2	9.82	mg/L	0.143	9.82	mg/L	0.143	1.46%
QC value within limits for Mg 279.077 Recovery = 98.21%								
Mn 257.610†	231717.7	0.490	mg/L	0.0013	0.490	mg/L	0.0013	0.27%
QC value within limits for Mn 257.610 Recovery = 98.05%								
Mo 202.031†	12154.1	0.977	mg/L	0.0052	0.977	mg/L	0.0052	0.53%
QC value within limits for Mo 202.031 Recovery = 97.67%								
Ni 231.604†	15519.9	0.487	mg/L	0.0033	0.487	mg/L	0.0033	0.67%
QC value within limits for Ni 231.604 Recovery = 97.36%								
Pb 220.353†	2552.6	0.489	mg/L	0.0041	0.489	mg/L	0.0041	0.85%
QC value within limits for Pb 220.353 Recovery = 97.77%								
Sb 206.836†	1594.6	1.16	mg/L	0.007	1.16	mg/L	0.007	0.64%
QC value within limits for Sb 206.836 Recovery = 96.68%								
Se 196.026†	490.6	0.391	mg/L	0.0071	0.391	mg/L	0.0071	1.81%
QC value within limits for Se 196.026 Recovery = 97.81%								
Si 251.611†	159797.9	4.66	mg/L	0.051	4.66	mg/L	0.051	1.10%
QC value within limits for Si 251.611 Recovery = 93.14%								
Sn 189.927†	5351.8	0.977	mg/L	0.0043	0.977	mg/L	0.0043	0.44%
QC value within limits for Sn 189.927 Recovery = 97.66%								
Ti 334.940†	724352.8	0.970	mg/L	0.0065	0.970	mg/L	0.0065	0.67%
QC value within limits for Ti 334.940 Recovery = 96.99%								
Tl 190.801†	760.4	0.499	mg/L	0.0024	0.499	mg/L	0.0024	0.48%
QC value within limits for Tl 190.801 Recovery = 99.78%								
V 290.880†	149780.7	0.968	mg/L	0.0035	0.968	mg/L	0.0035	0.36%
QC value within limits for V 290.880 Recovery = 96.83%								
Zn 206.200†	29769.5	0.953	mg/L	0.0052	0.953	mg/L	0.0052	0.54%
QC value within limits for Zn 206.200 Recovery = 95.28%								
K 766.490†	133536.4	49.5	mg/L	0.22	49.5	mg/L	0.22	0.45%
QC value within limits for K 766.490 Recovery = 98.94%								
Na 589.592†	664359.3	49.8	mg/L	0.55	49.8	mg/L	0.55	1.10%
QC value within limits for Na 589.592 Recovery = 99.64%								
Sr 407.771†	1537730.8	1.02	mg/L	0.024	1.02	mg/L	0.024	2.34%
QC value within limits for Sr 407.771 Recovery = 101.86%								
Li 670.784†	83265.2	1.03	mg/L	0.003	1.03	mg/L	0.003	0.27%
QC value within limits for Li 670.784 Recovery = 102.93%								

QC Failed. Continue with analysis.

Approved: April 18, 2011

Sequence No.: 99 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/16/2011 12:05:42 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	201.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4971765.0						42427.43	0.85%
YRADIAL	307670.5						2742.66	0.89%
Ga 417.206	1326539.0						10506.80	0.79%
GaRADIAL	67092.8						733.21	1.09%
Ag 328.068†	-969.7	-0.00398	mg/L	0.000681	-0.00398	mg/L	0.000681	17.12%
QC value within limits for Ag 328.068 Recovery = Not calculated								
Al 396.153†	100.9	0.0111	mg/L	0.00311	0.0111	mg/L	0.00311	28.08%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.9	0.00070	mg/L	0.001693	0.00070	mg/L	0.001693	242.41%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	8.0	0.00022	mg/L	0.000050	0.00022	mg/L	0.000050	22.38%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	119.1	0.00022	mg/L	0.000030	0.00022	mg/L	0.000030	13.66%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	463.9	0.00958	mg/L	0.000468	0.00958	mg/L	0.000468	4.89%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	2.9	0.0496	mg/L	0.02412	0.0496	mg/L	0.02412	48.64%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-5.4	-0.00037	mg/L	0.000249	-0.00037	mg/L	0.000249	67.56%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-9.3	-0.00018	mg/L	0.000149	-0.00018	mg/L	0.000149	83.03%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	54.2	0.00031	mg/L	0.000118	0.00031	mg/L	0.000118	38.54%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-250.3	-0.00207	mg/L	0.000139	-0.00207	mg/L	0.000139	6.72%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	-1.1	-0.00949	mg/L	0.004311	-0.00949	mg/L	0.004311	45.41%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	2.9	0.00173	mg/L	0.004242	0.00173	mg/L	0.004242	245.04%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	40.7	0.00000	mg/L	0.000024	0.00000	mg/L	0.000024	553.62%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-8.5	-0.00015	mg/L	0.000087	-0.00015	mg/L	0.000087	56.76%
QC value within limits for Mo 202.031 Recovery = Not calculated								
Ni 231.604†	6.9	0.00005	mg/L	0.000161	0.00005	mg/L	0.000161	329.32%
QC value within limits for Ni 231.604 Recovery = Not calculated								
Pb 220.353†	-0.4	0.00101	mg/L	0.000371	0.00101	mg/L	0.000371	36.77%
QC value within limits for Pb 220.353 Recovery = Not calculated								
Sb 206.836†	5.6	0.00049	mg/L	0.000158	0.00049	mg/L	0.000158	32.26%
QC value within limits for Sb 206.836 Recovery = Not calculated								
Se 196.026†	-3.0	-0.00564	mg/L	0.003719	-0.00564	mg/L	0.003719	65.98%
QC value within limits for Se 196.026 Recovery = Not calculated								
Si 251.611†	53.6	0.00237	mg/L	0.000745	0.00237	mg/L	0.000745	31.49%
QC value within limits for Si 251.611 Recovery = Not calculated								
Sn 189.927†	-5.0	-0.00028	mg/L	0.000451	-0.00028	mg/L	0.000451	163.75%
QC value within limits for Sn 189.927 Recovery = Not calculated								
Ti 334.940†	-128.0	-0.00018	mg/L	0.000068	-0.00018	mg/L	0.000068	37.77%
QC value within limits for Ti 334.940 Recovery = Not calculated								
Tl 190.801†	-4.8	-0.00576	mg/L	0.004080	-0.00576	mg/L	0.004080	70.81%
QC value within limits for Tl 190.801 Recovery = Not calculated								
V 290.880†	76.9	0.00084	mg/L	0.000222	0.00084	mg/L	0.000222	26.35%
QC value within limits for V 290.880 Recovery = Not calculated								
Zn 206.200†	3.1	0.00039	mg/L	0.000044	0.00039	mg/L	0.000044	11.24%
QC value within limits for Zn 206.200 Recovery = Not calculated								
K 766.490†	314.1	0.115	mg/L	0.0634	0.115	mg/L	0.0634	54.94%
QC value within limits for K 766.490 Recovery = Not calculated								

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Na 589.592† 6540.7 0.476 mg/L 0.0171 0.476 mg/L 0.0171 3.59%
QC value within limits for Na 589.592 Recovery = Not calculated
Sr 407.771† -34.0 -0.00006 mg/L 0.000039 -0.00006 mg/L 0.000039 68.87%
QC value within limits for Sr 407.771 Recovery = Not calculated
Li 670.784† 24.1 -0.00046 mg/L 0.001718 -0.00046 mg/L 0.001718 372.07%
QC value within limits for Li 670.784 Recovery = Not calculated
All analyte(s) passed QC.

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Sequence No.: 100 **Autosampler Location: 124**
Sample ID: L1104051204 **Date Collected: 4/16/2011 12:12:17 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104051204

Analyte	Back Pressure	Flow
All	201.0 kPa	0.50 L/min

Mean Data: L1104051204

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4399810.5						22638.09	0.51%
YRADIAL	291641.9						4915.96	1.69%
Ga 417.206	1212620.3						10446.70	0.86%
GaRADIAL	64776.4						2073.48	3.20%
Ag 328.068†	-837.6	-0.00349	mg/L	0.000627	-0.00349	mg/L	0.000627	17.95%
Al 396.153†	-1.9	-0.00982	mg/L	0.010173	-0.00982	mg/L	0.010173	103.62%
As 188.979†	8.3	0.0133	mg/L	0.00546	0.0133	mg/L	0.00546	41.04%
Ba 233.527†	17910.2	0.321	mg/L	0.0016	0.321	mg/L	0.0016	0.49%
Be 234.861†	97.8	0.00029	mg/L	0.000024	0.00029	mg/L	0.000024	8.20%
B 249.677†	13674.7	0.254	mg/L	0.0006	0.254	mg/L	0.0006	0.22%
Ca 227.546†	870.7	9.31	mg/L	0.022	9.31	mg/L	0.022	0.23%
Cd 228.802†	0.6	-0.00002	mg/L	0.000119	-0.00002	mg/L	0.000119	624.80%
Co 228.616†	-24.8	-0.00114	mg/L	0.000415	-0.00114	mg/L	0.000415	36.27%
Cr 267.716†	136.7	0.00100	mg/L	0.000073	0.00100	mg/L	0.000073	7.31%
Cu 327.393†	-205.6	-0.00177	mg/L	0.000136	-0.00177	mg/L	0.000136	7.68%
Fe 239.562†	1.2	-0.00184	mg/L	0.001380	-0.00184	mg/L	0.001380	74.86%
Mg 279.077†	1654.4	2.28	mg/L	0.074	2.28	mg/L	0.074	3.27%
Mn 257.610†	5113.7	0.0118	mg/L	0.00011	0.0118	mg/L	0.00011	0.97%
Mo 202.031†	910.2	0.0736	mg/L	0.00084	0.0736	mg/L	0.00084	1.14%
Ni 231.604†	40.4	0.00109	mg/L	0.000092	0.00109	mg/L	0.000092	8.45%
Pb 220.353†	7.5	0.00331	mg/L	0.001778	0.00331	mg/L	0.001778	53.65%
Sb 206.836†	9.1	0.00354	mg/L	0.001959	0.00354	mg/L	0.001959	55.26%
Se 196.026†	-6.6	-0.00614	mg/L	0.001089	-0.00614	mg/L	0.001089	17.72%
Si 251.611†	95989.1	2.81	mg/L	0.018	2.81	mg/L	0.018	0.63%
Sn 189.927†	-6.3	-0.00051	mg/L	0.000527	-0.00051	mg/L	0.000527	102.86%
Ti 334.940†	-245.0	-0.00024	mg/L	0.000120	-0.00024	mg/L	0.000120	49.42%
Tl 190.801†	14.7	0.00595	mg/L	0.004246	0.00595	mg/L	0.004246	71.31%
V 290.880†	709.6	0.00488	mg/L	0.000311	0.00488	mg/L	0.000311	6.37%
Zn 206.200†	74.3	0.00266	mg/L	0.000136	0.00266	mg/L	0.000136	5.13%
K 766.490†	9012.6	3.27	mg/L	0.059	3.27	mg/L	0.059	1.81%
Na 589.592†	Saturated2							
Sr 407.771†	1083976.4	0.719	mg/L	0.0045	0.719	mg/L	0.0045	0.63%
Li 670.784†	3058.7	0.0371	mg/L	0.00141	0.0371	mg/L	0.00141	3.81%

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Sequence No.: 101 **Autosampler Location: 125**
Sample ID: L1104051206 **Date Collected: 4/16/2011 12:19:02 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104051206

Analyte	Back Pressure	Flow
All	201.0 kPa	0.50 L/min

Mean Data: L1104051206

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD

Approved: April 18, 2011

Analyte	Intensity	Conc.	Units	Std.Dev.	Conc.	Units	Std.Dev.	RSD
Y 371.029	4618805.3						56213.56	1.22%
YRADIAL	302531.3						5418.15	1.79%
Ga 417.206	1295441.3						20347.39	1.57%
GaRADIAL	67951.5						1867.70	2.75%
Ag 328.068†	-911.5	-0.00373	mg/L	0.000321	-0.00373	mg/L	0.000321	8.60%
Al 396.153†	227.7	0.0346	mg/L	0.01408	0.0346	mg/L	0.01408	40.74%
As 188.979†	9.8	0.0160	mg/L	0.00284	0.0160	mg/L	0.00284	17.70%
Ba 233.527†	4526.8	0.0813	mg/L	0.00107	0.0813	mg/L	0.00107	1.32%
Be 234.861†	115.9	0.00032	mg/L	0.000032	0.00032	mg/L	0.000032	10.16%
B 249.677†	13232.6	0.246	mg/L	0.0014	0.246	mg/L	0.0014	0.58%
Ca 227.546†	151.7	1.63	mg/L	0.098	1.63	mg/L	0.098	6.01%
Cd 228.802†	-2.7	-0.00024	mg/L	0.000080	-0.00024	mg/L	0.000080	33.64%
Co 228.616†	-15.0	-0.00052	mg/L	0.000110	-0.00052	mg/L	0.000110	21.34%
Cr 267.716†	96.7	0.00066	mg/L	0.000080	0.00066	mg/L	0.000080	12.17%
Cu 327.393†	-92.7	-0.00102	mg/L	0.000496	-0.00102	mg/L	0.000496	48.67%
Fe 239.562†	12.2	0.0352	mg/L	0.00261	0.0352	mg/L	0.00261	7.41%
Mg 279.077†	280.1	0.384	mg/L	0.0101	0.384	mg/L	0.0101	2.62%
Mn 257.610†	4229.8	0.0136	mg/L	0.00035	0.0136	mg/L	0.00035	2.55%
Mo 202.031†	951.1	0.0769	mg/L	0.00127	0.0769	mg/L	0.00127	1.65%
Ni 231.604†	15.3	0.00031	mg/L	0.000185	0.00031	mg/L	0.000185	59.34%
Pb 220.353†	3.6	0.00223	mg/L	0.000713	0.00223	mg/L	0.000713	32.04%
Sb 206.836†	6.6	0.00178	mg/L	0.001250	0.00178	mg/L	0.001250	70.06%
Se 196.026†	0.5	-0.00240	mg/L	0.004023	-0.00240	mg/L	0.004023	167.45%
Si 251.611†	112973.4	3.30	mg/L	0.023	3.30	mg/L	0.023	0.69%
Sn 189.927†	-3.1	0.00006	mg/L	0.000150	0.00006	mg/L	0.000150	246.07%
Ti 334.940†	70.7	0.00010	mg/L	0.000021	0.00010	mg/L	0.000021	20.38%
Tl 190.801†	0.1	-0.00277	mg/L	0.001354	-0.00277	mg/L	0.001354	48.87%
V 290.880†	472.9	0.00336	mg/L	0.000397	0.00336	mg/L	0.000397	11.83%
Zn 206.200†	63.6	0.00231	mg/L	0.000152	0.00231	mg/L	0.000152	6.56%
K 766.490†	4528.1	1.20	mg/L	0.011	1.20	mg/L	0.011	0.88%
Na 589.592†	4040676.5	442	mg/L	25.6	442	mg/L	25.6	5.79%
Sr 407.771†	167314.3	0.111	mg/L	0.0006	0.111	mg/L	0.0006	0.56%
Li 670.784†	1519.1	0.0180	mg/L	0.00075	0.0180	mg/L	0.00075	4.18%

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Sequence No.: 102 **Autosampler Location: 126**
Sample ID: L1104051208 **Date Collected: 4/16/2011 12:25:49 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104051208

Analyte	Back Pressure	Flow
All	201.0 kPa	0.50 L/min

Mean Data: L1104051208

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4931415.7						50802.58	1.03%
YRADIAL	313530.8						7653.30	2.44%
Ga 417.206	1337723.0						8870.90	0.66%
GaRADIAL	68699.6						275.51	0.40%
Ag 328.068†	-942.2	-0.00385	mg/L	0.000616	-0.00385	mg/L	0.000616	16.02%
Al 396.153†	131.4	0.0170	mg/L	0.00714	0.0170	mg/L	0.00714	42.04%
As 188.979†	0.6	0.00016	mg/L	0.001453	0.00016	mg/L	0.001453	887.00%
Ba 233.527†	5.6	0.00018	mg/L	0.000042	0.00018	mg/L	0.000042	23.31%
Be 234.861†	119.3	0.00022	mg/L	0.000004	0.00022	mg/L	0.000004	2.01%
B 249.677†	309.6	0.00675	mg/L	0.000272	0.00675	mg/L	0.000272	4.03%
Ca 227.546†	4.6	0.0685	mg/L	0.00198	0.0685	mg/L	0.00198	2.89%
Cd 228.802†	-3.6	-0.00025	mg/L	0.000046	-0.00025	mg/L	0.000046	18.53%
Co 228.616†	-13.3	-0.00040	mg/L	0.000107	-0.00040	mg/L	0.000107	26.51%
Cr 267.716†	114.5	0.00081	mg/L	0.000131	0.00081	mg/L	0.000131	16.11%
Cu 327.393†	-88.5	-0.00100	mg/L	0.000531	-0.00100	mg/L	0.000531	53.02%
Fe 239.562†	1.3	-0.00146	mg/L	0.003915	-0.00146	mg/L	0.003915	268.66%
Mg 279.077†	2.0	0.00054	mg/L	0.008563	0.00054	mg/L	0.008563	>999.9%
Mn 257.610†	80.0	0.00008	mg/L	0.000025	0.00008	mg/L	0.000025	31.01%
Mo 202.031†	-8.7	-0.00017	mg/L	0.000424	-0.00017	mg/L	0.000424	251.96%
Ni 231.604†	16.0	0.00033	mg/L	0.000262	0.00033	mg/L	0.000262	78.48%
Pb 220.353†	7.7	0.00252	mg/L	0.001764	0.00252	mg/L	0.001764	69.87%
Sb 206.836†	3.6	-0.00096	mg/L	0.001302	-0.00096	mg/L	0.001302	135.22%

Approved: April 18, 2011

Se 196.026†	0.1	-0.00311	mg/L	0.004272	-0.00311	mg/L	0.004272 137.20%
Si 251.611†	195.9	0.00653	mg/L	0.000303	0.00653	mg/L	0.000303 4.64%
Sn 189.927†	-4.4	-0.00017	mg/L	0.000565	-0.00017	mg/L	0.000565 336.91%
Ti 334.940†	-128.2	-0.00018	mg/L	0.000107	-0.00018	mg/L	0.000107 59.70%
Tl 190.801†	-4.1	-0.00526	mg/L	0.001923	-0.00526	mg/L	0.001923 36.59%
V 290.880†	92.2	0.00094	mg/L	0.000892	0.00094	mg/L	0.000892 94.66%
Zn 206.200†	45.1	0.00174	mg/L	0.000110	0.00174	mg/L	0.000110 6.32%
K 766.490†	265.0	0.0974	mg/L	0.02618	0.0974	mg/L	0.02618 26.89%
Na 589.592†	8924.9	0.648	mg/L	0.0139	0.648	mg/L	0.0139 2.15%
Sr 407.771†	-25.1	-0.00005	mg/L	0.000071	-0.00005	mg/L	0.000071 135.14%
Li 670.784†	111.4	0.00062	mg/L	0.001189	0.00062	mg/L	0.001189 192.35%

Sequence No.: 103 **Autosampler Location: 127**
Sample ID: L1104051211 **Date Collected: 4/16/2011 12:32:29 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104051211

Analyte	Back Pressure	Flow
All	201.0 kPa	0.50 L/min

Mean Data: L1104051211

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4578134.2						12117.61	0.26%
YRADIAL	292582.9						4043.49	1.38%
Ga 417.206	1309427.2						17102.42	1.31%
GaRADIAL	66054.3						1269.46	1.92%
Ag 328.068†	-375.8	-0.00128	mg/L	0.000172	-0.00128	mg/L	0.000172	13.43%
Al 396.153†	28.6	-0.00292	mg/L	0.007446	-0.00292	mg/L	0.007446	254.73%
As 188.979†	14.9	0.0226	mg/L	0.00106	0.0226	mg/L	0.00106	4.68%
Ba 233.527†	7801.7	0.140	mg/L	0.0005	0.140	mg/L	0.0005	0.38%
Be 234.861†	140.8	0.00030	mg/L	0.000014	0.00030	mg/L	0.000014	4.61%
B 249.677†	2355.9	0.0448	mg/L	0.00050	0.0448	mg/L	0.00050	1.13%
Ca 227.546†	14678.8	157	mg/L	2.0	157	mg/L	2.0	1.28%
Cd 228.802†	-4.4	-0.00038	mg/L	0.000215	-0.00038	mg/L	0.000215	57.08%
Co 228.616†	-14.9	-0.00053	mg/L	0.000310	-0.00053	mg/L	0.000310	57.88%
Cr 267.716†	200.0	0.00136	mg/L	0.000118	0.00136	mg/L	0.000118	8.61%
Cu 327.393†	-940.6	-0.00661	mg/L	0.000474	-0.00661	mg/L	0.000474	7.17%
Fe 239.562†	15.3	0.0439	mg/L	0.01711	0.0439	mg/L	0.01711	38.95%
Mg 279.077†	40394.3	55.6	mg/L	0.50	55.6	mg/L	0.50	0.89%
Mn 257.610†	177917.3	0.375	mg/L	0.0049	0.375	mg/L	0.0049	1.31%
Mo 202.031†	-3.3	0.00034	mg/L	0.000026	0.00034	mg/L	0.000026	7.68%
Ni 231.604†	35.9	0.00092	mg/L	0.000201	0.00092	mg/L	0.000201	21.95%
Pb 220.353†	-13.9	0.00594	mg/L	0.001095	0.00594	mg/L	0.001095	18.43%
Sb 206.836†	21.2	0.0118	mg/L	0.00194	0.0118	mg/L	0.00194	16.50%
Se 196.026†	-30.6	0.0114	mg/L	0.00267	0.0114	mg/L	0.00267	23.32%
Si 251.611†	225680.1	6.60	mg/L	0.161	6.60	mg/L	0.161	2.44%
Sn 189.927†	-13.8	-0.00189	mg/L	0.001148	-0.00189	mg/L	0.001148	60.66%
Ti 334.940†	-1550.0	-0.00052	mg/L	0.000085	-0.00052	mg/L	0.000085	16.51%
Tl 190.801†	108.4	0.0537	mg/L	0.00281	0.0537	mg/L	0.00281	5.24%
V 290.880†	-787.4	-0.00475	mg/L	0.000582	-0.00475	mg/L	0.000582	12.25%
Zn 206.200†	142.3	0.00484	mg/L	0.000077	0.00484	mg/L	0.000077	1.60%
K 766.490†	4744.7	1.55	mg/L	0.026	1.55	mg/L	0.026	1.67%
Na 589.592†	2051802.4	170	mg/L	4.2	170	mg/L	4.2	2.47%
Sr 407.771†	655506.5	0.435	mg/L	0.0102	0.435	mg/L	0.0102	2.35%
Li 670.784†	1189.3	0.0140	mg/L	0.00117	0.0140	mg/L	0.00117	8.41%

Sequence No.: 104 **Autosampler Location: 128**
Sample ID: PBW R6 WG361173-04 **Date Collected: 4/16/2011 12:39:15 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: PBW R6 WG361173-04

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Approved: April 18, 2011

Mean Data: PBW R6 WG361173-04

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4903371.7						66387.84	1.35%
YRADIAL	310456.6						6223.76	2.00%
Ga 417.206	1346404.8						16585.52	1.23%
GaRADIAL	68426.1						1031.80	1.51%
Ag 328.068†	-1023.3	-0.00423	mg/L	0.000877	-0.00423	mg/L	0.000877	20.72%
Al 396.153†	86.4	0.00827	mg/L	0.005236	0.00827	mg/L	0.005236	63.35%
As 188.979†	-0.8	-0.00238	mg/L	0.001894	-0.00238	mg/L	0.001894	79.46%
Ba 233.527†	7.4	0.00021	mg/L	0.000074	0.00021	mg/L	0.000074	34.54%
Be 234.861†	138.5	0.00025	mg/L	0.000018	0.00025	mg/L	0.000018	7.13%
B 249.677†	227.4	0.00522	mg/L	0.000401	0.00522	mg/L	0.000401	7.69%
Ca 227.546†	4.1	0.0625	mg/L	0.04611	0.0625	mg/L	0.04611	73.73%
Cd 228.802†	-5.7	-0.00038	mg/L	0.000164	-0.00038	mg/L	0.000164	43.20%
Co 228.616†	-12.3	-0.00035	mg/L	0.000118	-0.00035	mg/L	0.000118	33.75%
Cr 267.716†	57.3	0.00033	mg/L	0.000088	0.00033	mg/L	0.000088	26.60%
Cu 327.393†	-148.6	-0.00140	mg/L	0.000682	-0.00140	mg/L	0.000682	48.78%
Fe 239.562†	-0.6	-0.00781	mg/L	0.002573	-0.00781	mg/L	0.002573	32.96%
Mg 279.077†	3.2	0.00215	mg/L	0.007020	0.00215	mg/L	0.007020	325.98%
Mn 257.610†	59.7	0.00004	mg/L	0.000016	0.00004	mg/L	0.000016	35.38%
Mo 202.031†	-9.1	-0.00020	mg/L	0.000468	-0.00020	mg/L	0.000468	231.87%
Ni 231.604†	12.8	0.00023	mg/L	0.000126	0.00023	mg/L	0.000126	54.05%
Pb 220.353†	4.3	0.00189	mg/L	0.001877	0.00189	mg/L	0.001877	99.24%
Sb 206.836†	3.1	-0.00135	mg/L	0.002390	-0.00135	mg/L	0.002390	176.43%
Se 196.026†	-4.4	-0.00671	mg/L	0.001559	-0.00671	mg/L	0.001559	23.24%
Si 251.611†	427.6	0.0133	mg/L	0.00031	0.0133	mg/L	0.00031	2.36%
Sn 189.927†	-12.8	-0.00170	mg/L	0.000741	-0.00170	mg/L	0.000741	43.65%
Ti 334.940†	-176.1	-0.00024	mg/L	0.000116	-0.00024	mg/L	0.000116	47.54%
Tl 190.801†	-0.5	-0.00296	mg/L	0.002378	-0.00296	mg/L	0.002378	80.38%
V 290.880†	127.2	0.00117	mg/L	0.000774	0.00117	mg/L	0.000774	66.20%
Zn 206.200†	40.2	0.00158	mg/L	0.000058	0.00158	mg/L	0.000058	3.65%
K 766.490†	1562.7	0.568	mg/L	0.0027	0.568	mg/L	0.0027	0.48%
Na 589.592†	4229.1	0.309	mg/L	0.0178	0.309	mg/L	0.0178	5.74%
Sr 407.771†	12.0	-0.00003	mg/L	0.000064	-0.00003	mg/L	0.000064	240.95%
Li 670.784†	117.4	0.00069	mg/L	0.000143	0.00069	mg/L	0.000143	20.59%

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Sequence No.: 105 **Autosampler Location: 129**
Sample ID: LCSW R6 WG361173-05 **Date Collected: 4/16/2011 12:45:55 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: LCSW R6 WG361173-05

Analyte	Back Pressure	Flow
All	201.0 kPa	0.50 L/min

Mean Data: LCSW R6 WG361173-05

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4782639.9						44079.98	0.92%
YRADIAL	303803.8						7042.56	2.32%
Ga 417.206	1323214.0						5561.69	0.42%
GaRADIAL	67125.6						581.12	0.87%
Ag 328.068†	39253.7	0.189	mg/L	0.0011	0.189	mg/L	0.0011	0.59%
Al 396.153†	26480.8	5.11	mg/L	0.012	5.11	mg/L	0.012	0.24%
As 188.979†	126.1	0.223	mg/L	0.0084	0.223	mg/L	0.0084	3.75%
Ba 233.527†	27077.8	0.487	mg/L	0.0056	0.487	mg/L	0.0056	1.15%
Be 234.861†	12146.5	0.0230	mg/L	0.00018	0.0230	mg/L	0.00018	0.80%
B 249.677†	51755.4	0.961	mg/L	0.0084	0.961	mg/L	0.0084	0.87%
Ca 227.546†	465.6	5.16	mg/L	0.042	5.16	mg/L	0.042	0.81%
Cd 228.802†	373.1	0.0237	mg/L	0.00013	0.0237	mg/L	0.00013	0.56%
Co 228.616†	1783.9	0.0988	mg/L	0.00125	0.0988	mg/L	0.00125	1.27%
Cr 267.716†	28661.4	0.240	mg/L	0.0021	0.240	mg/L	0.0021	0.85%
Cu 327.393†	35392.5	0.234	mg/L	0.0014	0.234	mg/L	0.0014	0.59%
Fe 239.562†	597.3	2.01	mg/L	0.012	2.01	mg/L	0.012	0.60%
Mg 279.077†	3674.8	5.06	mg/L	0.054	5.06	mg/L	0.054	1.06%
Mn 257.610†	117203.5	0.248	mg/L	0.0028	0.248	mg/L	0.0028	1.11%

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Mo 202.031†	6147.9	0.494 mg/L	0.0039	0.494 mg/L	0.0039	0.79%
Ni 231.604†	7858.7	0.246 mg/L	0.0024	0.246 mg/L	0.0024	0.98%
Pb 220.353†	1295.3	0.249 mg/L	0.0024	0.249 mg/L	0.0024	0.97%
Sb 206.836†	806.9	0.585 mg/L	0.0024	0.585 mg/L	0.0024	0.40%
Se 196.026†	252.5	0.200 mg/L	0.0013	0.200 mg/L	0.0013	0.67%
Si 251.611†	82509.4	2.41 mg/L	0.013	2.41 mg/L	0.013	0.54%
Sn 189.927†	-20.5	-0.00311 mg/L	0.000578	-0.00311 mg/L	0.000578	18.61%
Ti 334.940†	365348.8	0.489 mg/L	0.0048	0.489 mg/L	0.0048	0.98%
Tl 190.801†	391.0	0.255 mg/L	0.0021	0.255 mg/L	0.0021	0.83%
V 290.880†	75305.6	0.487 mg/L	0.0067	0.487 mg/L	0.0067	1.37%
Zn 206.200†	14774.3	0.473 mg/L	0.0054	0.473 mg/L	0.0054	1.14%
K 766.490†	68559.5	25.1 mg/L	0.07	25.1 mg/L	0.07	0.28%
Na 589.592†	342389.0	25.2 mg/L	0.65	25.2 mg/L	0.65	2.57%
Sr 407.771†	793362.8	0.526 mg/L	0.0187	0.526 mg/L	0.0187	3.56%
Li 670.784†	43258.0	0.534 mg/L	0.0065	0.534 mg/L	0.0065	1.22%

Sequence No.: 106 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/16/2011 12:52:39 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	201.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4719662.5						38191.61	0.81%
YRADIAL	299664.4						2399.45	0.80%
Ga 417.206	1289188.0						22176.83	1.72%
GaRADIAL	66802.8						837.30	1.25%
Ag 328.068†	79147.9	0.380	mg/L	0.0104	0.380	mg/L	0.0104	2.72%
QC value within limits for Ag 328.068 Recovery = 95.10%								
Al 396.153†	51327.1	9.91	mg/L	0.030	9.91	mg/L	0.030	0.30%
QC value within limits for Al 396.153 Recovery = 99.08%								
As 188.979†	253.7	0.450	mg/L	0.0080	0.450	mg/L	0.0080	1.79%
QC value greater than the upper limit for As 188.979 Recovery = 112.45%								
Ba 233.527†	53955.3	0.970	mg/L	0.0187	0.970	mg/L	0.0187	1.93%
QC value within limits for Ba 233.527 Recovery = 96.99%								
Be 234.861†	24420.5	0.0461	mg/L	0.00123	0.0461	mg/L	0.00123	2.67%
QC value within limits for Be 234.861 Recovery = 92.27%								
B 249.677†	26174.5	0.491	mg/L	0.0139	0.491	mg/L	0.0139	2.83%
QC value within limits for B 249.677 Recovery = 98.28%								
Ca 227.546†	932.7	10.3	mg/L	0.18	10.3	mg/L	0.18	1.77%
QC value within limits for Ca 227.546 Recovery = 103.11%								
Cd 228.802†	759.2	0.0482	mg/L	0.00074	0.0482	mg/L	0.00074	1.54%
QC value within limits for Cd 228.802 Recovery = 96.39%								
Co 228.616†	3524.8	0.195	mg/L	0.0023	0.195	mg/L	0.0023	1.18%
QC value within limits for Co 228.616 Recovery = 97.46%								
Cr 267.716†	57582.1	0.483	mg/L	0.0090	0.483	mg/L	0.0090	1.86%
QC value within limits for Cr 267.716 Recovery = 96.56%								
Cu 327.393†	71620.0	0.473	mg/L	0.0138	0.473	mg/L	0.0138	2.91%
QC value within limits for Cu 327.393 Recovery = 94.63%								
Fe 239.562†	1184.8	3.99	mg/L	0.037	3.99	mg/L	0.037	0.92%
QC value within limits for Fe 239.562 Recovery = 99.76%								
Mg 279.077†	7161.5	9.86	mg/L	0.087	9.86	mg/L	0.087	0.88%
QC value within limits for Mg 279.077 Recovery = 98.64%								
Mn 257.610†	232917.0	0.493	mg/L	0.0099	0.493	mg/L	0.0099	2.01%
QC value within limits for Mn 257.610 Recovery = 98.55%								
Mo 202.031†	12137.2	0.975	mg/L	0.0090	0.975	mg/L	0.0090	0.92%
QC value within limits for Mo 202.031 Recovery = 97.53%								
Ni 231.604†	15673.2	0.492	mg/L	0.0077	0.492	mg/L	0.0077	1.57%
QC value within limits for Ni 231.604 Recovery = 98.32%								
Pb 220.353†	2559.2	0.490	mg/L	0.0049	0.490	mg/L	0.0049	1.00%
QC value within limits for Pb 220.353 Recovery = 98.01%								
Sb 206.836†	1609.4	1.17	mg/L	0.023	1.17	mg/L	0.023	1.99%
QC value within limits for Sb 206.836 Recovery = 97.57%								
Se 196.026†	498.7	0.398	mg/L	0.0046	0.398	mg/L	0.0046	1.16%

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QC value within limits for Se 196.026 Recovery = 99.43%
Si 251.611† 161460.1 4.71 mg/L 0.132 4.71 mg/L 0.132 2.81%
QC value within limits for Si 251.611 Recovery = 94.11%
Sn 189.927† 5369.2 0.980 mg/L 0.0091 0.980 mg/L 0.0091 0.93%
QC value within limits for Sn 189.927 Recovery = 97.98%
Ti 334.940† 732590.0 0.981 mg/L 0.0022 0.981 mg/L 0.0022 0.22%
QC value within limits for Ti 334.940 Recovery = 98.09%
Tl 190.801† 763.5 0.501 mg/L 0.0059 0.501 mg/L 0.0059 1.18%
QC value within limits for Tl 190.801 Recovery = 100.22%
V 290.880† 150922.0 0.976 mg/L 0.0209 0.976 mg/L 0.0209 2.14%
QC value within limits for V 290.880 Recovery = 97.57%
Zn 206.200† 29934.2 0.958 mg/L 0.0162 0.958 mg/L 0.0162 1.69%
QC value within limits for Zn 206.200 Recovery = 95.81%
K 766.490† 133303.3 49.4 mg/L 0.28 49.4 mg/L 0.28 0.57%
QC value within limits for K 766.490 Recovery = 98.77%
Na 589.592† 652484.1 48.9 mg/L 0.75 48.9 mg/L 0.75 1.53%
QC value within limits for Na 589.592 Recovery = 97.79%
Sr 407.771† 1535614.2 1.02 mg/L 0.003 1.02 mg/L 0.003 0.32%
QC value within limits for Sr 407.771 Recovery = 101.72%
Li 670.784† 83167.6 1.03 mg/L 0.001 1.03 mg/L 0.001 0.13%
QC value within limits for Li 670.784 Recovery = 102.81%
QC Failed. Continue with analysis.

Sequence No.: 107 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/16/2011 12:59:20 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4884931.5						19324.94	0.40%
YRADIAL	308681.4						7025.81	2.28%
Ga 417.206	1318599.3						497.17	0.04%
GaRADIAL	67582.6						1094.95	1.62%
Ag 328.068†	-1097.9	-0.00459	mg/L	0.000440	-0.00459	mg/L	0.000440	9.58%
QC value less than the lower limit for Ag 328.068 Recovery = Not calculated								
Al 396.153†	33.3	-0.00201	mg/L	0.019117	-0.00201	mg/L	0.019117	949.47%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.9	-0.00449	mg/L	0.001415	-0.00449	mg/L	0.001415	31.55%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	0.8	0.00010	mg/L	0.000042	0.00010	mg/L	0.000042	44.34%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	105.4	0.00019	mg/L	0.000010	0.00019	mg/L	0.000010	5.09%
QC value within limits for Be 234.861 Recovery = Not calculated								
B 249.677†	407.2	0.00857	mg/L	0.000483	0.00857	mg/L	0.000483	5.63%
QC value within limits for B 249.677 Recovery = Not calculated								
Ca 227.546†	2.0	0.0405	mg/L	0.03449	0.0405	mg/L	0.03449	85.24%
QC value within limits for Ca 227.546 Recovery = Not calculated								
Cd 228.802†	-3.4	-0.00022	mg/L	0.000044	-0.00022	mg/L	0.000044	19.52%
QC value within limits for Cd 228.802 Recovery = Not calculated								
Co 228.616†	-10.2	-0.00023	mg/L	0.000441	-0.00023	mg/L	0.000441	191.48%
QC value within limits for Co 228.616 Recovery = Not calculated								
Cr 267.716†	58.3	0.00034	mg/L	0.000087	0.00034	mg/L	0.000087	25.34%
QC value within limits for Cr 267.716 Recovery = Not calculated								
Cu 327.393†	-178.9	-0.00160	mg/L	0.000394	-0.00160	mg/L	0.000394	24.69%
QC value within limits for Cu 327.393 Recovery = Not calculated								
Fe 239.562†	1.1	-0.00223	mg/L	0.001327	-0.00223	mg/L	0.001327	59.49%
QC value within limits for Fe 239.562 Recovery = Not calculated								
Mg 279.077†	0.5	-0.00152	mg/L	0.001426	-0.00152	mg/L	0.001426	93.73%
QC value within limits for Mg 279.077 Recovery = Not calculated								
Mn 257.610†	27.6	-0.00004	mg/L	0.000007	-0.00004	mg/L	0.000007	19.66%
QC value within limits for Mn 257.610 Recovery = Not calculated								
Mo 202.031†	-12.7	-0.00049	mg/L	0.000420	-0.00049	mg/L	0.000420	86.33%
QC value within limits for Mo 202.031 Recovery = Not calculated								

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Ni 231.604†	12.2	0.00021 mg/L	0.000184	0.00021 mg/L	0.000184	85.96%
QC value within limits for Ni 231.604 Recovery = Not calculated						
Pb 220.353†	4.1	0.00185 mg/L	0.000747	0.00185 mg/L	0.000747	40.46%
QC value within limits for Pb 220.353 Recovery = Not calculated						
Sb 206.836†	5.3	0.00026 mg/L	0.002450	0.00026 mg/L	0.002450	954.64%
QC value within limits for Sb 206.836 Recovery = Not calculated						
Se 196.026†	-1.3	-0.00427 mg/L	0.005030	-0.00427 mg/L	0.005030	117.70%
QC value within limits for Se 196.026 Recovery = Not calculated						
Si 251.611†	-14.1	0.00039 mg/L	0.000285	0.00039 mg/L	0.000285	72.52%
QC value within limits for Si 251.611 Recovery = Not calculated						
Sn 189.927†	1.8	0.00095 mg/L	0.000246	0.00095 mg/L	0.000246	25.76%
QC value within limits for Sn 189.927 Recovery = Not calculated						
Ti 334.940†	-105.5	-0.00015 mg/L	0.000122	-0.00015 mg/L	0.000122	81.96%
QC value within limits for Ti 334.940 Recovery = Not calculated						
Tl 190.801†	-2.0	-0.00391 mg/L	0.002262	-0.00391 mg/L	0.002262	57.91%
QC value within limits for Tl 190.801 Recovery = Not calculated						
V 290.880†	153.8	0.00134 mg/L	0.000178	0.00134 mg/L	0.000178	13.27%
QC value within limits for V 290.880 Recovery = Not calculated						
Zn 206.200†	-0.4	0.00028 mg/L	0.000058	0.00028 mg/L	0.000058	20.47%
QC value within limits for Zn 206.200 Recovery = Not calculated						
K 766.490†	151.3	0.0566 mg/L	0.05439	0.0566 mg/L	0.05439	96.09%
QC value within limits for K 766.490 Recovery = Not calculated						
Na 589.592†	2213.6	0.164 mg/L	0.0130	0.164 mg/L	0.0130	7.89%
QC value within limits for Na 589.592 Recovery = Not calculated						
Sr 407.771†	39.4	-0.00001 mg/L	0.000036	-0.00001 mg/L	0.000036	383.66%
QC value within limits for Sr 407.771 Recovery = Not calculated						
Li 670.784†	125.8	0.00080 mg/L	0.001265	0.00080 mg/L	0.001265	158.67%
QC value within limits for Li 670.784 Recovery = Not calculated						

QC Failed. Continue with analysis.

Sequence No.: 108 **Autosampler Location: 130**
Sample ID: L1104016001 WG361173-01 **Date Collected: 4/16/2011 1:05:56 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016001 WG361173-01

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: L1104016001 WG361173-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4484596.9						13918.47	0.31%
YRADIAL	291135.6						6300.57	2.16%
Ga 417.206	1243664.0						17025.25	1.37%
GaRADIAL	64721.1						1206.63	1.86%
Ag 328.068†	-30.5	-0.00188	mg/L	0.000778	-0.00188	mg/L	0.000778	41.31%
Al 396.153†	183.5	0.0292	mg/L	0.01081	0.0292	mg/L	0.01081	37.03%
As 188.979†	27.7	0.0476	mg/L	0.00312	0.0476	mg/L	0.00312	6.56%
Ba 233.527†	18029.7	0.323	mg/L	0.0057	0.323	mg/L	0.0057	1.76%
Be 234.861†	2952.7	0.00029	mg/L	0.000115	0.00029	mg/L	0.000115	40.41%
B 249.677†	900994.5	16.8	mg/L	0.25	16.8	mg/L	0.25	1.49%
Ca 227.546†	22182.6	237	mg/L	4.5	237	mg/L	4.5	1.89%
Cd 228.802†	-3.2	-0.00036	mg/L	0.000083	-0.00036	mg/L	0.000083	22.81%
Co 228.616†	-6.2	-0.00081	mg/L	0.000253	-0.00081	mg/L	0.000253	31.14%
Cr 267.716†	385.0	0.00204	mg/L	0.000173	0.00204	mg/L	0.000173	8.48%
Cu 327.393†	27701.9	0.185	mg/L	0.0053	0.185	mg/L	0.0053	2.88%
Fe 239.562†	7934.3	26.8	mg/L	0.43	26.8	mg/L	0.43	1.62%
Mg 279.077†	66752.0	91.9	mg/L	1.96	91.9	mg/L	1.96	2.13%
Mn 257.610†	1172522.6	2.47	mg/L	0.038	2.47	mg/L	0.038	1.53%
Mo 202.031†	-25.2	0.00034	mg/L	0.000618	0.00034	mg/L	0.000618	180.09%
Ni 231.604†	137.7	0.00410	mg/L	0.000179	0.00410	mg/L	0.000179	4.36%
Pb 220.353†	-18.8	0.00733	mg/L	0.000430	0.00733	mg/L	0.000430	5.86%
Sb 206.836†	22.9	0.0131	mg/L	0.00388	0.0131	mg/L	0.00388	29.67%
Se 196.026†	-52.8	0.0227	mg/L	0.00257	0.0227	mg/L	0.00257	11.31%
Si 251.611†	463666.7	13.6	mg/L	0.29	13.6	mg/L	0.29	2.12%
Sn 189.927†	-2.6	0.00015	mg/L	0.001514	0.00015	mg/L	0.001514	>999.9%
Ti 334.940†	-1270.2	0.00066	mg/L	0.000057	0.00066	mg/L	0.000057	8.60%
Tl 190.801†	125.4	0.0606	mg/L	0.00197	0.0606	mg/L	0.00197	3.25%

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V 290.880†	-292.2	0.00049 mg/L	0.000605	0.00049 mg/L	0.000605	123.04%
Zn 206.200†	2827.7	0.0900 mg/L	0.00047	0.0900 mg/L	0.00047	0.52%
K 766.490†	157272.2	58.3 mg/L	0.07	58.3 mg/L	0.07	0.13%
Na 589.592†	2878690.0	259 mg/L	8.9	259 mg/L	8.9	3.44%
Sr 407.771†	5498002.8	3.64 mg/L	0.100	3.64 mg/L	0.100	2.76%
Li 670.784†	107150.0	1.32 mg/L	0.009	1.32 mg/L	0.009	0.68%

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Sequence No.: 109 **Autosampler Location: 131**
Sample ID: L1104016002S WG361173-06 **Date Collected: 4/16/2011 1:11:44 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016002S WG361173-06

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: L1104016002S WG361173-06

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4516482.7						39278.06	0.87%
YRADIAL	296977.2						1987.34	0.67%
Ga 417.206	1264590.7						20026.81	1.58%
GaRADIAL	66251.3						662.94	1.00%
Ag 328.068†	40868.3	0.195	mg/L	0.0047	0.195	mg/L	0.0047	2.41%
Al 396.153†	25829.3	4.98	mg/L	0.080	4.98	mg/L	0.080	1.61%
As 188.979†	140.8	0.248	mg/L	0.0119	0.248	mg/L	0.0119	4.83%
Ba 233.527†	41924.3	0.753	mg/L	0.0112	0.753	mg/L	0.0112	1.48%
Be 234.861†	14643.2	0.0238	mg/L	0.00063	0.0238	mg/L	0.00063	2.64%
B 249.677†	939685.9	17.5	mg/L	0.16	17.5	mg/L	0.16	0.94%
Ca 227.546†	21416.0	229	mg/L	4.2	229	mg/L	4.2	1.84%
Cd 228.802†	364.9	0.0231	mg/L	0.00008	0.0231	mg/L	0.00008	0.36%
Co 228.616†	1657.1	0.0911	mg/L	0.00108	0.0911	mg/L	0.00108	1.19%
Cr 267.716†	28386.9	0.237	mg/L	0.0015	0.237	mg/L	0.0015	0.63%
Cu 327.393†	36258.8	0.241	mg/L	0.0035	0.241	mg/L	0.0035	1.46%
Fe 239.562†	6485.4	21.9	mg/L	0.15	21.9	mg/L	0.15	0.68%
Mg 279.077†	68518.5	94.4	mg/L	1.26	94.4	mg/L	1.26	1.34%
Mn 257.610†	1191339.6	2.51	mg/L	0.019	2.51	mg/L	0.019	0.75%
Mo 202.031†	5945.6	0.480	mg/L	0.0048	0.480	mg/L	0.0048	1.00%
Ni 231.604†	7436.4	0.233	mg/L	0.0026	0.233	mg/L	0.0026	1.11%
Pb 220.353†	1191.0	0.238	mg/L	0.0020	0.238	mg/L	0.0020	0.83%
Sb 206.836†	822.4	0.596	mg/L	0.0129	0.596	mg/L	0.0129	2.16%
Se 196.026†	194.9	0.216	mg/L	0.0038	0.216	mg/L	0.0038	1.74%
Si 251.611†	520136.2	15.2	mg/L	0.24	15.2	mg/L	0.24	1.57%
Sn 189.927†	-31.3	-0.00508	mg/L	0.001370	-0.00508	mg/L	0.001370	26.98%
Ti 334.940†	372660.8	0.501	mg/L	0.0102	0.501	mg/L	0.0102	2.03%
Tl 190.801†	480.8	0.296	mg/L	0.0042	0.296	mg/L	0.0042	1.42%
V 290.880†	75387.7	0.489	mg/L	0.0060	0.489	mg/L	0.0060	1.23%
Zn 206.200†	14513.3	0.464	mg/L	0.0040	0.464	mg/L	0.0040	0.87%
K 766.490†	224367.7	84.3	mg/L	0.84	84.3	mg/L	0.84	1.00%
Na 589.592†	3138612.2	292	mg/L	2.6	292	mg/L	2.6	0.89%
Sr 407.771†	6110984.3	4.05	mg/L	0.028	4.05	mg/L	0.028	0.69%
Li 670.784†	149486.9	1.85	mg/L	0.015	1.85	mg/L	0.015	0.83%

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Sequence No.: 110 **Autosampler Location: 132**
Sample ID: L1104016003SD WG361173-07 **Date Collected: 4/16/2011 1:17:33 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016003SD WG361173-07

Analyte	Back Pressure	Flow
All	201.0 kPa	0.50 L/min

Mean Data: L1104016003SD WG361173-07

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD

Approved: April 18, 2011

Y 371.029	4496749.3					62234.83	1.38%
YRADIAL	300431.0					854.03	0.28%
Ga 417.206	1257292.7					10472.90	0.83%
GaRADIAL	67054.1					83.07	0.12%
Ag 328.068†	40576.8	0.193	mg/L	0.0015	0.193 mg/L	0.0015	0.80%
Al 396.153†	25511.8	4.92	mg/L	0.044	4.92 mg/L	0.044	0.90%
As 188.979†	140.8	0.248	mg/L	0.0182	0.248 mg/L	0.0182	7.35%
Ba 233.527†	42497.4	0.763	mg/L	0.0095	0.763 mg/L	0.0095	1.24%
Be 234.861†	15026.2	0.0237	mg/L	0.00036	0.0237 mg/L	0.00036	1.52%
B 249.677†	927747.9	17.3	mg/L	0.03	17.3 mg/L	0.03	0.19%
Ca 227.546†	21707.0	232	mg/L	2.1	232 mg/L	2.1	0.91%
Cd 228.802†	363.6	0.0230	mg/L	0.00045	0.0230 mg/L	0.00045	1.97%
Co 228.616†	1642.6	0.0902	mg/L	0.00139	0.0902 mg/L	0.00139	1.54%
Cr 267.716†	27941.5	0.233	mg/L	0.0042	0.233 mg/L	0.0042	1.81%
Cu 327.393†	80708.8	0.535	mg/L	0.0017	0.535 mg/L	0.0017	0.33%
Fe 239.562†	7630.8	25.7	mg/L	0.30	25.7 mg/L	0.30	1.18%
Mg 279.077†	66422.4	91.5	mg/L	0.90	91.5 mg/L	0.90	0.99%
Mn 257.610†	1251184.5	2.64	mg/L	0.011	2.64 mg/L	0.011	0.43%
Mo 202.031†	5926.3	0.478	mg/L	0.0073	0.478 mg/L	0.0073	1.53%
Ni 231.604†	7416.8	0.233	mg/L	0.0042	0.233 mg/L	0.0042	1.82%
Pb 220.353†	1196.6	0.239	mg/L	0.0023	0.239 mg/L	0.0023	0.96%
Sb 206.836†	823.6	0.597	mg/L	0.0058	0.597 mg/L	0.0058	0.96%
Se 196.026†	186.4	0.211	mg/L	0.0049	0.211 mg/L	0.0049	2.33%
Si 251.611†	521630.7	15.2	mg/L	0.11	15.2 mg/L	0.11	0.69%
Sn 189.927†	7.1	0.00192	mg/L	0.000947	0.00192 mg/L	0.000947	49.39%
Ti 334.940†	369365.2	0.497	mg/L	0.0040	0.497 mg/L	0.0040	0.81%
Tl 190.801†	479.2	0.295	mg/L	0.0047	0.295 mg/L	0.0047	1.58%
V 290.880†	74264.2	0.482	mg/L	0.0063	0.482 mg/L	0.0063	1.32%
Zn 206.200†	16660.1	0.533	mg/L	0.0069	0.533 mg/L	0.0069	1.30%
K 766.490†	218259.1	81.9	mg/L	0.22	81.9 mg/L	0.22	0.27%
Na 589.592†	2994148.5	273	mg/L	3.7	273 mg/L	3.7	1.34%
Sr 407.771†	5887585.4	3.90	mg/L	0.046	3.90 mg/L	0.046	1.17%
Li 670.784†	145202.1	1.80	mg/L	0.007	1.80 mg/L	0.007	0.38%

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Sequence No.: 111 **Autosampler Location: 133**
Sample ID: L1104016004 **Date Collected: 4/16/2011 1:23:23 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016004

Analyte	**Back Pressure**	**Flow**
All	202.0 kPa	0.50 L/min

Mean Data: L1104016004

Analyte	**Mean Corrected Intensity**	**Calib. Conc.**	**Units**	**Std.Dev.**	**Sample Conc.**	**Units**	**Std.Dev.**	**RSD**
Y 371.029	4994375.8						78004.69	1.56%
YRADIAL	313217.7						2146.42	0.69%
Ga 417.206	1364612.7						29927.28	2.19%
GaRADIAL	69041.7						675.77	0.98%
Ag 328.068†	-978.5	-0.00402	mg/L	0.000566	-0.00402	mg/L	0.000566	14.08%
Al 396.153†	47.8	0.00080	mg/L	0.018252	0.00080	mg/L	0.018252	>999.9%
As 188.979†	-0.1	-0.00121	mg/L	0.003167	-0.00121	mg/L	0.003167	261.28%
Ba 233.527†	5.1	0.00017	mg/L	0.000074	0.00017	mg/L	0.000074	43.21%
Be 234.861†	128.2	0.00023	mg/L	0.000032	0.00023	mg/L	0.000032	13.95%
B 249.677†	4723.3	0.0884	mg/L	0.00714	0.0884	mg/L	0.00714	8.08%
Ca 227.546†	2.1	0.0415	mg/L	0.05915	0.0415	mg/L	0.05915	142.61%
Cd 228.802†	-3.4	-0.00023	mg/L	0.000105	-0.00023	mg/L	0.000105	45.50%
Co 228.616†	-13.3	-0.00040	mg/L	0.000097	-0.00040	mg/L	0.000097	24.28%
Cr 267.716†	75.6	0.00049	mg/L	0.000045	0.00049	mg/L	0.000045	9.17%
Cu 327.393†	-102.0	-0.00109	mg/L	0.000514	-0.00109	mg/L	0.000514	47.12%
Fe 239.562†	2.2	0.00142	mg/L	0.003382	0.00142	mg/L	0.003382	238.17%
Mg 279.077†	8.3	0.00919	mg/L	0.003093	0.00919	mg/L	0.003093	33.67%
Mn 257.610†	135.6	0.00022	mg/L	0.000041	0.00022	mg/L	0.000041	19.01%
Mo 202.031†	-15.8	-0.00074	mg/L	0.000245	-0.00074	mg/L	0.000245	33.08%
Ni 231.604†	15.0	0.00030	mg/L	0.000168	0.00030	mg/L	0.000168	55.47%
Pb 220.353†	7.3	0.00244	mg/L	0.002270	0.00244	mg/L	0.002270	92.89%
Sb 206.836†	1.7	-0.00236	mg/L	0.001054	-0.00236	mg/L	0.001054	44.60%
Se 196.026†	3.4	-0.00048	mg/L	0.003790	-0.00048	mg/L	0.003790	784.64%

Approved: April 18, 2011

Si 251.611†	1911.6	0.0567	mg/L	0.00157	0.0567	mg/L	0.00157	2.78%
Sn 189.927†	-10.1	-0.00121	mg/L	0.000568	-0.00121	mg/L	0.000568	46.79%
Ti 334.940†	-90.4	-0.00013	mg/L	0.000009	-0.00013	mg/L	0.000009	7.33%
Tl 190.801†	-3.6	-0.00496	mg/L	0.001429	-0.00496	mg/L	0.001429	28.83%
V 290.880†	71.5	0.00081	mg/L	0.001210	0.00081	mg/L	0.001210	149.40%
Zn 206.200†	61.8	0.00227	mg/L	0.000101	0.00227	mg/L	0.000101	4.44%
K 766.490†	516.8	0.189	mg/L	0.0285	0.189	mg/L	0.0285	15.08%
Na 589.592†	7209.6	0.525	mg/L	0.0039	0.525	mg/L	0.0039	0.75%
Sr 407.771†	505.3	0.00030	mg/L	0.000070	0.00030	mg/L	0.000070	23.38%
Li 670.784†	170.0	0.00134	mg/L	0.000076	0.00134	mg/L	0.000076	5.68%

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Sequence No.: 112 **Autosampler Location: 134**
Sample ID: L1104016004PS WG361886-01 **Date Collected: 4/16/2011 1:30:03 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016004PS WG361886-01

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: L1104016004PS WG361886-01

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4733721.5						31821.06	0.67%
YRADIAL	308253.4						9483.97	3.08%
Ga 417.206	1307901.3						7760.38	0.59%
GaRADIAL	68104.2						875.56	1.29%
Ag 328.068†	38901.3	0.187	mg/L	0.0013	0.187	mg/L	0.0013	0.67%
Al 396.153†	25949.5	5.01	mg/L	0.032	5.01	mg/L	0.032	0.64%
As 188.979†	125.5	0.222	mg/L	0.0080	0.222	mg/L	0.0080	3.60%
Ba 233.527†	26954.2	0.485	mg/L	0.0028	0.485	mg/L	0.0028	0.58%
Be 234.861†	12056.2	0.0228	mg/L	0.00013	0.0228	mg/L	0.00013	0.58%
B 249.677†	54287.3	1.01	mg/L	0.007	1.01	mg/L	0.007	0.74%
Ca 227.546†	471.8	5.22	mg/L	0.057	5.22	mg/L	0.057	1.09%
Cd 228.802†	371.7	0.0236	mg/L	0.00014	0.0236	mg/L	0.00014	0.61%
Co 228.616†	1769.0	0.0980	mg/L	0.00091	0.0980	mg/L	0.00091	0.93%
Cr 267.716†	28442.0	0.238	mg/L	0.0021	0.238	mg/L	0.0021	0.88%
Cu 327.393†	35247.4	0.233	mg/L	0.0021	0.233	mg/L	0.0021	0.89%
Fe 239.562†	580.3	1.95	mg/L	0.023	1.95	mg/L	0.023	1.15%
Mg 279.077†	3563.4	4.91	mg/L	0.083	4.91	mg/L	0.083	1.69%
Mn 257.610†	116250.8	0.246	mg/L	0.0008	0.246	mg/L	0.0008	0.31%
Mo 202.031†	6093.2	0.490	mg/L	0.0039	0.490	mg/L	0.0039	0.79%
Ni 231.604†	7831.9	0.246	mg/L	0.0014	0.246	mg/L	0.0014	0.56%
Pb 220.353†	1278.4	0.245	mg/L	0.0022	0.245	mg/L	0.0022	0.89%
Sb 206.836†	798.9	0.579	mg/L	0.0052	0.579	mg/L	0.0052	0.89%
Se 196.026†	247.9	0.196	mg/L	0.0012	0.196	mg/L	0.0012	0.63%
Si 251.611†	83955.2	2.45	mg/L	0.007	2.45	mg/L	0.007	0.30%
Sn 189.927†	-20.3	-0.00308	mg/L	0.000589	-0.00308	mg/L	0.000589	19.13%
Ti 334.940†	363492.4	0.487	mg/L	0.0020	0.487	mg/L	0.0020	0.40%
Tl 190.801†	384.3	0.251	mg/L	0.0026	0.251	mg/L	0.0026	1.02%
V 290.880†	75169.0	0.486	mg/L	0.0024	0.486	mg/L	0.0024	0.50%
Zn 206.200†	14619.6	0.468	mg/L	0.0032	0.468	mg/L	0.0032	0.69%
K 766.490†	67014.0	24.5	mg/L	0.19	24.5	mg/L	0.19	0.78%
Na 589.592†	330244.1	24.3	mg/L	0.43	24.3	mg/L	0.43	1.79%
Sr 407.771†	760320.9	0.504	mg/L	0.0170	0.504	mg/L	0.0170	3.38%
Li 670.784†	42441.0	0.524	mg/L	0.0029	0.524	mg/L	0.0029	0.55%

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Sequence No.: 113 **Autosampler Location: 135**
Sample ID: L1104016004DL WG361886-02 **Date Collected: 4/16/2011 1:36:47 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016004DL WG361886-02

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Approved: April 18, 2011

Mean Data: L1104016004DL WG361886-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4980163.3						53813.98	1.08%
YRADIAL	312407.0						6456.41	2.07%
Ga 417.206	1342098.1						14267.20	1.06%
GaRADIAL	68558.1						950.90	1.39%
Ag 328.068†	-1051.4	-0.00437	mg/L	0.000469	-0.00437	mg/L	0.000469	10.72%
Al 396.153†	24.4	-0.00373	mg/L	0.003997	-0.00373	mg/L	0.003997	107.22%
As 188.979†	3.0	0.00436	mg/L	0.002284	0.00436	mg/L	0.002284	52.40%
Ba 233.527†	3.0	0.00013	mg/L	0.000059	0.00013	mg/L	0.000059	45.23%
Be 234.861†	128.8	0.00023	mg/L	0.000012	0.00023	mg/L	0.000012	5.10%
B 249.677†	2607.2	0.0493	mg/L	0.00207	0.0493	mg/L	0.00207	4.20%
Ca 227.546†	-1.3	0.00551	mg/L	0.054245	0.00551	mg/L	0.054245	984.34%
Cd 228.802†	-2.3	-0.00018	mg/L	0.000146	-0.00018	mg/L	0.000146	82.43%
Co 228.616†	-13.7	-0.00043	mg/L	0.000113	-0.00043	mg/L	0.000113	26.46%
Cr 267.716†	44.5	0.00023	mg/L	0.000113	0.00023	mg/L	0.000113	50.14%
Cu 327.393†	-108.3	-0.00113	mg/L	0.000658	-0.00113	mg/L	0.000658	58.17%
Fe 239.562†	2.8	0.00373	mg/L	0.002603	0.00373	mg/L	0.002603	69.75%
Mg 279.077†	0.3	-0.00190	mg/L	0.001515	-0.00190	mg/L	0.001515	79.63%
Mn 257.610†	81.9	0.00009	mg/L	0.000018	0.00009	mg/L	0.000018	20.36%
Mo 202.031†	-10.0	-0.00027	mg/L	0.000361	-0.00027	mg/L	0.000361	131.92%
Ni 231.604†	15.7	0.00032	mg/L	0.000212	0.00032	mg/L	0.000212	65.42%
Pb 220.353†	7.1	0.00242	mg/L	0.000415	0.00242	mg/L	0.000415	17.12%
Sb 206.836†	3.9	-0.00076	mg/L	0.001322	-0.00076	mg/L	0.001322	173.97%
Se 196.026†	-1.2	-0.00416	mg/L	0.005369	-0.00416	mg/L	0.005369	129.03%
Si 251.611†	377.6	0.0118	mg/L	0.00043	0.0118	mg/L	0.00043	3.61%
Sn 189.927†	-5.2	-0.00032	mg/L	0.000636	-0.00032	mg/L	0.000636	196.07%
Ti 334.940†	-149.1	-0.00021	mg/L	0.000099	-0.00021	mg/L	0.000099	47.50%
Tl 190.801†	0.8	-0.00215	mg/L	0.005019	-0.00215	mg/L	0.005019	233.70%
V 290.880†	-11.4	0.00027	mg/L	0.000595	0.00027	mg/L	0.000595	218.70%
Zn 206.200†	51.5	0.00194	mg/L	0.000091	0.00194	mg/L	0.000091	4.68%
K 766.490†	186.4	0.0693	mg/L	0.02137	0.0693	mg/L	0.02137	30.81%
Na 589.592†	2174.4	0.161	mg/L	0.0029	0.161	mg/L	0.0029	1.81%
Sr 407.771†	40.5	-0.00001	mg/L	0.000076	-0.00001	mg/L	0.000076	753.62%
Li 670.784†	90.3	0.00036	mg/L	0.000701	0.00036	mg/L	0.000701	196.05%

Sequence No.: 114 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/16/2011 1:43:28 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4663751.7						37019.53	0.79%
YRADIAL	299893.9						5906.56	1.97%
Ga 417.206	1280993.4						19790.51	1.54%
GaRADIAL	66920.7						380.84	0.57%
Ag 328.068†	79384.8	0.382	mg/L	0.0093	0.382	mg/L	0.0093	2.43%
QC value within limits for Ag 328.068 Recovery = 95.39%								
Al 396.153†	51752.9	9.99	mg/L	0.027	9.99	mg/L	0.027	0.27%
QC value within limits for Al 396.153 Recovery = 99.91%								
As 188.979†	257.2	0.456	mg/L	0.0063	0.456	mg/L	0.0063	1.38%
QC value greater than the upper limit for As 188.979 Recovery = 114.03%								
Ba 233.527†	53850.5	0.968	mg/L	0.0155	0.968	mg/L	0.0155	1.60%
QC value within limits for Ba 233.527 Recovery = 96.80%								
Be 234.861†	24374.9	0.0460	mg/L	0.00113	0.0460	mg/L	0.00113	2.46%
QC value within limits for Be 234.861 Recovery = 92.07%								
B 249.677†	27890.8	0.523	mg/L	0.0116	0.523	mg/L	0.0116	2.21%
QC value within limits for B 249.677 Recovery = 104.67%								
Ca 227.546†	937.6	10.4	mg/L	0.14	10.4	mg/L	0.14	1.34%
QC value within limits for Ca 227.546 Recovery = 103.62%								
Cd 228.802†	754.3	0.0479	mg/L	0.00072	0.0479	mg/L	0.00072	1.51%

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QC value within limits for Cd 228.802 Recovery = 95.72%
Co 228.616† 3514.0 0.194 mg/L 0.0017 0.194 mg/L 0.0017 0.90%
QC value within limits for Co 228.616 Recovery = 97.16%
Cr 267.716† 57538.5 0.482 mg/L 0.0059 0.482 mg/L 0.0059 1.22%
QC value within limits for Cr 267.716 Recovery = 96.48%
Cu 327.393† 71718.1 0.474 mg/L 0.0112 0.474 mg/L 0.0112 2.36%
QC value within limits for Cu 327.393 Recovery = 94.76%
Fe 239.562† 1204.7 4.06 mg/L 0.023 4.06 mg/L 0.023 0.57%
QC value within limits for Fe 239.562 Recovery = 101.43%
Mg 279.077† 7232.1 9.96 mg/L 0.066 9.96 mg/L 0.066 0.66%
QC value within limits for Mg 279.077 Recovery = 99.62%
Mn 257.610† 233333.0 0.494 mg/L 0.0085 0.494 mg/L 0.0085 1.73%
QC value within limits for Mn 257.610 Recovery = 98.73%
Mo 202.031† 12142.4 0.976 mg/L 0.0085 0.976 mg/L 0.0085 0.87%
QC value within limits for Mo 202.031 Recovery = 97.57%
Ni 231.604† 15618.7 0.490 mg/L 0.0072 0.490 mg/L 0.0072 1.46%
QC value within limits for Ni 231.604 Recovery = 97.98%
Pb 220.353† 2551.3 0.489 mg/L 0.0040 0.489 mg/L 0.0040 0.81%
QC value within limits for Pb 220.353 Recovery = 97.72%
Sb 206.836† 1601.9 1.17 mg/L 0.022 1.17 mg/L 0.022 1.86%
QC value within limits for Sb 206.836 Recovery = 97.12%
Se 196.026† 501.9 0.400 mg/L 0.0100 0.400 mg/L 0.0100 2.51%
QC value within limits for Se 196.026 Recovery = 100.07%
Si 251.611† 161248.9 4.70 mg/L 0.127 4.70 mg/L 0.127 2.71%
QC value within limits for Si 251.611 Recovery = 93.99%
Sn 189.927† 5358.2 0.978 mg/L 0.0103 0.978 mg/L 0.0103 1.06%
QC value within limits for Sn 189.927 Recovery = 97.78%
Ti 334.940† 726582.6 0.973 mg/L 0.0041 0.973 mg/L 0.0041 0.42%
QC value within limits for Ti 334.940 Recovery = 97.29%
Tl 190.801† 763.5 0.501 mg/L 0.0043 0.501 mg/L 0.0043 0.85%
QC value within limits for Tl 190.801 Recovery = 100.20%
V 290.880† 151624.7 0.980 mg/L 0.0159 0.980 mg/L 0.0159 1.62%
QC value within limits for V 290.880 Recovery = 98.02%
Zn 206.200† 29670.0 0.950 mg/L 0.0098 0.950 mg/L 0.0098 1.04%
QC value within limits for Zn 206.200 Recovery = 94.96%
K 766.490† 134151.4 49.7 mg/L 0.19 49.7 mg/L 0.19 0.38%
QC value within limits for K 766.490 Recovery = 99.41%
Na 589.592† 652289.2 48.9 mg/L 0.91 48.9 mg/L 0.91 1.85%
QC value within limits for Na 589.592 Recovery = 97.76%
Sr 407.771† 1552803.8 1.03 mg/L 0.025 1.03 mg/L 0.025 2.48%
QC value within limits for Sr 407.771 Recovery = 102.86%
Li 670.784† 83944.9 1.04 mg/L 0.006 1.04 mg/L 0.006 0.59%
QC value within limits for Li 670.784 Recovery = 103.77%
QC Failed. Continue with analysis.

Sequence No.: 115 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/16/2011 1:50:08 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4953989.4						34609.51	0.70%
YRADIAL	308968.3						2686.13	0.87%
Ga 417.206	1346847.5						9123.97	0.68%
GaRADIAL	67981.9						1450.74	2.13%
Ag 328.068†	-986.3	-0.00406	mg/L	0.001187	-0.00406	mg/L	0.001187	29.24%
QC value less than the lower limit for Ag 328.068 Recovery = Not calculated								
Al 396.153†	42.0	-0.00034	mg/L	0.007424	-0.00034	mg/L	0.007424	>999.9%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.3	-0.00045	mg/L	0.001797	-0.00045	mg/L	0.001797	400.03%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	5.3	0.00017	mg/L	0.000102	0.00017	mg/L	0.000102	58.69%
QC value within limits for Ba 233.527 Recovery = Not calculated								

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Be 234.861†	135.6	0.00025 mg/L	0.000030	0.00025 mg/L	0.000030	12.25%	
QC value within limits for Be 234.861 Recovery = Not calculated							
B 249.677†	2010.4	0.0382 mg/L	0.00030	0.0382 mg/L	0.00030	0.80%	
QC value within limits for B 249.677 Recovery = Not calculated							
Ca 227.546†	0.4	0.0233 mg/L	0.00623	0.0233 mg/L	0.00623	26.76%	
QC value within limits for Ca 227.546 Recovery = Not calculated							
Cd 228.802†	-4.3	-0.00029 mg/L	0.000115	-0.00029 mg/L	0.000115	38.99%	
QC value within limits for Cd 228.802 Recovery = Not calculated							
Co 228.616†	-15.1	-0.00050 mg/L	0.000338	-0.00050 mg/L	0.000338	66.93%	
QC value within limits for Co 228.616 Recovery = Not calculated							
Cr 267.716†	57.9	0.00034 mg/L	0.000074	0.00034 mg/L	0.000074	22.03%	
QC value within limits for Cr 267.716 Recovery = Not calculated							
Cu 327.393†	-111.4	-0.00115 mg/L	0.000959	-0.00115 mg/L	0.000959	83.11%	
QC value within limits for Cu 327.393 Recovery = Not calculated							
Fe 239.562†	-0.2	-0.00656 mg/L	0.001584	-0.00656 mg/L	0.001584	24.16%	
QC value within limits for Fe 239.562 Recovery = Not calculated							
Mg 279.077†	6.4	0.00661 mg/L	0.003163	0.00661 mg/L	0.003163	47.89%	
QC value within limits for Mg 279.077 Recovery = Not calculated							
Mn 257.610†	34.9	-0.00002 mg/L	0.000014	-0.00002 mg/L	0.000014	79.58%	
QC value within limits for Mn 257.610 Recovery = Not calculated							
Mo 202.031†	-7.2	-0.00005 mg/L	0.000346	-0.00005 mg/L	0.000346	676.17%	
QC value within limits for Mo 202.031 Recovery = Not calculated							
Ni 231.604†	8.3	0.00009 mg/L	0.000113	0.00009 mg/L	0.000113	120.21%	
QC value within limits for Ni 231.604 Recovery = Not calculated							
Pb 220.353†	7.4	0.00247 mg/L	0.001832	0.00247 mg/L	0.001832	74.15%	
QC value within limits for Pb 220.353 Recovery = Not calculated							
Sb 206.836†	2.5	-0.00179 mg/L	0.000309	-0.00179 mg/L	0.000309	17.21%	
QC value within limits for Sb 206.836 Recovery = Not calculated							
Se 196.026†	-0.2	-0.00335 mg/L	0.002614	-0.00335 mg/L	0.002614	77.96%	
QC value within limits for Se 196.026 Recovery = Not calculated							
Si 251.611†	-21.4	0.00018 mg/L	0.000327	0.00018 mg/L	0.000327	186.75%	
QC value within limits for Si 251.611 Recovery = Not calculated							
Sn 189.927†	-5.4	-0.00035 mg/L	0.000585	-0.00035 mg/L	0.000585	167.82%	
QC value within limits for Sn 189.927 Recovery = Not calculated							
Ti 334.940†	-166.0	-0.00023 mg/L	0.000172	-0.00023 mg/L	0.000172	74.68%	
QC value within limits for Ti 334.940 Recovery = Not calculated							
Tl 190.801†	-3.8	-0.00509 mg/L	0.001688	-0.00509 mg/L	0.001688	33.15%	
QC value within limits for Tl 190.801 Recovery = Not calculated							
V 290.880†	42.0	0.00062 mg/L	0.000639	0.00062 mg/L	0.000639	103.52%	
QC value within limits for V 290.880 Recovery = Not calculated							
Zn 206.200†	-1.2	0.00026 mg/L	0.000084	0.00026 mg/L	0.000084	32.33%	
QC value within limits for Zn 206.200 Recovery = Not calculated							
K 766.490†	229.8	0.0851 mg/L	0.02067	0.0851 mg/L	0.02067	24.27%	
QC value within limits for K 766.490 Recovery = Not calculated							
Na 589.592†	1139.5	0.0866 mg/L	0.01141	0.0866 mg/L	0.01141	13.17%	
QC value within limits for Na 589.592 Recovery = Not calculated							
Sr 407.771†	25.9	-0.00002 mg/L	0.000038	-0.00002 mg/L	0.000038	219.07%	
QC value within limits for Sr 407.771 Recovery = Not calculated							
Li 670.784†	142.7	0.00101 mg/L	0.001356	0.00101 mg/L	0.001356	134.93%	
QC value within limits for Li 670.784 Recovery = Not calculated							

QC Failed. Continue with analysis.

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Sequence No.: 116 **Autosampler Location: 136**
Sample ID: L1104016102 WG361173-02 **Date Collected: 4/16/2011 1:56:44 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016102 WG361173-02

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104016102 WG361173-02

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4610565.8						19986.90	0.43%
YRADIAL	299191.3						1400.37	0.47%
Ga 417.206	1309447.3						11146.37	0.85%
GaRADIAL	67362.0						1069.76	1.59%
Ag 328.068†	-961.7	-0.00397	mg/L	0.000688	-0.00397	mg/L	0.000688	17.33%

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Al 396.153†	191.1	0.0278 mg/L	0.00650	0.0278 mg/L	0.00650	23.42%
As 188.979†	11.2	0.0188 mg/L	0.00644	0.0188 mg/L	0.00644	34.32%
Ba 233.527†	2657.8	0.0478 mg/L	0.00047	0.0478 mg/L	0.00047	0.98%
Be 234.861†	123.5	0.00031 mg/L	0.000015	0.00031 mg/L	0.000015	5.02%
B 249.677†	17320.1	0.321 mg/L	0.0051	0.321 mg/L	0.0051	1.60%
Ca 227.546†	207.3	2.22 mg/L	0.084	2.22 mg/L	0.084	3.77%
Cd 228.802†	-6.8	-0.00051 mg/L	0.000142	-0.00051 mg/L	0.000142	27.79%
Co 228.616†	-17.7	-0.00066 mg/L	0.000262	-0.00066 mg/L	0.000262	39.85%
Cr 267.716†	114.5	0.00081 mg/L	0.000131	0.00081 mg/L	0.000131	16.05%
Cu 327.393†	-268.2	-0.00218 mg/L	0.000281	-0.00218 mg/L	0.000281	12.89%
Fe 239.562†	3.2	0.00480 mg/L	0.001359	0.00480 mg/L	0.001359	28.34%
Mg 279.077†	306.7	0.420 mg/L	0.0060	0.420 mg/L	0.0060	1.44%
Mn 257.610†	638.1	0.00494 mg/L	0.000131	0.00494 mg/L	0.000131	2.65%
Mo 202.031†	683.9	0.0554 mg/L	0.00114	0.0554 mg/L	0.00114	2.06%
Ni 231.604†	16.7	0.00036 mg/L	0.000130	0.00036 mg/L	0.000130	36.65%
Pb 220.353†	1.2	0.00168 mg/L	0.000540	0.00168 mg/L	0.000540	32.14%
Sb 206.836†	6.4	0.00146 mg/L	0.000545	0.00146 mg/L	0.000545	37.36%
Se 196.026†	-1.6	-0.00399 mg/L	0.001766	-0.00399 mg/L	0.001766	44.26%
Si 251.611†	118860.3	3.47 mg/L	0.054	3.47 mg/L	0.054	1.54%
Sn 189.927†	-7.5	-0.00073 mg/L	0.000716	-0.00073 mg/L	0.000716	97.55%
Ti 334.940†	-114.8	-0.00014 mg/L	0.000180	-0.00014 mg/L	0.000180	128.82%
Tl 190.801†	-0.4	-0.00313 mg/L	0.004135	-0.00313 mg/L	0.004135	131.94%
V 290.880†	602.2	0.00420 mg/L	0.000467	0.00420 mg/L	0.000467	11.12%
Zn 206.200†	52.7	0.00197 mg/L	0.000058	0.00197 mg/L	0.000058	2.94%
K 766.490†	2258.7	0.505 mg/L	0.0407	0.505 mg/L	0.0407	8.06%
Na 589.592†	3315175.5	316 mg/L	11.9	316 mg/L	11.9	3.76%
Sr 407.771†	230807.1	0.153 mg/L	0.0006	0.153 mg/L	0.0006	0.39%
Li 670.784†	1170.2	0.0137 mg/L	0.00063	0.0137 mg/L	0.00063	4.59%

Sequence No.: 117 **Autosampler Location: 137**
Sample ID: L1104016102DP WG361173-08 **Date Collected: 4/16/2011 2:03:33 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016102DP WG361173-08

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104016102DP WG361173-08

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4552738.0						12415.67	0.27%
YRADIAL	297236.8						3292.92	1.11%
Ga 417.206	1277757.5						10261.27	0.80%
GaRADIAL	67059.4						1009.80	1.51%
Ag 328.068†	-995.2	-0.00413	mg/L	0.000683	-0.00413	mg/L	0.000683	16.52%
Al 396.153†	134.8	0.0168	mg/L	0.01843	0.0168	mg/L	0.01843	109.45%
As 188.979†	12.1	0.0203	mg/L	0.00434	0.0203	mg/L	0.00434	21.39%
Ba 233.527†	2752.1	0.0494	mg/L	0.00040	0.0494	mg/L	0.00040	0.81%
Be 234.861†	114.2	0.00029	mg/L	0.000007	0.00029	mg/L	0.000007	2.50%
B 249.677†	17981.7	0.334	mg/L	0.0037	0.334	mg/L	0.0037	1.12%
Ca 227.546†	219.5	2.35	mg/L	0.031	2.35	mg/L	0.031	1.31%
Cd 228.802†	-6.7	-0.00051	mg/L	0.000090	-0.00051	mg/L	0.000090	17.63%
Co 228.616†	-14.2	-0.00046	mg/L	0.000207	-0.00046	mg/L	0.000207	44.93%
Cr 267.716†	111.9	0.00079	mg/L	0.000064	0.00079	mg/L	0.000064	8.03%
Cu 327.393†	-285.2	-0.00229	mg/L	0.000912	-0.00229	mg/L	0.000912	39.79%
Fe 239.562†	5.7	0.0132	mg/L	0.00106	0.0132	mg/L	0.00106	8.01%
Mg 279.077†	317.1	0.435	mg/L	0.0021	0.435	mg/L	0.0021	0.48%
Mn 257.610†	676.6	0.00516	mg/L	0.000063	0.00516	mg/L	0.000063	1.21%
Mo 202.031†	701.7	0.0569	mg/L	0.00080	0.0569	mg/L	0.00080	1.41%
Ni 231.604†	11.8	0.00020	mg/L	0.000279	0.00020	mg/L	0.000279	137.28%
Pb 220.353†	8.7	0.00312	mg/L	0.000622	0.00312	mg/L	0.000622	19.93%
Sb 206.836†	6.5	0.00159	mg/L	0.001556	0.00159	mg/L	0.001556	97.98%
Se 196.026†	2.3	-0.00083	mg/L	0.005817	-0.00083	mg/L	0.005817	699.40%
Si 251.611†	125442.0	3.67	mg/L	0.030	3.67	mg/L	0.030	0.83%
Sn 189.927†	-9.0	-0.00102	mg/L	0.000399	-0.00102	mg/L	0.000399	39.15%
Ti 334.940†	-138.3	-0.00017	mg/L	0.000044	-0.00017	mg/L	0.000044	25.99%
Tl 190.801†	-6.8	-0.00728	mg/L	0.000856	-0.00728	mg/L	0.000856	11.75%
V 290.880†	603.1	0.00421	mg/L	0.000084	0.00421	mg/L	0.000084	2.00%

Approved: April 18, 2011

Zn 206.200†	68.4	0.00247 mg/L	0.000226	0.00247 mg/L	0.000226	9.17%
K 766.490†	2257.8	0.494 mg/L	0.0516	0.494 mg/L	0.0516	10.45%
Na 589.592†	3391710.5	327 mg/L	7.7	327 mg/L	7.7	2.35%
Sr 407.771†	240180.2	0.159 mg/L	0.0012	0.159 mg/L	0.0012	0.75%
Li 670.784†	1243.6	0.0146 mg/L	0.00197	0.0146 mg/L	0.00197	13.45%

Sequence No.: 118 **Autosampler Location: 138**
Sample ID: L1104016104 **Date Collected: 4/16/2011 2:10:21 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016104

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104016104

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4126957.5						49882.10	1.21%
YRADIAL	274094.0						3682.04	1.34%
Ga 417.206	1159606.3						19637.61	1.69%
GaRADIAL	61894.6						1727.97	2.79%
Ag 328.068†	-864.9	-0.00414	mg/L	0.000115	-0.00414	mg/L	0.000115	2.78%
Al 396.153†	37.3	-0.00176	mg/L	0.007472	-0.00176	mg/L	0.007472	424.93%
As 188.979†	11.1	0.0180	mg/L	0.00227	0.0180	mg/L	0.00227	12.60%
Ba 233.527†	70999.1	1.27	mg/L	0.006	1.27	mg/L	0.006	0.44%
Be 234.861†	100.9	0.00024	mg/L	0.000011	0.00024	mg/L	0.000011	4.42%
B 249.677†	14659.7	0.272	mg/L	0.0043	0.272	mg/L	0.0043	1.60%
Ca 227.546†	3062.3	32.7	mg/L	0.45	32.7	mg/L	0.45	1.38%
Cd 228.802†	-0.5	-0.00010	mg/L	0.000055	-0.00010	mg/L	0.000055	54.09%
Co 228.616†	-44.9	-0.00259	mg/L	0.000367	-0.00259	mg/L	0.000367	14.14%
Cr 267.716†	85.2	0.00054	mg/L	0.000073	0.00054	mg/L	0.000073	13.37%
Cu 327.393†	-540.0	-0.00398	mg/L	0.001149	-0.00398	mg/L	0.001149	28.86%
Fe 239.562†	6.2	0.0146	mg/L	0.00804	0.0146	mg/L	0.00804	54.92%
Mg 279.077†	5671.0	7.81	mg/L	0.170	7.81	mg/L	0.170	2.17%
Mn 257.610†	28685.3	0.0631	mg/L	0.00057	0.0631	mg/L	0.00057	0.90%
Mo 202.031†	469.5	0.0382	mg/L	0.00024	0.0382	mg/L	0.00024	0.63%
Ni 231.604†	18.0	0.00038	mg/L	0.000254	0.00038	mg/L	0.000254	66.97%
Pb 220.353†	-2.6	0.00234	mg/L	0.000685	0.00234	mg/L	0.000685	29.34%
Sb 206.836†	14.1	0.00694	mg/L	0.002444	0.00694	mg/L	0.002444	35.23%
Se 196.026†	-16.0	-0.00782	mg/L	0.005889	-0.00782	mg/L	0.005889	75.28%
Si 251.611†	111487.3	3.26	mg/L	0.030	3.26	mg/L	0.030	0.93%
Sn 189.927†	-5.8	-0.00043	mg/L	0.000799	-0.00043	mg/L	0.000799	183.88%
Ti 334.940†	-597.7	-0.00048	mg/L	0.000069	-0.00048	mg/L	0.000069	14.41%
Tl 190.801†	44.0	0.0229	mg/L	0.00418	0.0229	mg/L	0.00418	18.28%
V 290.880†	701.9	0.00481	mg/L	0.000358	0.00481	mg/L	0.000358	7.45%
Zn 206.200†	78.3	0.00279	mg/L	0.000248	0.00279	mg/L	0.000248	8.87%
K 766.490†	21138.9	7.69	mg/L	0.096	7.69	mg/L	0.096	1.25%
Na 589.592†	Saturated2							
Sr 407.771†	4952202.6	3.28	mg/L	0.102	3.28	mg/L	0.102	3.11%
Li 670.784†	7400.5	0.0908	mg/L	0.00250	0.0908	mg/L	0.00250	2.76%

Sequence No.: 119 **Autosampler Location: 139**
Sample ID: L1104016106 **Date Collected: 4/16/2011 2:17:06 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016106

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104016106

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4108183.5						14672.10	0.36%

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YRADIAL	291955.7					2428.42	0.83%
Ga 417.206	1147638.1					13991.49	1.22%
GaRADIAL	65509.0					907.60	1.39%
Ag 328.068†	-905.2	-0.00438	mg/L	0.000676	-0.00438 mg/L	0.000676	15.45%
Al 396.153†	57.3	0.00187	mg/L	0.012129	0.00187 mg/L	0.012129	648.72%
As 188.979†	9.8	0.0154	mg/L	0.00350	0.0154 mg/L	0.00350	22.73%
Ba 233.527†	53075.6	0.951	mg/L	0.0103	0.951 mg/L	0.0103	1.08%
Be 234.861†	111.7	0.00026	mg/L	0.000030	0.00026 mg/L	0.000030	11.31%
B 249.677†	13448.1	0.251	mg/L	0.0045	0.251 mg/L	0.0045	1.78%
Ca 227.546†	3597.7	38.4	mg/L	0.46	38.4 mg/L	0.46	1.20%
Cd 228.802†	-3.1	-0.00027	mg/L	0.000201	-0.00027 mg/L	0.000201	74.85%
Co 228.616†	-35.5	-0.00196	mg/L	0.000214	-0.00196 mg/L	0.000214	10.88%
Cr 267.716†	160.0	0.00112	mg/L	0.000174	0.00112 mg/L	0.000174	15.51%
Cu 327.393†	-626.4	-0.00452	mg/L	0.000556	-0.00452 mg/L	0.000556	12.29%
Fe 239.562†	72.7	0.239	mg/L	0.0072	0.239 mg/L	0.0072	3.01%
Mg 279.077†	6306.4	8.68	mg/L	0.039	8.68 mg/L	0.039	0.44%
Mn 257.610†	83191.1	0.177	mg/L	0.0029	0.177 mg/L	0.0029	1.62%
Mo 202.031†	702.3	0.0569	mg/L	0.00056	0.0569 mg/L	0.00056	0.99%
Ni 231.604†	16.0	0.00031	mg/L	0.000461	0.00031 mg/L	0.000461	147.93%
Pb 220.353†	4.1	0.00396	mg/L	0.001359	0.00396 mg/L	0.001359	34.35%
Sb 206.836†	15.6	0.00814	mg/L	0.005060	0.00814 mg/L	0.005060	62.15%
Se 196.026†	-15.7	-0.00617	mg/L	0.004291	-0.00617 mg/L	0.004291	69.57%
Si 251.611†	138259.0	4.04	mg/L	0.081	4.04 mg/L	0.081	2.00%
Sn 189.927†	-15.5	-0.00220	mg/L	0.000731	-0.00220 mg/L	0.000731	33.18%
Ti 334.940†	-663.2	-0.00051	mg/L	0.000261	-0.00051 mg/L	0.000261	51.01%
Tl 190.801†	51.8	0.0275	mg/L	0.00313	0.0275 mg/L	0.00313	11.37%
V 290.880†	529.1	0.00371	mg/L	0.000102	0.00371 mg/L	0.000102	2.76%
Zn 206.200†	69.7	0.00251	mg/L	0.000264	0.00251 mg/L	0.000264	10.52%
K 766.490†	12121.0	4.41	mg/L	0.183	4.41 mg/L	0.183	4.16%
Na 589.592†	Saturated2						
Sr 407.771†	5050442.1	3.35	mg/L	0.068	3.35 mg/L	0.068	2.03%
Li 670.784†	7374.6	0.0905	mg/L	0.00309	0.0905 mg/L	0.00309	3.42%

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Sequence No.: 120 **Autosampler Location: 140**
Sample ID: L1104016108 **Date Collected: 4/16/2011 2:23:51 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016108

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: L1104016108

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4273948.4						20911.03	0.49%
YRADIAL	286141.0						2805.17	0.98%
Ga 417.206	1191054.2						9830.63	0.83%
GaRADIAL	64104.7						1522.73	2.38%
Ag 328.068†	-1070.5	-0.00482	mg/L	0.000693	-0.00482	mg/L	0.000693	14.39%
Al 396.153†	-17.7	-0.0125	mg/L	0.00139	-0.0125	mg/L	0.00139	11.16%
As 188.979†	11.2	0.0184	mg/L	0.00440	0.0184	mg/L	0.00440	23.89%
Ba 233.527†	26705.3	0.479	mg/L	0.0007	0.479	mg/L	0.0007	0.15%
Be 234.861†	117.6	0.00026	mg/L	0.000021	0.00026	mg/L	0.000021	7.97%
B 249.677†	11725.9	0.219	mg/L	0.0020	0.219	mg/L	0.0020	0.91%
Ca 227.546†	1641.1	17.5	mg/L	0.26	17.5	mg/L	0.26	1.49%
Cd 228.802†	-4.5	-0.00036	mg/L	0.000152	-0.00036	mg/L	0.000152	41.89%
Co 228.616†	-23.6	-0.00113	mg/L	0.000325	-0.00113	mg/L	0.000325	28.63%
Cr 267.716†	89.1	0.00056	mg/L	0.000026	0.00056	mg/L	0.000026	4.56%
Cu 327.393†	-442.3	-0.00332	mg/L	0.000546	-0.00332	mg/L	0.000546	16.43%
Fe 239.562†	44.6	0.145	mg/L	0.0126	0.145	mg/L	0.0126	8.75%
Mg 279.077†	3069.7	4.23	mg/L	0.049	4.23	mg/L	0.049	1.15%
Mn 257.610†	41712.4	0.0893	mg/L	0.00032	0.0893	mg/L	0.00032	0.36%
Mo 202.031†	557.5	0.0453	mg/L	0.00032	0.0453	mg/L	0.00032	0.70%
Ni 231.604†	21.8	0.00050	mg/L	0.000150	0.00050	mg/L	0.000150	29.72%
Pb 220.353†	8.5	0.00375	mg/L	0.000917	0.00375	mg/L	0.000917	24.48%
Sb 206.836†	10.9	0.00470	mg/L	0.001470	0.00470	mg/L	0.001470	31.30%
Se 196.026†	-11.9	-0.00831	mg/L	0.003712	-0.00831	mg/L	0.003712	44.68%
Si 251.611†	129486.9	3.78	mg/L	0.013	3.78	mg/L	0.013	0.33%

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Sn 189.927†	-14.6	-0.00203	mg/L	0.000405	-0.00203	mg/L	0.000405 19.95%
Ti 334.940†	-450.5	-0.00044	mg/L	0.000145	-0.00044	mg/L	0.000145 33.29%
Tl 190.801†	26.2	0.0128	mg/L	0.00395	0.0128	mg/L	0.00395 30.93%
V 290.880†	480.2	0.00341	mg/L	0.000228	0.00341	mg/L	0.000228 6.67%
Zn 206.200†	57.8	0.00213	mg/L	0.000173	0.00213	mg/L	0.000173 8.11%
K 766.490†	14640.1	5.32	mg/L	0.166	5.32	mg/L	0.166 3.11%
Na 589.592†	Saturated2						
Sr 407.771†	2533876.4	1.68	mg/L	0.012	1.68	mg/L	0.012 0.70%
Li 670.784†	5848.0	0.0716	mg/L	0.00297	0.0716	mg/L	0.00297 4.14%

Sequence No.: 121 **Autosampler Location: 141**
Sample ID: L1104016110 **Date Collected: 4/16/2011 2:30:36 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016110

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104016110

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4416743.5						57371.39	1.30%
YRADIAL	294385.9						2584.48	0.88%
Ga 417.206	1256575.7						19435.09	1.55%
GaRADIAL	66224.5						1292.40	1.95%
Ag 328.068†	-977.7	-0.00410	mg/L	0.000315	-0.00410	mg/L	0.000315	7.69%
Al 396.153†	150.9	0.0195	mg/L	0.00922	0.0195	mg/L	0.00922	47.23%
As 188.979†	15.2	0.0256	mg/L	0.00506	0.0256	mg/L	0.00506	19.76%
Ba 233.527†	5760.8	0.103	mg/L	0.0012	0.103	mg/L	0.0012	1.14%
Be 234.861†	116.7	0.00034	mg/L	0.000017	0.00034	mg/L	0.000017	5.01%
B 249.677†	13355.9	0.248	mg/L	0.0037	0.248	mg/L	0.0037	1.48%
Ca 227.546†	408.5	4.37	mg/L	0.076	4.37	mg/L	0.076	1.75%
Cd 228.802†	-3.2	-0.00030	mg/L	0.000111	-0.00030	mg/L	0.000111	37.08%
Co 228.616†	-17.9	-0.00068	mg/L	0.000372	-0.00068	mg/L	0.000372	54.64%
Cr 267.716†	82.0	0.00053	mg/L	0.000128	0.00053	mg/L	0.000128	24.11%
Cu 327.393†	-304.7	-0.00242	mg/L	0.000373	-0.00242	mg/L	0.000373	15.45%
Fe 239.562†	10.7	0.0300	mg/L	0.00339	0.0300	mg/L	0.00339	11.27%
Mg 279.077†	738.9	1.02	mg/L	0.021	1.02	mg/L	0.021	2.07%
Mn 257.610†	11531.2	0.0310	mg/L	0.00034	0.0310	mg/L	0.00034	1.10%
Mo 202.031†	1109.4	0.0896	mg/L	0.00099	0.0896	mg/L	0.00099	1.11%
Ni 231.604†	16.2	0.00034	mg/L	0.000269	0.00034	mg/L	0.000269	79.47%
Pb 220.353†	5.4	0.00275	mg/L	0.001374	0.00275	mg/L	0.001374	49.89%
Sb 206.836†	3.8	-0.00014	mg/L	0.001457	-0.00014	mg/L	0.001457	>999.9%
Se 196.026†	-3.1	-0.00459	mg/L	0.001917	-0.00459	mg/L	0.001917	41.75%
Si 251.611†	124536.9	3.64	mg/L	0.050	3.64	mg/L	0.050	1.37%
Sn 189.927†	-6.3	-0.00053	mg/L	0.000148	-0.00053	mg/L	0.000148	28.15%
Ti 334.940†	-226.4	-0.00027	mg/L	0.000104	-0.00027	mg/L	0.000104	38.90%
Tl 190.801†	2.6	-0.00143	mg/L	0.002718	-0.00143	mg/L	0.002718	189.50%
V 290.880†	725.2	0.00498	mg/L	0.000182	0.00498	mg/L	0.000182	3.66%
Zn 206.200†	64.6	0.00234	mg/L	0.000130	0.00234	mg/L	0.000130	5.54%
K 766.490†	4310.0	0.916	mg/L	0.0500	0.916	mg/L	0.0500	5.46%
Na 589.592†	7515258.4	650	mg/L	0.0	650	mg/L	0.0	0.00%
Sr 407.771†	548928.5	0.364	mg/L	0.0028	0.364	mg/L	0.0028	0.76%
Li 670.784†	2303.5	0.0277	mg/L	0.00234	0.0277	mg/L	0.00234	8.44%

Sequence No.: 122 **Autosampler Location: 142**
Sample ID: L1104016112 **Date Collected: 4/16/2011 2:37:26 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104016112

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Approved: April 18, 2011

Mean Data: L1104016112

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4850831.1						13381.57	0.28%
YRADIAL	311040.1						3332.01	1.07%
Ga 417.206	1331422.0						13766.84	1.03%
GaRADIAL	68545.9						470.57	0.69%
Ag 328.068†	-1117.3	-0.00468	mg/L	0.000395	-0.00468	mg/L	0.000395	8.43%
Al 396.153†	42.0	-0.00032	mg/L	0.012289	-0.00032	mg/L	0.012289	>999.9%
As 188.979†	-1.5	-0.00362	mg/L	0.001851	-0.00362	mg/L	0.001851	51.11%
Ba 233.527†	6.0	0.00019	mg/L	0.000021	0.00019	mg/L	0.000021	10.87%
Be 234.861†	133.2	0.00024	mg/L	0.000030	0.00024	mg/L	0.000030	12.67%
B 249.677†	1146.4	0.0223	mg/L	0.00073	0.0223	mg/L	0.00073	3.27%
Ca 227.546†	1.2	0.0321	mg/L	0.01018	0.0321	mg/L	0.01018	31.77%
Cd 228.802†	-4.9	-0.00033	mg/L	0.000129	-0.00033	mg/L	0.000129	39.71%
Co 228.616†	-16.5	-0.00058	mg/L	0.000218	-0.00058	mg/L	0.000218	37.49%
Cr 267.716†	107.1	0.00075	mg/L	0.000071	0.00075	mg/L	0.000071	9.50%
Cu 327.393†	-71.8	-0.00089	mg/L	0.000009	-0.00089	mg/L	0.000009	1.00%
Fe 239.562†	3.0	0.00411	mg/L	0.001972	0.00411	mg/L	0.001972	48.00%
Mg 279.077†	3.0	0.00184	mg/L	0.003612	0.00184	mg/L	0.003612	196.48%
Mn 257.610†	67.9	0.00006	mg/L	0.000010	0.00006	mg/L	0.000010	16.09%
Mo 202.031†	-12.2	-0.00045	mg/L	0.000435	-0.00045	mg/L	0.000435	96.55%
Ni 231.604†	18.2	0.00040	mg/L	0.000434	0.00040	mg/L	0.000434	107.55%
Pb 220.353†	3.3	0.00170	mg/L	0.001568	0.00170	mg/L	0.001568	92.43%
Sb 206.836†	3.1	-0.00136	mg/L	0.002252	-0.00136	mg/L	0.002252	165.99%
Se 196.026†	-0.2	-0.00334	mg/L	0.004518	-0.00334	mg/L	0.004518	135.09%
Si 251.611†	219.7	0.00723	mg/L	0.000194	0.00723	mg/L	0.000194	2.68%
Sn 189.927†	-6.9	-0.00062	mg/L	0.000324	-0.00062	mg/L	0.000324	52.21%
Ti 334.940†	-91.7	-0.00013	mg/L	0.000188	-0.00013	mg/L	0.000188	143.82%
Tl 190.801†	-6.1	-0.00657	mg/L	0.002647	-0.00657	mg/L	0.002647	40.28%
V 290.880†	203.6	0.00166	mg/L	0.000913	0.00166	mg/L	0.000913	54.90%
Zn 206.200†	89.5	0.00315	mg/L	0.000061	0.00315	mg/L	0.000061	1.94%
K 766.490†	317.0	0.116	mg/L	0.0263	0.116	mg/L	0.0263	22.67%
Na 589.592†	14832.3	1.07	mg/L	0.012	1.07	mg/L	0.012	1.08%
Sr 407.771†	51.5	0.00000	mg/L	0.000054	0.00000	mg/L	0.000054	>999.9%
Li 670.784†	81.7	0.00025	mg/L	0.001158	0.00025	mg/L	0.001158	461.38%

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Sequence No.: 123 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/16/2011 2:44:07 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4723963.4						45116.07	0.96%
YRADIAL	300980.6						3806.47	1.26%
Ga 417.206	1299104.5						17524.48	1.35%
GaRADIAL	67210.7						850.63	1.27%
Ag 328.068†	77911.7	0.374	mg/L	0.0080	0.374	mg/L	0.0080	2.13%
QC value within limits for Ag 328.068 Recovery = 93.62%								
Al 396.153†	51065.9	9.86	mg/L	0.044	9.86	mg/L	0.044	0.44%
QC value within limits for Al 396.153 Recovery = 98.58%								
As 188.979†	247.8	0.439	mg/L	0.0062	0.439	mg/L	0.0062	1.41%
QC value within limits for As 188.979 Recovery = 109.83%								
Ba 233.527†	53249.0	0.957	mg/L	0.0135	0.957	mg/L	0.0135	1.41%
QC value within limits for Ba 233.527 Recovery = 95.72%								
Be 234.861†	24078.0	0.0454	mg/L	0.00097	0.0454	mg/L	0.00097	2.14%
QC value within limits for Be 234.861 Recovery = 90.89%								
B 249.677†	26452.5	0.497	mg/L	0.0098	0.497	mg/L	0.0098	1.98%
QC value within limits for B 249.677 Recovery = 99.31%								
Ca 227.546†	916.9	10.1	mg/L	0.17	10.1	mg/L	0.17	1.69%
QC value within limits for Ca 227.546 Recovery = 101.37%								
Cd 228.802†	738.4	0.0469	mg/L	0.00037	0.0469	mg/L	0.00037	0.78%
QC value within limits for Cd 228.802 Recovery = 93.75%								

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Co 228.616†	3461.8	0.191 mg/L	0.0016	0.191 mg/L	0.0016	0.81%
QC value within limits for Co 228.616 Recovery = 95.72%						
Cr 267.716†	56655.3	0.475 mg/L	0.0064	0.475 mg/L	0.0064	1.34%
QC value within limits for Cr 267.716 Recovery = 95.00%						
Cu 327.393†	70446.7	0.465 mg/L	0.0115	0.465 mg/L	0.0115	2.48%
QC value within limits for Cu 327.393 Recovery = 93.08%						
Fe 239.562†	1182.0	3.98 mg/L	0.046	3.98 mg/L	0.046	1.15%
QC value within limits for Fe 239.562 Recovery = 99.52%						
Mg 279.077†	7130.2	9.82 mg/L	0.084	9.82 mg/L	0.084	0.86%
QC value within limits for Mg 279.077 Recovery = 98.21%						
Mn 257.610†	230112.7	0.487 mg/L	0.0063	0.487 mg/L	0.0063	1.30%
QC value within limits for Mn 257.610 Recovery = 97.37%						
Mo 202.031†	11713.7	0.941 mg/L	0.0136	0.941 mg/L	0.0136	1.44%
QC value within limits for Mo 202.031 Recovery = 94.13%						
Ni 231.604†	15420.2	0.484 mg/L	0.0042	0.484 mg/L	0.0042	0.86%
QC value within limits for Ni 231.604 Recovery = 96.74%						
Pb 220.353†	2502.3	0.479 mg/L	0.0040	0.479 mg/L	0.0040	0.83%
QC value within limits for Pb 220.353 Recovery = 95.83%						
Sb 206.836†	1564.5	1.14 mg/L	0.013	1.14 mg/L	0.013	1.12%
QC value within limits for Sb 206.836 Recovery = 94.83%						
Se 196.026†	486.7	0.388 mg/L	0.0071	0.388 mg/L	0.0071	1.82%
QC value within limits for Se 196.026 Recovery = 97.02%						
Si 251.611†	158497.5	4.62 mg/L	0.092	4.62 mg/L	0.092	2.00%
QC value within limits for Si 251.611 Recovery = 92.39%						
Sn 189.927†	5257.9	0.960 mg/L	0.0081	0.960 mg/L	0.0081	0.84%
QC value within limits for Sn 189.927 Recovery = 95.95%						
Ti 334.940†	716877.5	0.960 mg/L	0.0048	0.960 mg/L	0.0048	0.50%
QC value within limits for Ti 334.940 Recovery = 95.99%						
Tl 190.801†	742.6	0.487 mg/L	0.0045	0.487 mg/L	0.0045	0.92%
QC value within limits for Tl 190.801 Recovery = 97.49%						
V 290.880†	149272.5	0.965 mg/L	0.0139	0.965 mg/L	0.0139	1.44%
QC value within limits for V 290.880 Recovery = 96.50%						
Zn 206.200†	29155.8	0.933 mg/L	0.0095	0.933 mg/L	0.0095	1.01%
QC value within limits for Zn 206.200 Recovery = 93.32%						
K 766.490†	132170.8	49.0 mg/L	0.19	49.0 mg/L	0.19	0.39%
QC value within limits for K 766.490 Recovery = 97.91%						
Na 589.592†	655376.9	49.1 mg/L	1.22	49.1 mg/L	1.22	2.48%
QC value within limits for Na 589.592 Recovery = 98.24%						
Sr 407.771†	1542624.9	1.02 mg/L	0.015	1.02 mg/L	0.015	1.43%
QC value within limits for Sr 407.771 Recovery = 102.19%						
Li 670.784†	82761.7	1.02 mg/L	0.009	1.02 mg/L	0.009	0.84%
QC value within limits for Li 670.784 Recovery = 102.31%						

All analyte(s) passed QC.

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Sequence No.: 124 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/16/2011 2:50:47 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4890724.4						27239.12	0.56%
YRADIAL	308944.9						9936.12	3.22%
Ga 417.206	1316479.3						7800.78	0.59%
GaRADIAL	67831.8						1196.57	1.76%
Ag 328.068†	-1022.9	-0.00423	mg/L	0.000651	-0.00423	mg/L	0.000651	15.38%
QC value less than the lower limit for Ag 328.068 Recovery = Not calculated								
Al 396.153†	87.3	0.00844	mg/L	0.006506	0.00844	mg/L	0.006506	77.11%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	0.8	0.00048	mg/L	0.003600	0.00048	mg/L	0.003600	745.88%
QC value within limits for As 188.979 Recovery = Not calculated								
Ba 233.527†	-0.6	0.00007	mg/L	0.000050	0.00007	mg/L	0.000050	70.70%
QC value within limits for Ba 233.527 Recovery = Not calculated								
Be 234.861†	118.9	0.00021	mg/L	0.000016	0.00021	mg/L	0.000016	7.40%

Approved: April 18, 2011

QC value within limits for Be 234.861 Recovery = Not calculated

B 249.677†	1147.3	0.0223 mg/L	0.00111	0.0223 mg/L	0.00111	4.97%

QC value within limits for B 249.677 Recovery = Not calculated

Ca 227.546†	-5.2	-0.0364 mg/L	0.06582	-0.0364 mg/L	0.06582	180.68%

QC value within limits for Ca 227.546 Recovery = Not calculated

Cd 228.802†	-5.1	-0.00035 mg/L	0.000079	-0.00035 mg/L	0.000079	22.79%

QC value within limits for Cd 228.802 Recovery = Not calculated

Co 228.616†	-15.0	-0.00050 mg/L	0.000255	-0.00050 mg/L	0.000255	50.99%

QC value within limits for Co 228.616 Recovery = Not calculated

Cr 267.716†	54.9	0.00031 mg/L	0.000111	0.00031 mg/L	0.000111	35.45%

QC value within limits for Cr 267.716 Recovery = Not calculated

Cu 327.393†	-169.8	-0.00154 mg/L	0.000872	-0.00154 mg/L	0.000872	56.73%

QC value within limits for Cu 327.393 Recovery = Not calculated

Fe 239.562†	2.1	0.00119 mg/L	0.003160	0.00119 mg/L	0.003160	266.19%

QC value within limits for Fe 239.562 Recovery = Not calculated

Mg 279.077†	2.2	0.00072 mg/L	0.003136	0.00072 mg/L	0.003136	437.35%

QC value within limits for Mg 279.077 Recovery = Not calculated

Mn 257.610†	35.9	-0.00001 mg/L	0.000002	-0.00001 mg/L	0.000002	17.38%

QC value within limits for Mn 257.610 Recovery = Not calculated

Mo 202.031†	-12.5	-0.00048 mg/L	0.000243	-0.00048 mg/L	0.000243	50.92%

QC value within limits for Mo 202.031 Recovery = Not calculated

Ni 231.604†	11.4	0.00019 mg/L	0.000047	0.00019 mg/L	0.000047	24.64%

QC value within limits for Ni 231.604 Recovery = Not calculated

Pb 220.353†	1.1	0.00128 mg/L	0.001527	0.00128 mg/L	0.001527	119.24%

QC value within limits for Pb 220.353 Recovery = Not calculated

Sb 206.836†	7.1	0.00153 mg/L	0.000532	0.00153 mg/L	0.000532	34.78%

QC value within limits for Sb 206.836 Recovery = Not calculated

Se 196.026†	0.9	-0.00254 mg/L	0.002636	-0.00254 mg/L	0.002636	103.90%

QC value within limits for Se 196.026 Recovery = Not calculated

Si 251.611†	-15.4	0.00036 mg/L	0.000208	0.00036 mg/L	0.000208	58.43%

QC value within limits for Si 251.611 Recovery = Not calculated

Sn 189.927†	-4.8	-0.00025 mg/L	0.000497	-0.00025 mg/L	0.000497	197.63%

QC value within limits for Sn 189.927 Recovery = Not calculated

Ti 334.940†	-148.2	-0.00021 mg/L	0.000121	-0.00021 mg/L	0.000121	58.61%

QC value within limits for Ti 334.940 Recovery = Not calculated

Tl 190.801†	-4.8	-0.00572 mg/L	0.000751	-0.00572 mg/L	0.000751	13.12%

QC value within limits for Tl 190.801 Recovery = Not calculated

V 290.880†	165.0	0.00141 mg/L	0.000279	0.00141 mg/L	0.000279	19.75%

QC value within limits for V 290.880 Recovery = Not calculated

Zn 206.200†	1.1	0.00033 mg/L	0.000177	0.00033 mg/L	0.000177	53.63%

QC value within limits for Zn 206.200 Recovery = Not calculated

K 766.490†	287.9	0.106 mg/L	0.0299	0.106 mg/L	0.0299	28.22%

QC value within limits for K 766.490 Recovery = Not calculated

Na 589.592†	5992.4	0.437 mg/L	0.0151	0.437 mg/L	0.0151	3.46%

QC value within limits for Na 589.592 Recovery = Not calculated

Sr 407.771†	54.4	0.00000 mg/L	0.000061	0.00000 mg/L	0.000061	>999.9%

QC value within limits for Sr 407.771 Recovery = Not calculated

Li 670.784†	96.5	0.00043 mg/L	0.001009	0.00043 mg/L	0.001009	232.14%

QC value within limits for Li 670.784 Recovery = Not calculated

QC Failed. Continue with analysis.

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Sequence No.: 125 **Autosampler Location: 143**
Sample ID: L1104020702 WG361173-03 **Date Collected: 4/16/2011 2:57:24 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020702 WG361173-03

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: L1104020702 WG361173-03

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4746739.9						44126.96	0.93%
YRADIAL	310756.3						5967.27	1.92%
Ga 417.206	1345214.3						8928.62	0.66%
GaRADIAL	69396.3						476.26	0.69%
Ag 328.068†	-932.3	-0.00385	mg/L	0.000089	-0.00385	mg/L	0.000089	2.31%
Al 396.153†	-45.8	-0.0173	mg/L	0.00229	-0.0173	mg/L	0.00229	13.23%

Approved: April 18, 2011

As 188.979†	6.7	0.0108	mg/L	0.00388	0.0108	mg/L	0.00388 36.05%
Ba 233.527†	4148.9	0.0745	mg/L	0.00059	0.0745	mg/L	0.00059 0.79%
Be 234.861†	134.5	0.00025	mg/L	0.000017	0.00025	mg/L	0.000017 6.77%
B 249.677†	6663.3	0.124	mg/L	0.0020	0.124	mg/L	0.0020 1.58%
Ca 227.546†	854.2	9.13	mg/L	0.064	9.13	mg/L	0.064 0.70%
Cd 228.802†	-6.8	-0.00049	mg/L	0.000099	-0.00049	mg/L	0.000099 20.26%
Co 228.616†	-18.1	-0.00070	mg/L	0.000168	-0.00070	mg/L	0.000168 24.11%
Cr 267.716†	75.0	0.00048	mg/L	0.000084	0.00048	mg/L	0.000084 17.44%
Cu 327.393†	-184.4	-0.00163	mg/L	0.000516	-0.00163	mg/L	0.000516 31.55%
Fe 239.562†	1.8	0.00014	mg/L	0.002050	0.00014	mg/L	0.002050 >999.9%
Mg 279.077†	2089.9	2.88	mg/L	0.018	2.88	mg/L	0.018 0.64%
Mn 257.610†	138.2	0.00303	mg/L	0.000036	0.00303	mg/L	0.000036 1.19%
Mo 202.031†	6.7	0.00107	mg/L	0.000251	0.00107	mg/L	0.000251 23.52%
Ni 231.604†	14.1	0.00027	mg/L	0.000201	0.00027	mg/L	0.000201 75.54%
Pb 220.353†	7.6	0.00296	mg/L	0.000671	0.00296	mg/L	0.000671 22.70%
Sb 206.836†	7.4	0.00181	mg/L	0.001716	0.00181	mg/L	0.001716 95.05%
Se 196.026†	-3.2	-0.00349	mg/L	0.004367	-0.00349	mg/L	0.004367 125.12%
Si 251.611†	146106.5	4.27	mg/L	0.062	4.27	mg/L	0.062 1.45%
Sn 189.927†	-7.9	-0.00081	mg/L	0.000394	-0.00081	mg/L	0.000394 48.57%
Ti 334.940†	-321.0	-0.00035	mg/L	0.000059	-0.00035	mg/L	0.000059 17.07%
Tl 190.801†	17.7	0.00798	mg/L	0.003798	0.00798	mg/L	0.003798 47.58%
V 290.880†	302.7	0.00230	mg/L	0.000214	0.00230	mg/L	0.000214 9.31%
Zn 206.200†	54.0	0.00202	mg/L	0.000162	0.00202	mg/L	0.000162 8.04%
K 766.490†	2994.7	0.884	mg/L	0.0485	0.884	mg/L	0.0485 5.49%
Na 589.592†	2387262.4	204	mg/L	3.3	204	mg/L	3.3 1.62%
Sr 407.771†	388210.4	0.257	mg/L	0.0034	0.257	mg/L	0.0034 1.32%
Li 670.784†	1251.5	0.0147	mg/L	0.00186	0.0147	mg/L	0.00186 12.66%

Sequence No.: 126 **Autosampler Location: 144**
Sample ID: L1104020704S WG361173-09 **Date Collected: 4/16/2011 3:04:09 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020704S WG361173-09

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104020704S WG361173-09

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4556601.8						16738.25	0.37%
YRADIAL	296887.7						5632.54	1.90%
Ga 417.206	1301363.6						10005.75	0.77%
GaRADIAL	66589.8						184.53	0.28%
Ag 328.068†	39481.9	0.190	mg/L	0.0025	0.190	mg/L	0.0025	1.29%
Al 396.153†	26339.6	5.08	mg/L	0.029	5.08	mg/L	0.029	0.57%
As 188.979†	135.3	0.239	mg/L	0.0053	0.239	mg/L	0.0053	2.22%
Ba 233.527†	31948.2	0.574	mg/L	0.0019	0.574	mg/L	0.0019	0.33%
Be 234.861†	12326.3	0.0233	mg/L	0.00017	0.0233	mg/L	0.00017	0.73%
B 249.677†	59506.2	1.10	mg/L	0.014	1.10	mg/L	0.014	1.26%
Ca 227.546†	1391.9	15.0	mg/L	0.05	15.0	mg/L	0.05	0.32%
Cd 228.802†	372.8	0.0236	mg/L	0.00009	0.0236	mg/L	0.00009	0.37%
Co 228.616†	1793.2	0.0993	mg/L	0.00018	0.0993	mg/L	0.00018	0.19%
Cr 267.716†	29241.3	0.245	mg/L	0.0016	0.245	mg/L	0.0016	0.63%
Cu 327.393†	36109.2	0.238	mg/L	0.0034	0.238	mg/L	0.0034	1.44%
Fe 239.562†	611.1	2.06	mg/L	0.005	2.06	mg/L	0.005	0.24%
Mg 279.077†	5970.0	8.22	mg/L	0.041	8.22	mg/L	0.041	0.50%
Mn 257.610†	120106.2	0.257	mg/L	0.0012	0.257	mg/L	0.0012	0.48%
Mo 202.031†	6272.2	0.504	mg/L	0.0029	0.504	mg/L	0.0029	0.57%
Ni 231.604†	8044.1	0.252	mg/L	0.0024	0.252	mg/L	0.0024	0.97%
Pb 220.353†	1292.2	0.249	mg/L	0.0010	0.249	mg/L	0.0010	0.39%
Sb 206.836†	810.3	0.588	mg/L	0.0022	0.588	mg/L	0.0022	0.38%
Se 196.026†	241.3	0.193	mg/L	0.0046	0.193	mg/L	0.0046	2.39%
Si 251.611†	239059.5	6.98	mg/L	0.087	6.98	mg/L	0.087	1.25%
Sn 189.927†	-21.6	-0.00332	mg/L	0.001098	-0.00332	mg/L	0.001098	33.07%
Ti 334.940†	380067.6	0.509	mg/L	0.0015	0.509	mg/L	0.0015	0.29%
Tl 190.801†	396.5	0.258	mg/L	0.0035	0.258	mg/L	0.0035	1.37%
V 290.880†	78307.9	0.506	mg/L	0.0029	0.506	mg/L	0.0029	0.56%
Zn 206.200†	15294.6	0.490	mg/L	0.0017	0.490	mg/L	0.0017	0.35%

Approved: April 18, 2011

K 766.490†	72168.9	26.2	mg/L	0.12	26.2	mg/L	0.12	0.44%
Na 589.592†	2879277.9	259	mg/L	3.9	259	mg/L	3.9	1.51%
Sr 407.771†	1217418.8	0.807	mg/L	0.0059	0.807	mg/L	0.0059	0.73%
Li 670.784†	44368.3	0.548	mg/L	0.0005	0.548	mg/L	0.0005	0.09%

Sequence No.: 127 **Autosampler Location: 145**
Sample ID: L1104020706SD WG361173-10 **Date Collected: 4/16/2011 3:10:54 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020706SD WG361173-10

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: L1104020706SD WG361173-10

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4560973.5						19268.34	0.42%
YRADIAL	295510.1						2878.13	0.97%
Ga 417.206	1279205.7						5279.03	0.41%
GaRADIAL	66484.0						1060.54	1.60%
Ag 328.068†	39948.7	0.192	mg/L	0.0025	0.192	mg/L	0.0025	1.30%
Al 396.153†	26299.5	5.07	mg/L	0.018	5.07	mg/L	0.018	0.35%
As 188.979†	133.9	0.237	mg/L	0.0019	0.237	mg/L	0.0019	0.80%
Ba 233.527†	31478.5	0.566	mg/L	0.0046	0.566	mg/L	0.0046	0.81%
Be 234.861†	12472.4	0.0236	mg/L	0.00049	0.0236	mg/L	0.00049	2.08%
B 249.677†	59907.3	1.11	mg/L	0.014	1.11	mg/L	0.014	1.23%
Ca 227.546†	1377.5	14.9	mg/L	0.12	14.9	mg/L	0.12	0.82%
Cd 228.802†	377.3	0.0239	mg/L	0.00015	0.0239	mg/L	0.00015	0.64%
Co 228.616†	1788.8	0.0991	mg/L	0.00102	0.0991	mg/L	0.00102	1.03%
Cr 267.716†	29078.2	0.244	mg/L	0.0007	0.244	mg/L	0.0007	0.31%
Cu 327.393†	36584.5	0.241	mg/L	0.0027	0.241	mg/L	0.0027	1.13%
Fe 239.562†	611.9	2.06	mg/L	0.044	2.06	mg/L	0.044	2.13%
Mg 279.077†	5929.2	8.17	mg/L	0.129	8.17	mg/L	0.129	1.57%
Mn 257.610†	119872.5	0.257	mg/L	0.0018	0.257	mg/L	0.0018	0.69%
Mo 202.031†	6260.1	0.503	mg/L	0.0038	0.503	mg/L	0.0038	0.75%
Ni 231.604†	7993.0	0.251	mg/L	0.0010	0.251	mg/L	0.0010	0.39%
Pb 220.353†	1289.3	0.248	mg/L	0.0017	0.248	mg/L	0.0017	0.67%
Sb 206.836†	814.9	0.591	mg/L	0.0046	0.591	mg/L	0.0046	0.77%
Se 196.026†	244.7	0.196	mg/L	0.0022	0.196	mg/L	0.0022	1.11%
Si 251.611†	234974.8	6.86	mg/L	0.039	6.86	mg/L	0.039	0.57%
Sn 189.927†	-21.7	-0.00332	mg/L	0.000907	-0.00332	mg/L	0.000907	27.32%
Ti 334.940†	374144.8	0.501	mg/L	0.0022	0.501	mg/L	0.0022	0.43%
Tl 190.801†	403.5	0.263	mg/L	0.0014	0.263	mg/L	0.0014	0.55%
V 290.880†	77564.3	0.502	mg/L	0.0029	0.502	mg/L	0.0029	0.58%
Zn 206.200†	14999.1	0.480	mg/L	0.0017	0.480	mg/L	0.0017	0.35%
K 766.490†	72017.2	26.2	mg/L	0.10	26.2	mg/L	0.10	0.37%
Na 589.592†	2839097.3	255	mg/L	5.1	255	mg/L	5.1	1.99%
Sr 407.771†	1223835.2	0.811	mg/L	0.0156	0.811	mg/L	0.0156	1.92%
Li 670.784†	44359.0	0.548	mg/L	0.0027	0.548	mg/L	0.0027	0.49%

Sequence No.: 128 **Autosampler Location: 146**
Sample ID: L1104020708 **Date Collected: 4/16/2011 3:17:39 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020708

Analyte	Back Pressure	Flow
All	202.0 kPa	0.50 L/min

Mean Data: L1104020708

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4630581.8						34787.50	0.75%
YRADIAL	298563.4						4032.48	1.35%

Approved: April 18, 2011

Ga 417.206	1324562.1					15425.14	1.16%
GaRADIAL	66417.0					139.61	0.21%
Ag 328.068†	-675.1	-0.00276	mg/L	0.000498	-0.00276 mg/L	0.000498	18.03%
Al 396.153†	-26.8	-0.0136	mg/L	0.00353	-0.0136 mg/L	0.00353	25.91%
As 188.979†	12.9	0.0207	mg/L	0.00340	0.0207 mg/L	0.00340	16.47%
Ba 233.527†	5185.4	0.0930	mg/L	0.00077	0.0930 mg/L	0.00077	0.83%
Be 234.861†	150.5	0.00027	mg/L	0.000049	0.00027 mg/L	0.000049	18.26%
B 249.677†	2239.9	0.0426	mg/L	0.00106	0.0426 mg/L	0.00106	2.50%
Ca 227.546†	6466.4	69.1	mg/L	0.75	69.1 mg/L	0.75	1.09%
Cd 228.802†	-6.2	-0.00048	mg/L	0.000258	-0.00048 mg/L	0.000258	53.18%
Co 228.616†	-13.4	-0.00044	mg/L	0.000205	-0.00044 mg/L	0.000205	46.95%
Cr 267.716†	131.8	0.00096	mg/L	0.000104	0.00096 mg/L	0.000104	10.85%
Cu 327.393†	-596.5	-0.00435	mg/L	0.000302	-0.00435 mg/L	0.000302	6.95%
Fe 239.562†	11.7	0.0326	mg/L	0.00288	0.0326 mg/L	0.00288	8.83%
Mg 279.077†	25781.6	35.5	mg/L	0.15	35.5 mg/L	0.15	0.42%
Mn 257.610†	93.8	0.00121	mg/L	0.000020	0.00121 mg/L	0.000020	1.65%
Mo 202.031†	-12.9	-0.00051	mg/L	0.000202	-0.00051 mg/L	0.000202	39.75%
Ni 231.604†	-0.5	-0.00022	mg/L	0.000380	-0.00022 mg/L	0.000380	174.25%
Pb 220.353†	-6.5	0.00316	mg/L	0.001468	0.00316 mg/L	0.001468	46.45%
Sb 206.836†	20.7	0.0115	mg/L	0.00366	0.0115 mg/L	0.00366	31.86%
Se 196.026†	-26.1	-0.00672	mg/L	0.002144	-0.00672 mg/L	0.002144	31.92%
Si 251.611†	99835.5	2.92	mg/L	0.050	2.92 mg/L	0.050	1.70%
Sn 189.927†	-11.7	-0.00150	mg/L	0.000877	-0.00150 mg/L	0.000877	58.58%
Ti 334.940†	-857.4	-0.00047	mg/L	0.000067	-0.00047 mg/L	0.000067	14.35%
Tl 190.801†	86.0	0.0466	mg/L	0.00321	0.0466 mg/L	0.00321	6.88%
V 290.880†	-565.5	-0.00331	mg/L	0.000708	-0.00331 mg/L	0.000708	21.35%
Zn 206.200†	91.1	0.00321	mg/L	0.000091	0.00321 mg/L	0.000091	2.84%
K 766.490†	10134.5	3.64	mg/L	0.005	3.64 mg/L	0.005	0.13%
Na 589.592†	583223.6	43.5	mg/L	0.38	43.5 mg/L	0.38	0.88%
Sr 407.771†	1392184.8	0.923	mg/L	0.0053	0.923 mg/L	0.0053	0.58%
Li 670.784†	1324.2	0.0156	mg/L	0.00072	0.0156 mg/L	0.00072	4.63%

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Sequence No.: 129 **Autosampler Location: 147**
Sample ID: L1104020710 **Date Collected: 4/16/2011 3:25:09 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020710

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104020710

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4697404.4						51091.07	1.09%
YRADIAL	307215.4						4272.71	1.39%
Ga 417.206	1349695.9						13294.88	0.99%
GaRADIAL	67714.5						1431.11	2.11%
Ag 328.068†	-707.3	-0.00292	mg/L	0.000331	-0.00292	mg/L	0.000331	11.32%
Al 396.153†	56.0	0.00238	mg/L	0.010656	0.00238	mg/L	0.010656	448.01%
As 188.979†	10.5	0.0166	mg/L	0.00276	0.0166	mg/L	0.00276	16.65%
Ba 233.527†	3477.2	0.0624	mg/L	0.00063	0.0624	mg/L	0.00063	1.01%
Be 234.861†	160.1	0.00029	mg/L	0.000019	0.00029	mg/L	0.000019	6.55%
B 249.677†	2214.2	0.0421	mg/L	0.00064	0.0421	mg/L	0.00064	1.51%
Ca 227.546†	5847.5	62.5	mg/L	0.83	62.5	mg/L	0.83	1.33%
Cd 228.802†	-4.2	-0.00034	mg/L	0.000077	-0.00034	mg/L	0.000077	22.77%
Co 228.616†	-10.3	-0.00025	mg/L	0.000111	-0.00025	mg/L	0.000111	43.65%
Cr 267.716†	146.9	0.00108	mg/L	0.000022	0.00108	mg/L	0.000022	2.01%
Cu 327.393†	-456.9	-0.00343	mg/L	0.000323	-0.00343	mg/L	0.000323	9.43%
Fe 239.562†	7.6	0.0187	mg/L	0.00728	0.0187	mg/L	0.00728	38.99%
Mg 279.077†	24342.8	33.5	mg/L	0.56	33.5	mg/L	0.56	1.66%
Mn 257.610†	4979.9	0.0113	mg/L	0.00010	0.0113	mg/L	0.00010	0.88%
Mo 202.031†	-8.9	-0.00018	mg/L	0.000117	-0.00018	mg/L	0.000117	64.12%
Ni 231.604†	0.0	-0.00020	mg/L	0.000406	-0.00020	mg/L	0.000406	202.45%
Pb 220.353†	-9.1	0.00236	mg/L	0.001721	0.00236	mg/L	0.001721	72.89%
Sb 206.836†	17.9	0.00942	mg/L	0.002088	0.00942	mg/L	0.002088	22.16%
Se 196.026†	-28.4	-0.0103	mg/L	0.00220	-0.0103	mg/L	0.00220	21.38%
Si 251.611†	91223.1	2.67	mg/L	0.019	2.67	mg/L	0.019	0.72%
Sn 189.927†	-14.8	-0.00207	mg/L	0.001325	-0.00207	mg/L	0.001325	64.14%

Approved: April 18, 2011

Ti 334.940†	-664.4	-0.00027	mg/L	0.000059	-0.00027	mg/L	0.000059 21.53%
Tl 190.801†	80.0	0.0434	mg/L	0.00244	0.0434	mg/L	0.00244 5.62%
V 290.880†	-564.2	-0.00331	mg/L	0.000689	-0.00331	mg/L	0.000689 20.86%
Zn 206.200†	83.3	0.00296	mg/L	0.000119	0.00296	mg/L	0.000119 4.03%
K 766.490†	9989.4	3.60	mg/L	0.054	3.60	mg/L	0.054 1.49%
Na 589.592†	411470.9	30.4	mg/L	0.46	30.4	mg/L	0.46 1.52%
Sr 407.771†	1429896.2	0.948	mg/L	0.0070	0.948	mg/L	0.0070 0.74%
Li 670.784†	1102.5	0.0129	mg/L	0.00083	0.0129	mg/L	0.00083 6.45%

Sequence No.: 130 **Autosampler Location: 148**
Sample ID: L1104020712 **Date Collected: 4/16/2011 3:31:54 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020712

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104020712

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4638796.6						12387.34	0.27%
YRADIAL	304604.8						4005.86	1.32%
Ga 417.206	1329569.7						16969.95	1.28%
GaRADIAL	68113.4						1849.71	2.72%
Ag 328.068†	-973.6	-0.00400	mg/L	0.000232	-0.00400	mg/L	0.000232	5.79%
Al 396.153†	209.4	0.0320	mg/L	0.01682	0.0320	mg/L	0.01682	52.62%
As 188.979†	10.4	0.0176	mg/L	0.00185	0.0176	mg/L	0.00185	10.53%
Ba 233.527†	1859.6	0.0334	mg/L	0.00018	0.0334	mg/L	0.00018	0.55%
Be 234.861†	132.5	0.00025	mg/L	0.000016	0.00025	mg/L	0.000016	6.27%
B 249.677†	7008.5	0.131	mg/L	0.0011	0.131	mg/L	0.0011	0.83%
Ca 227.546†	242.7	2.60	mg/L	0.022	2.60	mg/L	0.022	0.84%
Cd 228.802†	-3.2	-0.00028	mg/L	0.000091	-0.00028	mg/L	0.000091	32.63%
Co 228.616†	-11.6	-0.00032	mg/L	0.000117	-0.00032	mg/L	0.000117	36.91%
Cr 267.716†	179.2	0.00136	mg/L	0.000206	0.00136	mg/L	0.000206	15.11%
Cu 327.393†	-153.0	-0.00142	mg/L	0.000680	-0.00142	mg/L	0.000680	47.92%
Fe 239.562†	5.2	0.0117	mg/L	0.00329	0.0117	mg/L	0.00329	28.06%
Mg 279.077†	496.2	0.681	mg/L	0.0187	0.681	mg/L	0.0187	2.75%
Mn 257.610†	127.5	0.00290	mg/L	0.000034	0.00290	mg/L	0.000034	1.19%
Mo 202.031†	83.1	0.00720	mg/L	0.000323	0.00720	mg/L	0.000323	4.48%
Ni 231.604†	33.1	0.00087	mg/L	0.000204	0.00087	mg/L	0.000204	23.48%
Pb 220.353†	11.4	0.00339	mg/L	0.001272	0.00339	mg/L	0.001272	37.53%
Sb 206.836†	4.7	-0.00009	mg/L	0.003468	-0.00009	mg/L	0.003468	>999.9%
Se 196.026†	3.2	-0.00002	mg/L	0.002537	-0.00002	mg/L	0.002537	>999.9%
Si 251.611†	164257.0	4.80	mg/L	0.040	4.80	mg/L	0.040	0.83%
Sn 189.927†	-9.6	-0.00111	mg/L	0.000053	-0.00111	mg/L	0.000053	4.74%
Ti 334.940†	-90.4	-0.00010	mg/L	0.000136	-0.00010	mg/L	0.000136	131.91%
Tl 190.801†	3.4	-0.00067	mg/L	0.001928	-0.00067	mg/L	0.001928	288.21%
V 290.880†	1710.7	0.0114	mg/L	0.00045	0.0114	mg/L	0.00045	3.93%
Zn 206.200†	78.6	0.00281	mg/L	0.000154	0.00281	mg/L	0.000154	5.49%
K 766.490†	2055.0	0.558	mg/L	0.0099	0.558	mg/L	0.0099	1.77%
Na 589.592†	2242620.5	189	mg/L	2.5	189	mg/L	2.5	1.32%
Sr 407.771†	176932.7	0.117	mg/L	0.0004	0.117	mg/L	0.0004	0.38%
Li 670.784†	727.8	0.00824	mg/L	0.000978	0.00824	mg/L	0.000978	11.86%

Sequence No.: 131 **Autosampler Location: 149**
Sample ID: L1104020714 **Date Collected: 4/16/2011 3:39:00 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020714

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: L1104020714

Approved: April 18, 2011

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4770057.8						44283.67	0.93%
YRADIAL	307261.6						10497.86	3.42%
Ga 417.206	1390792.2						21104.50	1.52%
GaRADIAL	69126.2						1016.24	1.47%
Ag 328.068†	-821.4	-0.00331	mg/L	0.000490	-0.00331	mg/L	0.000490	14.80%
Al 396.153†	134.0	0.0175	mg/L	0.00406	0.0175	mg/L	0.00406	23.22%
As 188.979†	8.5	0.0133	mg/L	0.00503	0.0133	mg/L	0.00503	37.94%
Ba 233.527†	1385.9	0.0249	mg/L	0.00015	0.0249	mg/L	0.00015	0.62%
Be 234.861†	175.5	0.00031	mg/L	0.000011	0.00031	mg/L	0.000011	3.36%
B 249.677†	3037.8	0.0573	mg/L	0.00091	0.0573	mg/L	0.00091	1.59%
Ca 227.546†	4653.6	49.7	mg/L	0.85	49.7	mg/L	0.85	1.72%
Cd 228.802†	-4.9	-0.00038	mg/L	0.000163	-0.00038	mg/L	0.000163	42.87%
Co 228.616†	-16.9	-0.00061	mg/L	0.000149	-0.00061	mg/L	0.000149	24.41%
Cr 267.716†	192.6	0.00147	mg/L	0.000122	0.00147	mg/L	0.000122	8.31%
Cu 327.393†	-266.6	-0.00217	mg/L	0.000660	-0.00217	mg/L	0.000660	30.44%
Fe 239.562†	11.7	0.0334	mg/L	0.00661	0.0334	mg/L	0.00661	19.78%
Mg 279.077†	4468.8	6.15	mg/L	0.193	6.15	mg/L	0.193	3.13%
Mn 257.610†	175.1	0.00100	mg/L	0.000040	0.00100	mg/L	0.000040	3.99%
Mo 202.031†	-8.6	-0.00016	mg/L	0.000402	-0.00016	mg/L	0.000402	246.02%
Ni 231.604†	13.1	0.00021	mg/L	0.000165	0.00021	mg/L	0.000165	77.17%
Pb 220.353†	-8.2	0.00191	mg/L	0.001519	0.00191	mg/L	0.001519	79.55%
Sb 206.836†	14.4	0.00683	mg/L	0.001295	0.00683	mg/L	0.001295	18.96%
Se 196.026†	-23.6	-0.00961	mg/L	0.000821	-0.00961	mg/L	0.000821	8.55%
Si 251.611†	104575.2	3.06	mg/L	0.006	3.06	mg/L	0.006	0.21%
Sn 189.927†	-16.5	-0.00238	mg/L	0.000550	-0.00238	mg/L	0.000550	23.14%
Ti 334.940†	-658.9	-0.00039	mg/L	0.000118	-0.00039	mg/L	0.000118	30.07%
Tl 190.801†	73.7	0.0404	mg/L	0.00238	0.0404	mg/L	0.00238	5.87%
V 290.880†	18.5	0.00047	mg/L	0.000882	0.00047	mg/L	0.000882	189.61%
Zn 206.200†	87.7	0.00310	mg/L	0.000165	0.00310	mg/L	0.000165	5.31%
K 766.490†	4362.2	1.57	mg/L	0.066	1.57	mg/L	0.066	4.22%
Na 589.592†	136129.3	9.90	mg/L	0.056	9.90	mg/L	0.056	0.57%
Sr 407.771†	279169.1	0.185	mg/L	0.0018	0.185	mg/L	0.0018	0.95%
Li 670.784†	321.8	0.00322	mg/L	0.001639	0.00322	mg/L	0.001639	50.89%

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Sequence No.: 132 **Autosampler Location: 150**
Sample ID: L1104020716 **Date Collected: 4/16/2011 3:45:45 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104020716

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104020716

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4986108.2						51002.24	1.02%
YRADIAL	317518.0						8795.68	2.77%
Ga 417.206	1361233.9						4541.33	0.33%
GaRADIAL	69980.2						543.94	0.78%
Ag 328.068†	-1100.1	-0.00460	mg/L	0.000559	-0.00460	mg/L	0.000559	12.15%
Al 396.153†	128.1	0.0163	mg/L	0.00797	0.0163	mg/L	0.00797	48.79%
As 188.979†	0.9	0.00060	mg/L	0.000566	0.00060	mg/L	0.000566	93.92%
Ba 233.527†	1.7	0.00011	mg/L	0.000088	0.00011	mg/L	0.000088	80.02%
Be 234.861†	142.3	0.00026	mg/L	0.000014	0.00026	mg/L	0.000014	5.30%
B 249.677†	749.0	0.0149	mg/L	0.00012	0.0149	mg/L	0.00012	0.79%
Ca 227.546†	1.6	0.0361	mg/L	0.08315	0.0361	mg/L	0.08315	230.60%
Cd 228.802†	-4.6	-0.00031	mg/L	0.000229	-0.00031	mg/L	0.000229	73.12%
Co 228.616†	-11.2	-0.00028	mg/L	0.000136	-0.00028	mg/L	0.000136	47.91%
Cr 267.716†	243.4	0.00189	mg/L	0.000066	0.00189	mg/L	0.000066	3.51%
Cu 327.393†	-166.6	-0.00152	mg/L	0.000249	-0.00152	mg/L	0.000249	16.44%
Fe 239.562†	2.4	0.00220	mg/L	0.003460	0.00220	mg/L	0.003460	157.01%
Mg 279.077†	2.3	0.00093	mg/L	0.003096	0.00093	mg/L	0.003096	334.23%
Mn 257.610†	91.9	0.00010	mg/L	0.000007	0.00010	mg/L	0.000007	6.36%
Mo 202.031†	-13.4	-0.00054	mg/L	0.000198	-0.00054	mg/L	0.000198	36.41%
Ni 231.604†	32.3	0.00084	mg/L	0.000155	0.00084	mg/L	0.000155	18.40%
Pb 220.353†	11.6	0.00326	mg/L	0.000928	0.00326	mg/L	0.000928	28.47%

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Sb 206.836†	2.5	-0.00183	mg/L	0.001046	-0.00183	mg/L	0.001046 57.10%
Se 196.026†	2.4	-0.00126	mg/L	0.003591	-0.00126	mg/L	0.003591 285.21%
Si 251.611†	200.2	0.00666	mg/L	0.000157	0.00666	mg/L	0.000157 2.35%
Sn 189.927†	-6.7	-0.00058	mg/L	0.000611	-0.00058	mg/L	0.000611 104.45%
Ti 334.940†	-132.8	-0.00019	mg/L	0.000078	-0.00019	mg/L	0.000078 42.04%
Tl 190.801†	-0.7	-0.00310	mg/L	0.001863	-0.00310	mg/L	0.001863 60.00%
V 290.880†	129.2	0.00118	mg/L	0.000844	0.00118	mg/L	0.000844 71.37%
Zn 206.200†	41.9	0.00164	mg/L	0.000065	0.00164	mg/L	0.000065 3.98%
K 766.490†	102.4	0.0387	mg/L	0.03628	0.0387	mg/L	0.03628 93.78%
Na 589.592†	4737.7	0.346	mg/L	0.0092	0.346	mg/L	0.0092 2.66%
Sr 407.771†	48.8	0.00000	mg/L	0.000058	0.00000	mg/L	0.000058 >999.9%
Li 670.784†	83.1	0.00027	mg/L	0.000312	0.00027	mg/L	0.000312 116.52%

Sequence No.: 133 **Autosampler Location: 151**
Sample ID: L1104023601 **Date Collected: 4/16/2011 3:52:26 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104023601

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: L1104023601

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
Y 371.029	4783120.3						42457.02	0.89%
YRADIAL	310625.0						8469.54	2.73%
Ga 417.206	1376492.7						24815.28	1.80%
GaRADIAL	69873.9						579.80	0.83%
Ag 328.068†	-815.3	-0.00327	mg/L	0.000680	-0.00327	mg/L	0.000680	20.83%
Al 396.153†	225.4	0.0352	mg/L	0.00930	0.0352	mg/L	0.00930	26.46%
As 188.979†	5.9	0.00908	mg/L	0.005548	0.00908	mg/L	0.005548	61.08%
Ba 233.527†	1006.7	0.0181	mg/L	0.00009	0.0181	mg/L	0.00009	0.51%
Be 234.861†	171.2	0.00030	mg/L	0.000019	0.00030	mg/L	0.000019	6.44%
B 249.677†	1768.5	0.0340	mg/L	0.00151	0.0340	mg/L	0.00151	4.43%
Ca 227.546†	2027.9	21.7	mg/L	0.37	21.7	mg/L	0.37	1.73%
Cd 228.802†	-5.7	-0.00042	mg/L	0.000051	-0.00042	mg/L	0.000051	12.31%
Co 228.616†	-11.6	-0.00031	mg/L	0.000350	-0.00031	mg/L	0.000350	111.66%
Cr 267.716†	140.4	0.00102	mg/L	0.000085	0.00102	mg/L	0.000085	8.35%
Cu 327.393†	262.0	0.00132	mg/L	0.000344	0.00132	mg/L	0.000344	26.14%
Fe 239.562†	20.9	0.0647	mg/L	0.00512	0.0647	mg/L	0.00512	7.93%
Mg 279.077†	3031.6	4.17	mg/L	0.066	4.17	mg/L	0.066	1.57%
Mn 257.610†	7210.7	0.0159	mg/L	0.00008	0.0159	mg/L	0.00008	0.47%
Mo 202.031†	-10.6	-0.00032	mg/L	0.000290	-0.00032	mg/L	0.000290	91.91%
Ni 231.604†	34.4	0.00090	mg/L	0.000415	0.00090	mg/L	0.000415	46.34%
Pb 220.353†	5.3	0.00311	mg/L	0.000632	0.00311	mg/L	0.000632	20.34%
Sb 206.836†	8.6	0.00261	mg/L	0.001962	0.00261	mg/L	0.001962	75.21%
Se 196.026†	-11.3	-0.00681	mg/L	0.003875	-0.00681	mg/L	0.003875	56.91%
Si 251.611†	108556.7	3.17	mg/L	0.042	3.17	mg/L	0.042	1.34%
Sn 189.927†	-17.0	-0.00248	mg/L	0.000755	-0.00248	mg/L	0.000755	30.45%
Ti 334.940†	-170.6	-0.00002	mg/L	0.000098	-0.00002	mg/L	0.000098	489.67%
Tl 190.801†	34.8	0.0179	mg/L	0.00222	0.0179	mg/L	0.00222	12.43%
V 290.880†	145.8	0.00129	mg/L	0.000736	0.00129	mg/L	0.000736	57.00%
Zn 206.200†	463.5	0.0151	mg/L	0.00013	0.0151	mg/L	0.00013	0.89%
K 766.490†	8667.4	3.13	mg/L	0.074	3.13	mg/L	0.074	2.35%
Na 589.592†	306821.3	22.5	mg/L	0.31	22.5	mg/L	0.31	1.36%
Sr 407.771†	165697.2	0.110	mg/L	0.0006	0.110	mg/L	0.0006	0.54%
Li 670.784†	434.1	0.00461	mg/L	0.000920	0.00461	mg/L	0.000920	19.95%

Sequence No.: 134 **Autosampler Location: 152**
Sample ID: L1104023805 **Date Collected: 4/16/2011 3:59:10 AM**
Analyst: KHR **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: L1104023805

Analyte	Back Pressure	Flow

Approved: April 18, 2011

All 203.0 kPa 0.50 L/min

Mean Data: L1104023805

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4374603.7						52255.60	1.19%
YRADIAL	287934.6						2853.32	0.99%
Ga 417.206	1282392.6						11350.44	0.89%
GaRADIAL	66602.9						1098.15	1.65%
Ag 328.068†	23.7	0.00046	mg/L	0.000122	0.00046	mg/L	0.000122	26.33%
Al 396.153†	463.7	0.0811	mg/L	0.00580	0.0811	mg/L	0.00580	7.15%
As 188.979†	15.9	0.0219	mg/L	0.00118	0.0219	mg/L	0.00118	5.39%
Ba 233.527†	4649.0	0.0834	mg/L	0.00079	0.0834	mg/L	0.00079	0.95%
Be 234.861†	309.9	0.00027	mg/L	0.000118	0.00027	mg/L	0.000118	43.28%
B 249.677†	15391.3	0.293	mg/L	0.0042	0.293	mg/L	0.0042	1.45%
Ca 227.546†	26950.5	288	mg/L	2.0	288	mg/L	2.0	0.70%
Cd 228.802†	-8.0	-0.00062	mg/L	0.000209	-0.00062	mg/L	0.000209	33.89%
Co 228.616†	1.8	0.00037	mg/L	0.000442	0.00037	mg/L	0.000442	118.48%
Cr 267.716†	692.7	0.00564	mg/L	0.000023	0.00564	mg/L	0.000023	0.41%
Cu 327.393†	-499.7	-0.00352	mg/L	0.000723	-0.00352	mg/L	0.000723	20.55%
Fe 239.562†	489.5	1.64	mg/L	0.021	1.64	mg/L	0.021	1.28%
Mg 279.077†	71318.3	98.2	mg/L	0.11	98.2	mg/L	0.11	0.12%
Mn 257.610†	27983.7	0.0665	mg/L	0.00039	0.0665	mg/L	0.00039	0.59%
Mo 202.031†	278.2	0.0230	mg/L	0.00023	0.0230	mg/L	0.00023	1.01%
Ni 231.604†	172.2	0.00519	mg/L	0.000467	0.00519	mg/L	0.000467	8.99%
Pb 220.353†	-21.0	0.0110	mg/L	0.00048	0.0110	mg/L	0.00048	4.35%
Sb 206.836†	27.7	0.0167	mg/L	0.00195	0.0167	mg/L	0.00195	11.70%
Se 196.026†	-30.6	0.0449	mg/L	0.00858	0.0449	mg/L	0.00858	19.11%
Si 251.611†	382195.3	11.2	mg/L	0.11	11.2	mg/L	0.11	1.02%
Sn 189.927†	-23.4	-0.00365	mg/L	0.000624	-0.00365	mg/L	0.000624	17.11%
Ti 334.940†	-618.9	0.00204	mg/L	0.000146	0.00204	mg/L	0.000146	7.14%
Tl 190.801†	123.1	0.0509	mg/L	0.00736	0.0509	mg/L	0.00736	14.45%
V 290.880†	931.0	0.00647	mg/L	0.001246	0.00647	mg/L	0.001246	19.26%
Zn 206.200†	412.9	0.0135	mg/L	0.00026	0.0135	mg/L	0.00026	1.90%
K 766.490†	67252.7	24.0	mg/L	0.05	24.0	mg/L	0.05	0.22%
Na 589.592†	4695708.0	650	mg/L	0.0	650	mg/L	0.0	0.00%
Sr 407.771†	1727484.2	1.14	mg/L	0.003	1.14	mg/L	0.003	0.23%
Li 670.784†	2575.1	0.0311	mg/L	0.00141	0.0311	mg/L	0.00141	4.54%

Sequence No.: 135 **Autosampler Location: 6**
Sample ID: CCV **Date Collected: 4/16/2011 4:05:59 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCV

Analyte	Back Pressure	Flow
All	203.0 kPa	0.50 L/min

Mean Data: CCV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
Y 371.029	4618683.5						29928.84	0.65%
YRADIAL	294528.0						6259.87	2.13%
Ga 417.206	1290097.7						1148.98	0.09%
GaRADIAL	66144.9						620.12	0.94%
Ag 328.068†	78204.0	0.376	mg/L	0.0021	0.376	mg/L	0.0021	0.55%
QC value within limits for Ag 328.068 Recovery = 93.98%								
Al 396.153†	52675.7	10.2	mg/L	0.04	10.2	mg/L	0.04	0.35%
QC value within limits for Al 396.153 Recovery = 101.70%								
As 188.979†	259.7	0.461	mg/L	0.0059	0.461	mg/L	0.0059	1.27%
QC value greater than the upper limit for As 188.979 Recovery = 115.15%								
Ba 233.527†	54090.1	0.972	mg/L	0.0017	0.972	mg/L	0.0017	0.17%
QC value within limits for Ba 233.527 Recovery = 97.23%								
Be 234.861†	24041.4	0.0454	mg/L	0.00044	0.0454	mg/L	0.00044	0.97%
QC value within limits for Be 234.861 Recovery = 90.74%								
B 249.677†	26081.6	0.490	mg/L	0.0026	0.490	mg/L	0.0026	0.53%
QC value within limits for B 249.677 Recovery = 97.98%								
Ca 227.546†	941.8	10.4	mg/L	0.08	10.4	mg/L	0.08	0.74%

Approved: April 18, 2011

	QC value within limits for Ca 227.546 Recovery = 104.07%						
Cd 228.802†	749.2	0.0475 mg/L	0.00048	0.0475 mg/L	0.00048	1.00%	
	QC value within limits for Cd 228.802 Recovery = 95.03%						
Co 228.616†	3560.8	0.197 mg/L	0.0026	0.197 mg/L	0.0026	1.33%	
	QC value within limits for Co 228.616 Recovery = 98.46%						
Cr 267.716†	57700.4	0.484 mg/L	0.0015	0.484 mg/L	0.0015	0.31%	
	QC value within limits for Cr 267.716 Recovery = 96.75%						
Cu 327.393†	70823.7	0.468 mg/L	0.0021	0.468 mg/L	0.0021	0.44%	
	QC value within limits for Cu 327.393 Recovery = 93.58%						
Fe 239.562†	1220.3	4.11 mg/L	0.055	4.11 mg/L	0.055	1.34%	
	QC value within limits for Fe 239.562 Recovery = 102.75%						
Mg 279.077†	7349.2	10.1 mg/L	0.11	10.1 mg/L	0.11	1.04%	
	QC value within limits for Mg 279.077 Recovery = 101.23%						
Mn 257.610†	234322.6	0.496 mg/L	0.0009	0.496 mg/L	0.0009	0.18%	
	QC value within limits for Mn 257.610 Recovery = 99.15%						
Mo 202.031†	11856.7	0.953 mg/L	0.0031	0.953 mg/L	0.0031	0.33%	
	QC value within limits for Mo 202.031 Recovery = 95.28%						
Ni 231.604†	15651.0	0.491 mg/L	0.0009	0.491 mg/L	0.0009	0.18%	
	QC value within limits for Ni 231.604 Recovery = 98.18%						
Pb 220.353†	2569.9	0.492 mg/L	0.0062	0.492 mg/L	0.0062	1.25%	
	QC value within limits for Pb 220.353 Recovery = 98.40%						
Sb 206.836†	1583.9	1.15 mg/L	0.008	1.15 mg/L	0.008	0.66%	
	QC value within limits for Sb 206.836 Recovery = 96.01%						
Se 196.026†	492.0	0.392 mg/L	0.0034	0.392 mg/L	0.0034	0.87%	
	QC value within limits for Se 196.026 Recovery = 98.10%						
Si 251.611†	159192.2	4.64 mg/L	0.025	4.64 mg/L	0.025	0.54%	
	QC value within limits for Si 251.611 Recovery = 92.79%						
Sn 189.927†	5429.1	0.991 mg/L	0.0106	0.991 mg/L	0.0106	1.07%	
	QC value within limits for Sn 189.927 Recovery = 99.07%						
Ti 334.940†	733887.5	0.983 mg/L	0.0039	0.983 mg/L	0.0039	0.39%	
	QC value within limits for Ti 334.940 Recovery = 98.26%						
Tl 190.801†	764.2	0.502 mg/L	0.0046	0.502 mg/L	0.0046	0.91%	
	QC value within limits for Tl 190.801 Recovery = 100.31%						
V 290.880†	152648.8	0.987 mg/L	0.0025	0.987 mg/L	0.0025	0.25%	
	QC value within limits for V 290.880 Recovery = 98.68%						
Zn 206.200†	29563.4	0.946 mg/L	0.0014	0.946 mg/L	0.0014	0.15%	
	QC value within limits for Zn 206.200 Recovery = 94.62%						
K 766.490†	135478.7	50.2 mg/L	0.34	50.2 mg/L	0.34	0.67%	
	QC value within limits for K 766.490 Recovery = 100.42%						
Na 589.592†	666569.4	50.0 mg/L	1.02	50.0 mg/L	1.02	2.04%	
	QC value within limits for Na 589.592 Recovery = 99.99%						
Sr 407.771†	1592378.3	1.05 mg/L	0.014	1.05 mg/L	0.014	1.31%	
	QC value within limits for Sr 407.771 Recovery = 105.48%						
Li 670.784†	84997.2	1.05 mg/L	0.010	1.05 mg/L	0.010	0.91%	
	QC value within limits for Li 670.784 Recovery = 105.07%						
QC Failed. Continue with analysis.							

==========

Sequence No.: 136 **Autosampler Location: 1**
Sample ID: CCB **Date Collected: 4/16/2011 4:12:40 AM**
Analyst: **Data Type: Original**
Initial Sample Wt: **Initial Sample Vol:**
Dilution: **Sample Prep Vol:**

Nebulizer Parameters: CCB

Analyte	Back Pressure	Flow
All	204.0 kPa	0.50 L/min

Mean Data: CCB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
Y 371.029	4879860.8						35553.94	0.73%
YRADIAL	310750.4						4552.20	1.46%
Ga 417.206	1329178.9						4271.24	0.32%
GaRADIAL	68419.9						1015.89	1.48%
Ag 328.068†	-1144.9	-0.00482	mg/L	0.000744	-0.00482	mg/L	0.000744	15.44%
QC value less than the lower limit for Ag 328.068 Recovery = Not calculated								
Al 396.153†	6.8	-0.00713	mg/L	0.005135	-0.00713	mg/L	0.005135	71.98%
QC value within limits for Al 396.153 Recovery = Not calculated								
As 188.979†	-1.1	-0.00304	mg/L	0.000698	-0.00304	mg/L	0.000698	22.96%
QC value within limits for As 188.979 Recovery = Not calculated								

Approved: April 18, 2011

Ba 233.527†		0.8	0.00010 mg/L		0.000053	0.00010 mg/L		0.000053	55.12%
QC value within limits for Ba 233.527 Recovery = Not calculated									
Be 234.861†		146.9	0.00027 mg/L		0.000011	0.00027 mg/L		0.000011	4.11%
QC value within limits for Be 234.861 Recovery = Not calculated									
B 249.677†		708.5	0.0142 mg/L		0.00014	0.0142 mg/L		0.00014	0.98%
QC value within limits for B 249.677 Recovery = Not calculated									
Ca 227.546†		-4.1	-0.0244 mg/L		0.02924	-0.0244 mg/L		0.02924	119.62%
QC value within limits for Ca 227.546 Recovery = Not calculated									
Cd 228.802†		-6.0	-0.00040 mg/L		0.000074	-0.00040 mg/L		0.000074	18.53%
QC value within limits for Cd 228.802 Recovery = Not calculated									
Co 228.616†		-15.0	-0.00050 mg/L		0.000102	-0.00050 mg/L		0.000102	20.49%
QC value within limits for Co 228.616 Recovery = Not calculated									
Cr 267.716†		53.1	0.00030 mg/L		0.000039	0.00030 mg/L		0.000039	13.06%
QC value within limits for Cr 267.716 Recovery = Not calculated									
Cu 327.393†		-140.6	-0.00135 mg/L		0.000514	-0.00135 mg/L		0.000514	38.24%
QC value within limits for Cu 327.393 Recovery = Not calculated									
Fe 239.562†		1.0	-0.00241 mg/L		0.006925	-0.00241 mg/L		0.006925	287.42%
QC value within limits for Fe 239.562 Recovery = Not calculated									
Mg 279.077†		1.8	0.00022 mg/L		0.004900	0.00022 mg/L		0.004900	>999.9%
QC value within limits for Mg 279.077 Recovery = Not calculated									
Mn 257.610†		38.9	-0.00001 mg/L		0.000011	-0.00001 mg/L		0.000011	99.08%
QC value within limits for Mn 257.610 Recovery = Not calculated									
Mo 202.031†		-11.5	-0.00040 mg/L		0.000536	-0.00040 mg/L		0.000536	134.88%
QC value within limits for Mo 202.031 Recovery = Not calculated									
Ni 231.604†		16.9	0.00036 mg/L		0.000411	0.00036 mg/L		0.000411	113.83%
QC value within limits for Ni 231.604 Recovery = Not calculated									
Pb 220.353†		7.5	0.00248 mg/L		0.001380	0.00248 mg/L		0.001380	55.55%
QC value within limits for Pb 220.353 Recovery = Not calculated									
Sb 206.836†		6.4	0.00101 mg/L		0.000154	0.00101 mg/L		0.000154	15.22%
QC value within limits for Sb 206.836 Recovery = Not calculated									
Se 196.026†		1.7	-0.00188 mg/L		0.002253	-0.00188 mg/L		0.002253	119.85%
QC value within limits for Se 196.026 Recovery = Not calculated									
Si 251.611†		-31.3	-0.00011 mg/L		0.000206	-0.00011 mg/L		0.000206	188.70%
QC value within limits for Si 251.611 Recovery = Not calculated									
Sn 189.927†		-5.7	-0.00041 mg/L		0.001033	-0.00041 mg/L		0.001033	250.79%
QC value within limits for Sn 189.927 Recovery = Not calculated									
Ti 334.940†		-166.5	-0.00023 mg/L		0.000034	-0.00023 mg/L		0.000034	14.80%
QC value within limits for Ti 334.940 Recovery = Not calculated									
Tl 190.801†		-3.1	-0.00462 mg/L		0.001798	-0.00462 mg/L		0.001798	38.89%
QC value within limits for Tl 190.801 Recovery = Not calculated									
V 290.880†		214.8	0.00174 mg/L		0.000284	0.00174 mg/L		0.000284	16.39%
QC value within limits for V 290.880 Recovery = Not calculated									
Zn 206.200†		0.7	0.00032 mg/L		0.000053	0.00032 mg/L		0.000053	16.58%
QC value within limits for Zn 206.200 Recovery = Not calculated									
K 766.490†		247.8	0.0916 mg/L		0.00364	0.0916 mg/L		0.00364	3.97%
QC value within limits for K 766.490 Recovery = Not calculated									
Na 589.592†		2354.2	0.174 mg/L		0.0184	0.174 mg/L		0.0184	10.58%
QC value within limits for Na 589.592 Recovery = Not calculated									
Sr 407.771†		40.0	-0.00001 mg/L		0.000076	-0.00001 mg/L		0.000076	841.13%
QC value within limits for Sr 407.771 Recovery = Not calculated									
Li 670.784†		63.7	0.00003 mg/L		0.000571	0.00003 mg/L		0.000571	>999.9%
QC value within limits for Li 670.784 Recovery = Not calculated									

QC Failed. Continue with analysis.

Approved: April 18, 2011

2.1.2 Metals ICP-MS Data

2.1.2.1 Summary Data

Login Number: L11040306

Department: Metals

Analyst: Erin Long

METHOD

Preparation: SW-846 30153015

Analysis: SW-846 6020

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

Low Level Check: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG361365 - All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 25496
Approved By: Sheri Pfalzgraf

LABORATORY REPORT

L11040306

05/05/11 10:21

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA
Invoice Number: 616502
P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-4711-WC	L11040306-01	6020	1	08-APR-11

Microbac Laboratories Inc.

Report Number: **L11040306**
Report Date : **May 5, 2011**

Sample Number:	**L11040306-01**	PrePrep Method:	**NONE**	Instrument:	**ELAN-ICP**
Client ID:	**SWMU-57-4711-WC**	Prep Method:	**3015**	Prep Date:	**04/11/2011 07:33**
Matrix:	**Water**	Analytical Method:	**6020**	Cal Date:	**04/11/2011 09:24**
Workgroup Number:	**WG361365**	Analyst:	**EDL**	Run Date:	**04/11/2011 22:25**
Collect Date:	**04/07/2011 14:30**	Dilution:	**1**	File ID:	**EL.041111.222542**
Sample Tag:	**01**	Units:	**mg/L**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Antimony, Total	**7440-36-0**	**0.0175**		**0.00100**	**0.000500**
Selenium, Total	**7782-49-2**	**0.00150**		**0.00100**	**0.000500**
Thallium, Total	**7440-28-0**	**0.000504**		**0.000200**	**0.000100**

2.1.2.2 QC Summary Data

Example 6020 Calculations
Perkin Elmer ELAN 6100

1.0 Initial Calibration (ICAL) Parameters
The system performs linear regression from data consisting of a blank and three standards.

2.0 Calculating the concentration (C) of an element in water using data from prep log, run log, and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Final volume	100
Vi = Initial volume	40
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in (ug/L)	0.25

3.0 Calculating the concentration (C) of an element in soil using data from prep log, run log, and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Final volume	200
Vi = Initial volume	0.5
D = Dilution factor as a multiplier (10X = 10)	1
Cx = Concentration of element in (ug/kg)	40

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

Where:	**Example:**
Cx = Concentration calculated as received (wet basis)	40
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (ug/kg)	50

50 ug/kg = 0.050 mg/kg

Perkin Elmer ELAN ICP/MS

STANDARDS KEY

QC Std 1 - ICV
QC Std 2 - ICB
QC Std 3 - LLICV
QC Std 4 - ICSA
QC Std 5 - ICSAB
QC Std 6 - CCV
QC Std 7 - CCB
QC Std 8 - LLCCV

Calibration Solutions

Analyte	Stock Conc. (mg/L)	S1 (mg/L)	S2 (mg/L)	S3 (mg/L)	S4 (mg/L)
Al	10	0	0.0004	0.05	0.1
Sb	10	0	0.0004	0.05	0.1
As	10	0	0.0004	0.05	0.1
Ba	10	0	0.0004	0.05	0.1
Be	10	0	0.0004	0.05	0.1
Ca	1000	0	0.04	5	10
Cd	10	0	0.0004	0.05	0.1
Cr	10	0	0.0004	0.05	0.1
Co	10	0	0.0004	0.05	0.1
Cu	10	0	0.0004	0.05	0.1
Fe	1000	0	0.04	5	10
Pb	10	0	0.0004	0.05	0.1
Mg	1000	0	0.04	5	10
Mn	10	0	0.0004	0.05	0.1
Ni	10	0	0.0004	0.05	0.1
K	1000	0	0.04	5	10
Se	10	0	0.0004	0.05	0.1
Ag	10	0	0.0004	0.05	0.1
Na	1000	0	0.04	5	10
Tl	10	0	0.0004	0.05	0.1
V	10	0	0.0004	0.05	0.1
U	1000	0	0.0004	0.05	0.1
Zn	10	0	0.0004	0.05	0.1

Microbac Laboratories Inc.
Microwave Digestion Log

Workgroup: WG361305
Analyst: VC
Spike Analyst: VC
Run Date: 04/11/2011 07:33
Method: 3015
Balance: BAL016
Instrument: MW-3

SOP: ME407 Revison 11
Spike Solution: STD41894
Spike Witness: REK
HNO3 Lot #: COA15353
Digestion Tubes Lot #: COA15342
ICP-MS;WG353543 Lot #: COA15313

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Initial Vessel Wt	Final Vessel Wt	Spike Amount	Due Date
1	WG361305-02	BLANK	1	40 mL	100 mL	205.267 g	205.261 g		
2	WG361305-03	LCS	1	40 mL	100 mL	206.633 g	206.622 g	.25 mL	
3	L11040216-29	SAMP	1	40 mL	100 mL	205.958 g	205.953 g		04/15/11
4	L11040216-30	SAMP	1	40 mL	100 mL	205.775 g	205.773 g		04/15/11
5	L11040220-02	SAMP	1	40 mL	100 mL	207.279 g	207.273 g		04/15/11
6	L11040220-04	SAMP	1	40 mL	100 mL	206.935 g	206.924 g		04/15/11
7	L11040220-06	SAMP	1	40 mL	100 mL	206.668 g	206.659 g		04/15/11
8	L11040220-08	SAMP	1	40 mL	100 mL	206.992 g	206.986 g		04/15/11
9	L11040220-10	SAMP	1	40 mL	100 mL	208.472 g	208.474 g		04/15/11
10	L11040220-12	SAMP	1	40 mL	100 mL	204.58 g	204.577 g		04/15/11
11	WG361305-01	REF	1	40 mL	100 mL	207.659 g	207.654 g		
12	L11040220-16	SAMP	1	40 mL	100 mL	207.659 g	207.654 g		04/15/11
13	L11040220-18	SAMP	1	40 mL	100 mL	207.91 g	207.902 g		04/15/11
14	L11040220-20	SAMP	1	40 mL	100 mL	207.551 g	207.54 g		04/15/11
15	L11040220-22	SAMP	1	40 mL	100 mL	206.734 g	206.728 g		04/15/11
16	L11040220-24	SAMP	1	40 mL	100 mL	206.422 g	206.411 g		04/15/11
17	L11040220-26	SAMP	1	40 mL	100 mL	207.435 g	207.429 g		04/15/11
18	L11040220-28	SAMP	1	40 mL	100 mL	207.659 g	207.643 g		04/15/11
19	L11040220-30	SAMP	1	40 mL	100 mL	207.085 g	207.077 g		04/15/11
20	L11040220-32	SAMP	1	40 mL	100 mL	207.21 g	207.208 g		04/15/11
21	L11040302-01	SAMP	1	40 mL	100 mL	207.054 g	207.047 g		04/15/11
22	L11040306-01	SAMP	1	40 mL	100 mL	207.57 g	207.562 g		04/15/11
23	WG361305-04	MS	1	40 mL	100 mL	206.383 g	206.359 g	.25 mL	
24	WG361305-05	MSD	1	40 mL	100 mL	206.676 g	206.673 g	.25 mL	

L11040220-02	filtered w/coa15313
L11040220-04	filtered w/ coa15313
L11040220-06	filtered w/ coa15313
L11040220-08	filtered w/ coa15313
L11040220-10	filtered w/ coa15313
L11040220-18	filtered w/ coa15313
L11040220-20	filtered w/ coa15313
L11040220-22	filtered w/ coa15313
L11040220-24	filtered w/ coa15313
L11040220-26	filtered w/ coa15313
L11040220-28	filtered w/ coa15313
L11040220-30	filtered w/ coa15313

MW_DIG - Modified 09/30/2009
PDF ID: 1971092
Report generated: 04/11/2011 09:48

Microbac Laboratories Inc.
Microwave Digestion Log

L11040306-01	filtered w/ coa15313	SOP:

Spike Solution:

Spike Witness:

Analyst: 

Reviewer: 

Method:

Balance:

Instrument:

MW_DIG - Modified 09/30/2009
PDF ID: 1971092
Report generated: 04/11/2011 09:48

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 041111A.REP
Analyst1: EDL Analyst2: N/A
Method: 6020 SOP: ME700 Rev: 7
Maintenance Log ID: 37034

Calibration Std: STD44629 ICV Std: STD44275 Post Spike: STD42704
ICSA: STD44932 ICSAB: STD44933 Int. Std: STD44811
CCV: STD44692 LLCCV: STD44536

Workgroups: 361117, 361271, 361365

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	EL.041111.085620	Blank	Blank		1		04/11/11 08:56
2	EL.041111.090325	WG361366-01	Calibration Point		1		04/11/11 09:03
3	EL.041111.091030	WG361366-02	Calibration Point		1		04/11/11 09:10
4	EL.041111.091736	WG361366-03	Calibration Point		1		04/11/11 09:17
5	EL.041111.092442	WG361366-04	Calibration Point		1		04/11/11 09:24
6	EL.041111.093148	WG361366-05	Initial Calibration Verification		1		04/11/11 09:31
7	EL.041111.093853	WG361366-06	Initial Calib Blank		1		04/11/11 09:38
8	EL.041111.094600	WG361366-07	Low Level Initial Calibration V		1		04/11/11 09:46
9	EL.041111.095310	WG361366-08	Interference Check		1		04/11/11 09:53
10	EL.041111.100018	WG361366-09	Interference Check		1		04/11/11 10:00
11	EL.041111.100726	WG361366-10	CCV		1		04/11/11 10:07
12	EL.041111.101432	WG361366-11	CCB		1		04/11/11 10:14
13	EL.041111.102137	WG361054-02	Method/Prep Blank	.5/200	1		04/11/11 10:21
14	EL.041111.102841	WG361054-03	Laboratory Control S	.5/200	1		04/11/11 10:28
15	EL.041111.103546	L11040189-01	\#5	.524/200	5		04/11/11 10:35
16	EL.041111.104252	L11040189-03	\#6/B-3	.547/200	5		04/11/11 10:42
17	EL.041111.104958	WG361054-01	Reference Sample		5	L11040216-12	04/11/11 10:49
18	EL.041111.105705	WG361054-04	Matrix Spike	.503/200	5	L11040216-12	04/11/11 10:57
19	EL.041111.110412	WG361054-05	Matrix Spike Duplica	.503/200	5	L11040216-12	04/11/11 11:04
20	EL.041111.111119	L11040216-04	KA0004	.513/200	5		04/11/11 11:11
21	EL.041111.111826	WG361117-01	Post Digestion Spike		5	L11040216-04	04/11/11 11:18
22	EL.041111.112534	WG361117-02	Serial Dilution		25	L11040216-04	04/11/11 11:25
23	EL.041111.113242	WG361366-12	CCV		1		04/11/11 11:32
24	EL.041111.113948	WG361366-13	CCB		1		04/11/11 11:39
25	EL.041111.114655	WG361366-14	Low Level Continuing Calibra		1		04/11/11 11:46
26	EL.041111.115404	L11040216-01	KA0001	.505/200	5		04/11/11 11:54
27	EL.041111.120111	L11040216-02	KA0002	.502/200	5		04/11/11 12:01
28	EL.041111.120817	L11040216-03	KA0003	.528/200	5		04/11/11 12:08
29	EL.041111.121522	L11040216-05	KA0005	.508/200	5		04/11/11 12:15
30	EL.041111.122229	L11040216-06	KA0006	.502/200	5		04/11/11 12:22
31	EL.041111.122935	L11040216-07	KA0007	.515/200	5		04/11/11 12:29
32	EL.041111.123642	L11040216-08	KA0008	.543/200	5		04/11/11 12:36
33	EL.041111.124349	L11040216-09	KA0009	.516/200	5		04/11/11 12:43
34	EL.041111.125056	L11040216-10	KA0010	.519/200	5		04/11/11 12:50

Page: 1 Approved: April 13, 2011

Microbac

Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 041111A.REP
Analyst1: EDL Analyst2: N/A
Method: 6020 SOP: ME700 Rev: 7
Maintenance Log ID: 37034

Calibration Std: STD44629 ICV Std: STD44275 Post Spike: STD42704
ICSA: STD44932 ICSAB: STD44933 Int. Std: STD44811
CCV: STD44692 LLCCV: STD44536

Workgroups: 361117, 361271, 361365

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	EL.041111.125804	L11040216-11	KA0011	.508/200	5		04/11/11 12:58
36	EL.041111.130512	WG361366-15	CCV		1		04/11/11 13:05
37	EL.041111.131218	WG361366-16	CCB		1		04/11/11 13:12
38	EL.041111.132329	WG361117-01	Post Digestion Spike		5	L11040216-04	04/11/11 13:23
39	EL.041111.133036	L11040216-15	KA0013	.504/200	5		04/11/11 13:30
40	EL.041111.133744	L11040216-16	KA0014	.512/200	5		04/11/11 13:37
41	EL.041111.134453	L11040216-17	KA0015	.51/200	5		04/11/11 13:44
42	EL.041111.135200	L11040216-18	KA0016	.511/200	5		04/11/11 13:52
43	EL.041111.135906	L11040216-19	KA0017	.532/200	5		04/11/11 13:59
44	EL.041111.140612	L11040216-20	KA0018	.507/200	5		04/11/11 14:06
45	EL.041111.141319	WG361366-17	Interference Check		1		04/11/11 14:13
46	EL.041111.142028	WG361366-18	Interference Check		1		04/11/11 14:20
47	EL.041111.142736	WG361366-19	CCV		1		04/11/11 14:27
48	EL.041111.143442	WG361366-20	CCB		1		04/11/11 14:34
49	EL.041111.144149	WG361366-21	Low Level Continuing Calibra		1		04/11/11 14:41
50	EL.041111.145714	WG361210-03	Method/Prep Blank	.5/200	1		04/11/11 14:57
51	EL.041111.150419	WG361210-04	Laboratory Control S	.5/200	1		04/11/11 15:04
52	EL.041111.151124	L11040216-21	KA0019	.5/200	5		04/11/11 15:11
53	EL.041111.151830	L11040216-22	KA0020	.501/200	5		04/11/11 15:18
54	EL.041111.152535	L11040216-23	KA0021	.518/200	5		04/11/11 15:25
55	EL.041111.153242	L11040216-24	KA0022	.522/200	5		04/11/11 15:32
56	EL.041111.153948	WG361210-01	Reference Sample		5	L11040216-25	04/11/11 15:39
57	EL.041111.154655	WG361210-05	Matrix Spike	.504/200	5	L11040216-25	04/11/11 15:46
58	EL.041111.155402	WG361210-06	Matrix Spike Duplica	.504/200	5	L11040216-25	04/11/11 15:54
59	EL.041111.160110	L11040216-28	KA0024	.508/200	5		04/11/11 16:01
60	EL.041111.160817	WG361366-22	CCV		1		04/11/11 16:08
61	EL.041111.161523	WG361366-23	CCB		1		04/11/11 16:15
62	EL.041111.162230	L11040253-01	SSW-2	.513/200	5		04/11/11 16:22
63	EL.041111.162938	WG361271-01	Post Digestion Spike		5	L11040253-01	04/11/11 16:29
64	EL.041111.163645	WG361271-02	Serial Dilution		25	L11040253-01	04/11/11 16:36
65	EL.041111.164350	L11040253-03	NSW-3	.501/200	5		04/11/11 16:43
66	EL.041111.165056	L11040253-05	ESW-2	.503/200	5		04/11/11 16:50
67	EL.041111.165802	L11040253-07	B-4	.53/200	5		04/11/11 16:58
68	EL.041111.170508	L11040266-01	GC-SD-01-0006	.51/200	5		04/11/11 17:05

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Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 041111A.REP
Analyst1: EDL Analyst2: N/A
Method: 6020 SOP: ME700 Rev: 7
Maintenance Log ID: 37034

Calibration Std: STD44629 ICV Std: STD44275 Post Spike: STD42704
ICSA: STD44932 ICSAB: STD44933 Int. Std: STD44811
CCV: STD44692 LLCCV: STD44536

Workgroups: 361117, 361271, 361365

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
69	EL.041111.171215	L11040266-02	GC-SD-02-0006	.5/200	5		04/11/11 17:12
70	EL.041111.171922	L11040266-03	GC-SD-03-0006	.515/200	5		04/11/11 17:19
71	EL.041111.172630	WG361210-02	Reference Sample		5	L11040266-04	04/11/11 17:26
72	EL.041111.173337	WG361366-24	CCV		1		04/11/11 17:33
73	EL.041111.174043	WG361366-25	CCB		1		04/11/11 17:40
74	EL.041111.174749	WG361210-07	Matrix Spike	.527/200	5	L11040266-04	04/11/11 17:47
75	EL.041111.175458	WG361210-08	Matrix Spike Duplica	.527/200	5	L11040266-04	04/11/11 17:54
76	EL.041111.180206	L11040266-07	CR-SD-05-0006	.506/200	5		04/11/11 18:02
77	EL.041111.180915	L11040266-08	CR-SD-06-0006	.511/200	5		04/11/11 18:09
78	EL.041111.181622	L11040266-09	CR-SD-07-0006	.531/200	5		04/11/11 18:16
79	EL.041111.182328	L11040266-10	DUP-CR-SD-01-0006	.518/200	5		04/11/11 18:23
80	EL.041111.183035	WG361366-26	Interference Check		1		04/11/11 18:30
81	EL.041111.183743	WG361366-27	Interference Check		1		04/11/11 18:37
82	EL.041111.184451	WG361366-28	CCV		1		04/11/11 18:44
83	EL.041111.185157	WG361366-29	CCB		1		04/11/11 18:51
84	EL.041111.185905	WG361366-30	Low Level Continuing Calibra		1		04/11/11 18:59
85	EL.041111.190613	WG361305-02	Method/Prep Blank	40/100	1		04/11/11 19:06
86	EL.041111.191319	WG361305-03	Laboratory Control S	40/100	1		04/11/11 19:13
87	EL.041111.192026	L11040216-29	ER0017	40/100	1		04/11/11 19:20
88	EL.041111.192733	L11040216-30	ER0018	40/100	1		04/11/11 19:27
89	EL.041111.193440	L11040220-02	MW-16	40/100	5		04/11/11 19:34
90	EL.041111.194148	L11040220-04	MW-18	40/100	5		04/11/11 19:41
91	EL.041111.194856	L11040220-06	MW-48	40/100	5		04/11/11 19:48
92	EL.041111.195605	L11040220-08	MW-28	40/100	1		04/11/11 19:56
93	EL.041111.200314	WG361365-01	Post Digestion Spike		1	L11040220-08	04/11/11 20:03
94	EL.041111.201023	WG361365-02	Serial Dilution		5	L11040220-08	04/11/11 20:10
95	EL.041111.201731	WG361366-31	CCV		1		04/11/11 20:17
96	EL.041111.202437	WG361366-32	CCB		1		04/11/11 20:24
97	EL.041111.203143	L11040220-10	MW-2	40/100	5		04/11/11 20:31
98	EL.041111.203849	L11040220-12	MW-5		5		04/11/11 20:38
99	EL.041111.204555	L11040220-16	MW-12		1	WG361305-01	04/11/11 20:45
100	EL.041111.205302	WG361305-04	Matrix Spike	40/100	1	L11040220-16	04/11/11 20:53
101	EL.041111.210009	WG361305-05	Matrix Spike Duplica	40/100	1	L11040220-16	04/11/11 21:00
102	EL.041111.210716	L11040220-18	MW-39S	40/100	5		04/11/11 21:07

Page: 3 Approved: April 13, 2011



Microbac Laboratories Inc.

Instrument Run Log

Instrument: ELAN-ICP Dataset: 041111A.REP
Analyst1: EDL Analyst2: N/A
Method: 6020 SOP: ME700 Rev: 7
Maintenance Log ID: 37034

Calibration Std: STD44629 ICV Std: STD44275 Post Spike: STD42704
ICSA: STD44932 ICSAB: STD44933 Int. Std: STD44811
CCV: STD44692 LLCCV: STD44536

Workgroups: 361117, 361271, 361365

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
103	EL.041111.211424	L11040220-20	MW-31	40/100	5		04/11/11 21:14
104	EL.041111.212132	L11040220-22	MW-35	40/100	1		04/11/11 21:21
105	EL.041111.212841	L11040220-24	MW-37	40/100	1		04/11/11 21:28
106	EL.041111.213550	L11040220-26	MW-36	40/100	1		04/11/11 21:35
107	EL.041111.214258	WG361366-33	CCV		1		04/11/11 21:42
108	EL.041111.215004	WG361366-34	CCB		1		04/11/11 21:50
109	EL.041111.215711	L11040220-28	MW-46	40/100	1		04/11/11 21:57
110	EL.041111.220421	L11040220-30	MW-32	40/100	5		04/11/11 22:04
111	EL.041111.221129	L11040220-32	FB-1	40/100	1		04/11/11 22:11
112	EL.041111.221835	L11040302-01	SANITARY LEACHATE	40/100	1		04/11/11 22:18
113	EL.041111.222542	L11040306-01	SWMU-57-4711-WC	40/100	1		04/11/11 22:25
114	EL.041111.223249	WG361366-35	Interference Check		1		04/11/11 22:32
115	EL.041111.223958	WG361366-36	Interference Check		1		04/11/11 22:39
116	EL.041111.224706	WG361366-37	CCV		1		04/11/11 22:47
117	EL.041111.225412	WG361366-38	CCB		1		04/11/11 22:54
118	EL.041111.230120	WG361366-39	Low Level Continuing Calibra		1		04/11/11 23:01

Comments

Seq.	Rerun	Dil.	Reason	Analytes
21			Data not used due to a possible pipetting error.	

  Approved: April 13, 2011

Esther L. Babgard

Microbac

Microbac Laboratories Inc.

Data Checklist

Date: 11-APR-2011
Analyst: EDL
Analyst: NA
Method: 6020
Instrument: ELAN-ICP
Curve Workgroup: 361366
Runlog ID: 39938
Analytical Workgroups: 361117, 361271, 361365

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	189, 216, 253, 266, 220, 306
Client Forms	X
Level X	
Level 3	
Level 4	189, 216, 253, 266, 220, 306
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	EDL
Secondary Reviewer	SLP
Comments	

Primary Reviewer:
11-APR-2011

Secondary Reviewer:
13-APR-2011

CHECKLIST1 - Modified 03/05/2008
Generated: APR-13-2011 15:33:32

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method 6020 AAB#: WG361365

Login Number: L11040306

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-4711-WC	01	04/07/11					04/11/11	3.7	180		04/11/11	4.3	180	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1972490
Report generated 04/12/2011 08:26

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L11040306	Work Group:	WG361365
Blank File ID:	EL.041111.190613	Blank Sample ID:	WG361305-02
Prep Date:	04/11/11 07:33	Instrument ID:	ELAN-ICP
Analyzed Date:	04/11/11 19:06	Method:	6020
Analyst:	EDL		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG361305-03	EL.041111.191319	04/11/11 19:13	01
SWMU-57-4711-WC	L11040306-01	EL.041111.222542	04/11/11 22:25	01

Report Name: BLANK_SUMMARY
PDF File ID: 1972492
Report generated 04/12/2011 08:26

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11040306 Prep Date: 04/11/11 07:33 Sample ID: WG361305-02
Instrument ID: ELAN-ICP Run Date: 04/11/11 19:06 Prep Method: 3015
File ID: EL.041111.190613 Analyst: EDL Method: 6020
Workgroup (AAB#): WG361365 Matrix: Water Units: mg/L
Contract #: Cal ID: ELAN-I-11-APR-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Antimony, Total	0.000500	0.00100	0.000500	1	U
Selenium, Total	0.000500	0.00100	0.000500	1	U
Thallium, Total	0.000100	0.000200	0.000100	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1972493
12-APR-2011 08:26

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361305-03
Instrument ID: ELAN-ICP Run Time: 19:13 Prep Method: 3015
File ID: EL.041111.191319 Analyst: EDL Method: 6020
Workgroup (AAB#): WG361365 Matrix: Water Units: mg/L
QC Key: DOD4 Lot#: STD41894 Cal ID: ELAN-I-11-APR-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Antimony, Total	0.0625	0.0589	94.3	80 - 120	
Selenium, Total	0.0625	0.0502	80.4	80 - 120	
Thallium, Total	0.0625	0.0625	99.9	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1972494
Report generated: 04/12/2011 08:26

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11040306 Cal ID:ELAN-ICP- Worknum:WG361365
Instrument ID:ELAN-ICP Contract #: Method:6020
Parent ID:WG361305-01 File ID:EL.041111.204555 Dil:1 Matrix:WATER
Sample ID:WG361305-04 MS File ID:EL.041111.205302 Dil:1 Units:mg/L
Sample ID:WG361305-05 MSD File ID:EL.041111.210009 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Antimony, Dissolved	ND	0.0625	0.0606	97.0	0.0625	0.0613	98.1	1.15	80 - 120	20	
Selenium, Dissolved	0.000784	0.0625	0.0523	82.5	0.0625	0.0529	83.4	1.06	80 - 120	20	
Thallium, Dissolved	ND	0.0625	0.0633	101	0.0625	0.0636	102	0.477	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008
PDF File ID:1972495
Report generated 04/12/2011 08:26

Microbac Laboratories Inc.
Serial Dilution Report

Login: L11040306 **Worknum:** WG361365
Instrument: ELAN-ICP **Method:** 6020
Serial Dil: WG361365-02 **File ID:** EL.041111.201023 **Dil:** 5 **Units:** ug/L
Sample: L11040220-08 **File ID:** EL.041111.195605 **Dil:** 1

Analyte	Sample	Qual	Serial Dil	Qual	% Diff	Q
Antimony	ND	U	ND	U		
Selenium	.238	F	ND	U		
Thallium	ND	U	ND	U		

U = Result is below MDL.
F = Result is greater than or equal to MDL and less than the RL.
X = Result is greater than or equal to RL and less than 100 times the MDL.
E = %D exceeds control limit of 10% and initial sample result is greater than or equal to 100 times the MDL.

SERIAL_DIL - Modified 09/22/2008
PDF File ID: 1972488
04/12/2011 08:26

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11040306 **Worknum:** WG361365
Instrument ID: ELAN-ICP **Method:** 6020
Post Spike ID: WG361365-01 **File ID:** EL.041111.200314 **Dil:** 1 **Units:** ug/L
Sample ID: L11040220-08 **File ID:** EL.041111.195605 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
ANTIMONY	47.3		0	U	50	94.7	75 - 125	
SELENIUM	40.3		0.238	F	50	80.1	75 - 125	
THALLIUM	51.5		0	U	50	102.9	75 - 125	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1972489
Report generated: 04/12/2011 08:26

Microbac Laboratories Inc.
Initial Calibration Summary

Login:	**L11040306**	Workgroup (AAB#):	**WG361365**
Analytical Method:	**6020**	Instrument ID:	**ELAN-ICP**
ICAL Worknum:	**WG361366**	Initial Calibration Date:	**11-APR-2011 09:24**

	WG361366-01		WG361366-02		WG361366-03		WG361366-04			
	Conc	INT	Conc	INT	Conc	INT	Conc	INT	R	Q
ANTIMONY	0	23.4	.4	1560	50	190000	100	371000	.999998	
SELENIUM	0	-5.29	.4	42.8	50	5300	100	9990	.999835	
THALLIUM	0	41.7	.4	3560	50	423000	100	831000	.999994	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
*** = Out of Compliance; R < 0.995**

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-06
Instrument ID: ELAN-ICP Run Time: 09:38 Method: 6020
File ID: EL.041111.093853 Analyst: EDL Units: ug/L
Workgroup (AAB#): WG361365 Cal ID: ELAN-ICP - 11-APR-11
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
ANTIMONY	.2	.4	.2	U
SELENIUM	.2	.4	.2	U
THALLIUM	.04	.08	.04	U

U = Result is less than 2 x MDL
F = Result is between MDL and 2 x MDL
* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1972500
Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/11/2011	Sample ID:	WG361366-11
Instrument ID:	ELAN-ICP	Run Time:	10:14	Method:	6020
File ID:	EL.041111.101432	Analyst:	EDL	Units:	ug/L
Workgroup (AAB#):	WG361365	Cal ID:	ELAN-I - 11-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1972503
Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/11/2011	Sample ID:	WG361366-16
Instrument ID:	ELAN-ICP	Run Time:	13:12	Method:	6020
File ID:	EL.041111.131218	Analyst:	EDL	Units:	ug/L
Workgroup (AAB#):	WG361365	Cal ID:	ELAN-I - 11-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1972503
Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/11/2011	Sample ID:	WG361366-20
Instrument ID:	ELAN-ICP	Run Time:	14:34	Method:	6020
File ID:	EL.041111.143442	Analyst:	EDL	Units:	ug/L
Workgroup (AAB#):	WG361365	Cal ID:	ELAN-I - 11-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1972503
Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/11/2011	Sample ID:	WG361366-25
Instrument ID:	ELAN-ICP	Run Time:	17:40	Method:	6020
File ID:	EL.041111.174043	Analyst:	EDL	Units:	ug/L
Workgroup (AAB#):	WG361365	Cal ID:	ELAN-I - 11-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1972503
Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/11/2011	Sample ID:	WG361366-29
Instrument ID:	ELAN-ICP	Run Time:	18:51	Method:	6020
File ID:	EL.041111.185157	Analyst:	EDL	Units:	ug/L
Workgroup (AAB#):	WG361365	Cal ID:	ELAN-I - 11-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1972503
Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/11/2011	Sample ID:	WG361366-32
Instrument ID:	ELAN-ICP	Run Time:	20:24	Method:	6020
File ID:	EL.041111.202437	Analyst:	EDL	Units:	ug/L
Workgroup (AAB#):	WG361365	Cal ID:	ELAN-I - 11-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1972503
Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/11/2011	Sample ID:	WG361366-34
Instrument ID:	ELAN-ICP	Run Time:	21:50	Method:	6020
File ID:	EL.041111.215004	Analyst:	EDL	Units:	ug/L
Workgroup (AAB#):	WG361365	Cal ID:	ELAN-I - 11-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1972503
Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/11/2011	Sample ID:	WG361366-38
Instrument ID:	ELAN-ICP	Run Time:	22:54	Method:	6020
File ID:	EL.041111.225412	Analyst:	EDL	Units:	ug/L
Workgroup (AAB#):	WG361365	Cal ID:	ELAN-I - 11-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Antimony	0.200	0.400	0.200	U
Selenium	0.200	0.400	0.200	U
Thallium	0.0400	0.0800	0.0400	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1972503
Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-05

Instrument ID: ELAN-ICP Run Time: 09:31 Method: 6020

File ID: EL.041111.093148 Analyst: EDL Units: ug/L

Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11

QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Antimony		50	48.6	97.3	90 - 110	
Selenium		50	50.6	101	90 - 110	
Thallium		50	50.2	100	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008

PDF File ID: 1972499

Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-10

Instrument ID: ELAN-ICP Run Time: 10:07 Method: 6020

File ID: EL.041111.100726 Analyst: EDL QC Key: DOD4

Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.1	ug/L	100	90 - 110		
Selenium		50.0	51.1	ug/L	102	90 - 110		
Thallium		50.0	49.2	ug/L	98.4	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1972502

Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-15

Instrument ID: ELAN-ICP Run Time: 13:05 Method: 6020

File ID: EL.041111.130512 Analyst: EDL QC Key: DOD4

Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	49.4	ug/L	98.8	90 - 110		
Selenium		50.0	51.9	ug/L	104	90 - 110		
Thallium		50.0	49.3	ug/L	98.7	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1972502

Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-19

Instrument ID: ELAN-ICP Run Time: 14:27 Method: 6020

File ID: EL.041111.142736 Analyst: EDL QC Key: DOD4

Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	49.7	ug/L	99.4	90 - 110		
Selenium		50.0	50.2	ug/L	100	90 - 110		
Thallium		50.0	49.7	ug/L	99.4	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1972502

Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-24

Instrument ID: ELAN-ICP Run Time: 17:33 Method: 6020

File ID: EL.041111.173337 Analyst: EDL QC Key: DOD4

Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.3	ug/L	101	90 - 110		
Selenium		50.0	51.1	ug/L	102	90 - 110		
Thallium		50.0	50.0	ug/L	100	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1972502

Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-28

Instrument ID: ELAN-ICP Run Time: 18:44 Method: 6020

File ID: EL.041111.184451 Analyst: EDL QC Key: DOD4

Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	51.0	ug/L	102	90 - 110		
Selenium		50.0	50.0	ug/L	100	90 - 110		
Thallium		50.0	50.2	ug/L	100	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1972502

Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-31

Instrument ID: ELAN-ICP Run Time: 20:17 Method: 6020

File ID: EL.041111.201731 Analyst: EDL QC Key: DOD4

Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.0	ug/L	100	90 - 110		
Selenium		50.0	50.5	ug/L	101	90 - 110		
Thallium		50.0	49.2	ug/L	98.4	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1972502

Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-33

Instrument ID: ELAN-ICP Run Time: 21:42 Method: 6020

File ID: EL.041111.214258 Analyst: EDL QC Key: DOD4

Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	49.1	ug/L	98.1	90 - 110		
Selenium		50.0	49.8	ug/L	99.5	90 - 110		
Thallium		50.0	49.3	ug/L	98.5	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1972502

Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-37

Instrument ID: ELAN-ICP Run Time: 22:47 Method: 6020

File ID: EL.041111.224706 Analyst: EDL QC Key: DOD4

Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		50.0	50.4	ug/L	101	90 - 110		
Selenium		50.0	48.7	ug/L	97.3	90 - 110		
Thallium		50.0	49.1	ug/L	98.1	90 - 110		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1972502

Report generated 04/12/2011 08:27

Microbac Laboratories Inc.

LOW LEVEL CALIBRATION VERIFICATION

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-07
Instrument ID: ELAN-ICP Run Time: 09:46 Method: 6020
File ID: EL.041111.094600 Analyst: EDL QC Key: DOD4
Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		0.400	0.410	ug/L	103	80 - 120		
Thallium		0.0800	0.0724	ug/L	90.5	80 - 120		

* Exceeds LIMITS Criteria

LLCCV - Modified 1/7/2010
PDF File ID: 1972504
Report generated 04/13/2011 17:10

Microbac Laboratories Inc.

LOW LEVEL CALIBRATION VERIFICATION

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-14
Instrument ID: ELAN-ICP Run Time: 11:46 Method: 6020
File ID: EL.041111.114655 Analyst: EDL QC Key: DOD4
Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		0.400	0.400	ug/L	99.9	80 - 120		
Thallium		0.0800	0.0689	ug/L	86.1	80 - 120		

* Exceeds LIMITS Criteria

LLCCV - Modified 1/7/2010
PDF File ID: 1972504
Report generated 04/13/2011 17:10

Microbac Laboratories Inc.

LOW LEVEL CALIBRATION VERIFICATION

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-21
Instrument ID: ELAN-ICP Run Time: 14:41 Method: 6020
File ID: EL.041111.144149 Analyst: EDL QC Key: DOD4
Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11
Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		0.400	0.407	ug/L	102	80 - 120		
Thallium		0.0800	0.0733	ug/L	91.6	80 - 120		

* Exceeds LIMITS Criteria

LLCCV - Modified 1/7/2010
PDF File ID: 1972504
Report generated 04/13/2011 17:10

Microbac Laboratories Inc.

LOW LEVEL CALIBRATION VERIFICATION

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-30

Instrument ID: ELAN-ICP Run Time: 18:59 Method: 6020

File ID: EL.041111.185905 Analyst: EDL QC Key: DOD4

Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		0.400	0.434	ug/L	108	80 - 120		
Thallium		0.0800	0.0719	ug/L	89.9	80 - 120		

* Exceeds LIMITS Criteria

LLCCV - Modified 1/7/2010

PDF File ID: 1972504

Report generated 04/13/2011 17:10

Microbac Laboratories Inc.

LOW LEVEL CALIBRATION VERIFICATION

Login Number: L11040306 Run Date: 04/11/2011 Sample ID: WG361366-39

Instrument ID: ELAN-ICP Run Time: 23:01 Method: 6020

File ID: EL.041111.230120 Analyst: EDL QC Key: DOD4

Workgroup (AAB#): WG361365 Cal ID: ELAN-I - 11-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Antimony		0.400	0.425	ug/L	106	80 - 120		
Thallium		0.0800	0.0710	ug/L	88.8	80 - 120		

* Exceeds LIMITS Criteria

LLCCV - Modified 1/7/2010

PDF File ID: 1972504

Report generated 04/13/2011 17:10

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11040306 **Workgroup (AAB#):** WG361365
Instrument ID: ELAN-ICP **Method:** 6020
Sol. A : WG361366-08 **File ID:** EL.041111.095310 **Units:** ug/L
Sol. AB : WG361366-09 **File ID:** EL.041111.100018 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0514	NS	100	106	106	
Selenium	NS	0.0184	NS	100	98.2	98.2	
Thallium	NS	-0.0108	NS	100	100	100	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11040306 **Workgroup (AAB#):** WG361365
Instrument ID: ELAN-ICP **Method:** 6020
Sol. A : WG361366-17 **File ID:** EL.041111.141319 **Units:** ug/L
Sol. AB : WG361366-18 **File ID:** EL.041111.142028 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0404	NS	100	104	104	
Selenium	NS	-0.00480	NS	100	97.1	97.1	
Thallium	NS	-0.0119	NS	100	98.5	98.5	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11040306 **Workgroup (AAB#):** WG361365
Instrument ID: ELAN-ICP **Method:** 6020
Sol. A : WG361366-26 **File ID:** EL.041111.183035 **Units:** ug/L
Sol. AB : WG361366-27 **File ID:** EL.041111.183743 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0406	NS	100	103	103	
Selenium	NS	-0.0477	NS	100	94.6	94.6	
Thallium	NS	-0.00580	NS	100	98.3	98.3	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

Microbac Laboratories Inc.
INTERFERENCE CHECK SAMPLES

Login number: L11040306 **Workgroup (AAB#):** WG361365
Instrument ID: ELAN-ICP **Method:** 6020
Sol. A : WG361366-35 **File ID:** EL.041111.223249 **Units:** ug/L
Sol. AB : WG361366-36 **File ID:** EL.041111.223958 **Matrix:** Water

	Sol. A			Sol. AB			
ANALYTE	True	Found	%Recovery	True	Found	%Recovery	Q
Antimony	NS	0.0388	NS	100	104	104	
Selenium	NS	0.112	NS	100	90.0	90.0	
Thallium	NS	-0.0117	NS	100	98.2	98.2	

NS = Not spiked
*** = Recovery of spiked element is outside acceptance limit of 80% - 120% of true value.**
 # = Result for unspiked element is outside the acceptance limits of (+/-) the project reporting limit (RL).
+ = Result for unspiked element is outside the acceptance limits of (+/-) 2 times the project method detection limit (MDL). This criteria is only applicable to specific QAPPs.

Microbac Laboratories Inc.

INTERNAL STANDARD REPORT

Login: L11040306 **Analytical Method** 6020
Analytical Workgroup: WG361365 **Matrix:** 1
Instrument: ELAN-ICP **Analyst:** EDL
ICAL Date: 11-APR-2011 09:03

			BISMUTH	GERMANIUM	INDIUM	TERBIUM
Sample	Type	Run Date	% Rec	% Rec	% Rec	% Rec
L11040220-08	SAMP	11-APR-2011 19:56	104.664	116.644	112.347	114.619
L11040306-01	SAMP	11-APR-2011 22:25	95.77	107.775	99.376	105.509
WG361305-02	BLANK	11-APR-2011 19:06	96.082	102.361	98.975	102.644
WG361305-03	LCS	11-APR-2011 19:13	95.34	102.192	98.567	100.89
WG361365-01	PSPK	11-APR-2011 20:03	99.658	110.619	105.783	109.308
WG361365-02	SERIAL	11-APR-2011 20:10	98.13	107.163	100.867	102.839
WG361366-05	ICV	11-APR-2011 09:31	96.938	97.176	98.617	100.913
WG361366-06	ICB	11-APR-2011 09:38	99.017	97.973	99.472	101.06
WG361366-07	LLICV	11-APR-2011 09:46	97.811	99.287	100.972	100.756
WG361366-08	ICS	11-APR-2011 09:53	96.649	99.123	97.76	100.001
WG361366-09	ICS	11-APR-2011 10:00	95.678	93.349	88.984	96.489
WG361366-10	CCV	11-APR-2011 10:07	97.752	101.115	99.722	101.691
WG361366-11	CCB	11-APR-2011 10:14	98.966	101.425	101.214	100.517
WG361366-14	LLCCV	11-APR-2011 11:46	98.149	108.753	106.478	103.143
WG361366-15	CCV	11-APR-2011 13:05	97.513	108.802	106.943	104.555
WG361366-16	CCB	11-APR-2011 13:12	99.493	110.93	109.551	105.808
WG361366-17	ICS	11-APR-2011 14:13	95.489	103.976	100.076	100.318
WG361366-18	ICS	11-APR-2011 14:20	93.969	90.42	86.024	94.647
WG361366-19	CCV	11-APR-2011 14:27	95.839	103.042	100.616	99.407
WG361366-20	CCB	11-APR-2011 14:34	98.092	105.858	102.013	101.683
WG361366-21	LLCCV	11-APR-2011 14:41	98.761	106.986	102.705	102.917
WG361366-24	CCV	11-APR-2011 17:33	93.578	101.879	98.819	98.588
WG361366-25	CCB	11-APR-2011 17:40	92.983	102.669	97.321	99.038
WG361366-26	ICS	11-APR-2011 18:30	88.947	95.321	89.439	92.739
WG361366-27	ICS	11-APR-2011 18:37	86.504	82.307	77.51	88.604
WG361366-28	CCV	11-APR-2011 18:44	91.312	96.948	92.861	96.098
WG361366-29	CCB	11-APR-2011 18:51	91.59	96.916	92.761	95.634
WG361366-30	LLCCV	11-APR-2011 18:59	93.757	101.288	96.013	98.877
WG361366-31	CCV	11-APR-2011 20:17	93.679	105.865	100.479	101.228
WG361366-32	CCB	11-APR-2011 20:24	95.14	105.276	101.022	102.106
WG361366-33	CCV	11-APR-2011 21:42	98.304	107.566	102.978	104.339
WG361366-34	CCB	11-APR-2011 21:50	98.227	107.337	101.931	105.252
WG361366-35	ICS	11-APR-2011 22:32	95.534	105.682	96.722	100.762
WG361366-36	ICS	11-APR-2011 22:39	90.96	91.242	84.256	94.543
WG361366-37	CCV	11-APR-2011 22:47	95.873	100.932	96.66	99.948
WG361366-38	CCB	11-APR-2011 22:54	96.901	100.624	98.563	100.451
WG361366-39	LLCCV	11-APR-2011 23:01	97.613	104.056	98.541	101.69

Acceptance criteria: 30% - 120% Underlined recoveries are out of range
Acceptance criteria for CCVs and CCBs for method SW846-6020: 80% - 120%

INT_STD_ICPMS - Modified 07/28/2010
PDF File ID: 1972497
Report generated: 04/12/2011 08:26

Microbac Laboratories Inc.
LINEAR RANGE (QUARTERLY)

Login Number: L11040306 **Date:** 04/07/2011
Insturment ID: ELAN-ICP **Method:** 6020

Analyte	Integration Time (Sec.)	Concentration (ug/L)
Antimony	1.00	100.0
Arsenic	1.00	100.0
Barium	1.00	100.0
Cadmium	1.00	100.0
Chromium	1.00	100.0
Cobalt	1.00	100.0
Copper	1.00	100.0
Lead	1.00	100.0
Manganese	1.00	100.0
Nickel	1.00	100.0
Selenium	1.00	100.0
Silver	1.00	100.0
Thallium	1.00	100.0
Uranium	1.00	100.0
Vanadium	1.00	100.0
Zinc	1.00	100.0

Comments:
All analytes passed acceptance criteria at the specified concentration.

LINEAR_RANGE - Modified 03/06/2008
PDF File ID: 1972496
Report generated: 04/12/2011 08:26

2.1.2.3 Raw Data

Instrument Tuning Report

File Name: 06302008.tun
File Path: C:\elandata\Tuning\06302008.tun

Sample Information

Sample Date/Time: Monday, April 11, 2011 08:37:28

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
He	3.016	3.026	618	2060	0.743	
Li	7.016	7.029	1585	2060	0.706	
Co	58.933	58.928	14283	1990	0.649	
Ce	139.905	139.879	33989	2025	0.686	
Tl	204.975	204.977	49689	2255	0.708	

Relative Std. Dev.

Mass	Meas. Intens. RSD
2.000	1.127
3.000	1.136
4.000	15.560
5.000	13.839
6.000	1.267
7.000	0.706
8.000	22.435
9.000	2.203
58.000	1.469
59.000	0.928
60.000	9.200
139.000	1.361
140.000	0.689
141.000	11.658
204.000	2.343
205.000	0.970
206.000	1.258

Report Date/Time: Monday, April 11, 2011 08:38:39
Page 1

Approved: April 12, 2011



Daily Performance Report

Sample ID: Sample
Sample Date/Time: Monday, April 11, 2011 08:41:02
Sample Description:
Method File: C:\Elandata\Method\6020 DAILY.mth
Dataset File: C:\elandata\Dataset\040811\Sample.127
Tuning File: C:\elandata\Tuning\06302008.tun
Optimization File: C:\elandata\Optimize\Default.dac
Dual Detector Mode: Dual

Acq. Dead Time(ns): 50
Current Dead Time (ns): 50

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24.0	53026.2	53026.228	511.692	1.0
	Rh	102.9	199790.3	199790.313	1928.550	1.0
	In	114.9	516396.9	516396.896	3695.987	0.7
	Pb	208.0	233352.5	233352.499	1839.356	0.8
	U	238.1	45.3	45.300	2.465	5.4
⌈>	Ba	137.9	272760.0	272760.037	2799.912	1.0
⌊	Ba++	69.0	4494.4	0.016	0.000	1.7
⌈>	Ce	139.9	359318.0	359318.003	3493.455	1.0
⌊	CeO	155.9	8377.0	0.023	0.000	1.4
	Bkgd	220.0	12.8	12.800	2.139	16.7
	Ar2	79.9	5250470.5	5250470.487	35495.813	0.7

Current Optimization File Data

Current Value	Description
1.02	Nebulizer Gas Flow
6.40	Lens Voltage
1500.00	ICP RF Power
-1862.50	Analog Stage Voltage
1000.00	Pulse Stage Voltage
20.00	Discriminator Threshold
-10.00	AC Rod Offset

Current Autolens Data

Analyte	Mass	Num of Pts	DAC Value	Maximum Intensity
Be	9	33	5.3	3999.5
Co	59	33	6.0	120809.0
Rh	103	33	6.8	174421.7
Pb	208	33	7.8	173459.1

Sample ID: Sample
Report Date/Time: Monday, April 11, 2011 08:43:10
Page 1

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: Blank

Sample Date/Time: Monday, April 11, 2011 08:56:20
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

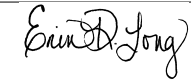
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18049.653					ug/L
|	Be	9	18.667					ug/L
|	Al	27	3033.803					ug/L
|>	Sc	45	175006.490					ug/L
⌈	Ti	49	33.337					ug/L
|	V	51	2542.326					ug/L
|	Cr	52	8296.857					ug/L
|	Cr	53	1116.841					ug/L
|	Mn	55	1090.404					ug/L
|	Co	59	71.334					ug/L
|	Ni	60	44.001					ug/L
|	Cu	65	116.335					ug/L
|	Zn	66	668.029					ug/L
|>	Ge	72	310451.459					ug/L
|	As	75	-182.508					ug/L
|	Se	77	72.667					ug/L
|	Se	82	-0.551					ug/L
⌊	Rb	85	22.667					mg/L
	Y	89	225984.034					ug/L
	Rh	103	14.000					ug/L
⌈	Mo	98	22.388					ug/L
|	Ag	107	116.002					ug/L
|	Cd	114	0.037					ug/L
|>	In	115	313091.139					ug/L
|	Sn	118	185.735					ug/L
⌊	Sb	123	30.865					ug/L
⌈	Ba	135	27.334					ug/L
|	Ce	140	46.671					ug/L
⌊>	Tb	159	434055.100					ug/L
⌈	Ho	165	30.003					ug/L
|	Tl	203	52.001					ug/L
|	Tl	205	133.348					ug/L
|	Pb	206	362.677					ug/L
|	Pb	207	313.008					ug/L
|	Pb	208	1430.054					ug/L
|	U	238	21.000					ug/L
⌊>	Bi	209	423431.897					ug/L

Sample ID: Blank
Report Date/Time: Monday, April 11, 2011 08:58:32
Page 1



Approved: April 12, 2011



Na	23	60971.594		mg/L
Mg	24	966.810		mg/L
K	39	338240.107		mg/L
Ca	43	200.022		mg/L
Fe	54	40703.552		mg/L
Fe	57	5898.996		mg/L
Sc-1	45	175006.490		mg/L
Cl	35	23532.342		mg/L
Kr	83	63.334		mg/L
Br	81	7448.774		mg/L
P	31	8051.910		mg/L
S	34	124347.774		mg/L
Sr	88	116.679		mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72					
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
In	115					
Sn	118					
Sb	123					
Ba	135					
Ce	140					
Tb	159					
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
Bi	209					

Sample ID: Blank
Report Date/Time: Monday, April 11, 2011 08:58:32
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Blank
Report Date/Time: Monday, April 11, 2011 08:58:32

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: Blank

Sample Date/Time: Monday, April 11, 2011 08:56:20
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

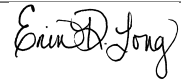
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18049.653					ug/L
|	Be	9	18.667					ug/L
|	Al	27	3033.803					ug/L
|>	Sc	45	175006.490					ug/L
⌈	Ti	49	33.337					ug/L
|	V	51	2542.326					ug/L
|	Cr	52	8296.857					ug/L
|	Cr	53	1116.841					ug/L
|	Mn	55	1090.404					ug/L
|	Co	59	71.334					ug/L
|	Ni	60	44.001					ug/L
|	Cu	65	116.335					ug/L
|	Zn	66	668.029					ug/L
|>	Ge	72	310451.459					ug/L
|	As	75	-182.508					ug/L
|	Se	77	72.667					ug/L
|	Se	82	-0.551					ug/L
⌊	Rb	85	22.667					mg/L
	Y	89	225984.034					ug/L
	Rh	103	14.000					ug/L
⌈	Mo	98	22.388					ug/L
|	Ag	107	116.002					ug/L
|	Cd	114	0.037					ug/L
|>	In	115	313091.139					ug/L
|	Sn	118	185.735					ug/L
⌊	Sb	123	30.865					ug/L
⌈	Ba	135	27.334					ug/L
|	Ce	140	46.671					ug/L
⌊>	Tb	159	434055.100					ug/L
⌈	Ho	165	30.003					ug/L
|	Tl	203	52.001					ug/L
|	Tl	205	133.348					ug/L
|	Pb	206	362.677					ug/L
|	Pb	207	313.008					ug/L
|	Pb	208	1430.054					ug/L
|	U	238	21.000					ug/L
⌊>	Bi	209	423431.897					ug/L

Sample ID: Blank
Report Date/Time: Monday, April 11, 2011 13:17:04
Page 1



Approved: April 12, 2011



Na	23	60971.594		mg/L
Mg	24	966.810		mg/L
K	39	338240.107		mg/L
Ca	43	200.022		mg/L
Fe	54	40703.552		mg/L
Fe	57	5898.996		mg/L
Sc-1	45	175006.490		mg/L
Cl	35	23532.342		mg/L
Kr	83	63.334		mg/L
Br	81	7448.774		mg/L
P	31	8051.910		mg/L
S	34	124347.774		mg/L
Sr	88	116.679		mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72					
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
In	115					
Sn	118					
Sb	123					
Ba	135					
Ce	140					
Tb	159					
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
Bi	209					

Sample ID: Blank
Report Date/Time: Monday, April 11, 2011 13:17:04



Approved: April 12, 2011



⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Blank
Report Date/Time: Monday, April 11, 2011 13:17:04
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Monday, April 11, 2011 09:03:25
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

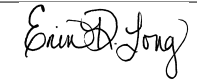
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17598.865	0.00				ug/L
|	Be	9	14.000	-0.00				ug/L
|	Al	27	2850.408	-0.00				ug/L
|>	Sc	45	169796.320	169796.32				ug/L
⌈	Ti	49	40.004	0.00				ug/L
|	V	51	2395.854	-0.00				ug/L
|	Cr	52	8218.458	-0.00				ug/L
|	Cr	53	970.145	-0.00				ug/L
|	Mn	55	1058.733	-0.00				ug/L
|	Co	59	76.334	0.00				ug/L
|	Ni	60	41.334	-0.00				ug/L
|	Cu	65	102.668	-0.00				ug/L
|	Zn	66	768.704	0.00				ug/L
|>	Ge	72	310976.379	310976.38				ug/L
|	As	75	-201.135	-0.00				ug/L
|	Se	77	76.000	0.00				ug/L
|	Se	82	-5.287	-0.00				ug/L
⌊	Rb	85	24.000	0.00				mg/L
	Y	89	226816.137	832.10				ug/L
	Rh	103	17.667	3.67				ug/L
⌈	Mo	98	16.018	-0.00				ug/L
|	Ag	107	113.002	-0.00				ug/L
|	Cd	114	-4.714	-0.00				ug/L
|>	In	115	313791.981	313791.98				ug/L
|	Sn	118	206.269	0.00				ug/L
⌊	Sb	123	23.364	-0.00				ug/L
⌈	Ba	135	24.000	-0.00				ug/L
|	Ce	140	16.668	-0.00				ug/L
|>	Tb	159	438230.898	438230.90				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	41.667	-0.00				ug/L
|	Tl	205	50.005	-0.00				ug/L
|	Pb	206	373.344	0.00				ug/L
|	Pb	207	320.008	0.00				ug/L
|	Pb	208	1450.055	0.00				ug/L
|	U	238	20.667	-0.00				ug/L
|>	Bi	209	424984.229	424984.23				ug/L

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⌈	Na	23	58674.147	-0.00		mg/L
|	Mg	24	1180.189	0.00		mg/L
|	K	39	335777.357	0.05		mg/L
|	Ca	43	243.361	0.00		mg/L
|	Fe	54	40993.614	0.01		mg/L
|	Fe	57	5732.218	0.00		mg/L
⌊>	Sc-1	45	169796.320	169796.32		mg/L
	Cl	35	20625.259	-2907.08		mg/L
	Kr	83	71.334	8.00		mg/L
	Br	81	7560.858	112.08		mg/L
	P	31	8696.496	644.59		mg/L
	S	34	126763.648	2415.87		mg/L
	Sr	88	126.680	10.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 1
Report Date/Time: Monday, April 11, 2011 09:05:36

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: Standard 1

Sample Date/Time: Monday, April 11, 2011 09:03:25
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17598.865	0.00				ug/L
|	Be	9	14.000	-0.00				ug/L
|	Al	27	2850.408	-0.00				ug/L
⌊>	Sc	45	169796.320	169796.32				ug/L
⌈	Ti	49	40.004	0.00				ug/L
|	V	51	2395.854	-0.00				ug/L
|	Cr	52	8218.458	-0.00				ug/L
|	Cr	53	970.145	-0.00				ug/L
|	Mn	55	1058.733	-0.00				ug/L
|	Co	59	76.334	0.00				ug/L
|	Ni	60	41.334	-0.00				ug/L
|	Cu	65	102.668	-0.00				ug/L
|	Zn	66	768.704	0.00				ug/L
|>	Ge	72	310976.379	310976.38				ug/L
|	As	75	-201.135	-0.00				ug/L
|	Se	77	76.000	0.00				ug/L
|	Se	82	-5.287	-0.00				ug/L
⌊	Rb	85	24.000	0.00				mg/L
	Y	89	226816.137	832.10				ug/L
	Rh	103	17.667	3.67				ug/L
⌈	Mo	98	16.018	-0.00				ug/L
|	Ag	107	113.002	-0.00				ug/L
|	Cd	114	-4.714	-0.00				ug/L
|>	In	115	313791.981	313791.98				ug/L
|	Sn	118	206.269	0.00				ug/L
⌊	Sb	123	23.364	-0.00				ug/L
⌈	Ba	135	24.000	-0.00				ug/L
|	Ce	140	16.668	-0.00				ug/L
⌊>	Tb	159	438230.898	438230.90				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	41.667	-0.00				ug/L
|	Tl	205	50.005	-0.00				ug/L
|	Pb	206	373.344	0.00				ug/L
|	Pb	207	320.008	0.00				ug/L
|	Pb	208	1450.055	0.00				ug/L
|	U	238	20.667	-0.00				ug/L
⌊>	Bi	209	424984.229	424984.23				ug/L

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⌈	Na	23	58674.147	-0.00		mg/L
|	Mg	24	1180.189	0.00		mg/L
|	K	39	335777.357	0.05		mg/L
|	Ca	43	243.361	0.00		mg/L
|	Fe	54	40993.614	0.01		mg/L
|	Fe	57	5732.218	0.00		mg/L
⌊>	Sc-1	45	169796.320	169796.32		mg/L
	Cl	35	20625.259	-2907.08		mg/L
	Kr	83	71.334	8.00		mg/L
	Br	81	7560.858	112.08		mg/L
	P	31	8696.496	644.59		mg/L
	S	34	126763.648	2415.87		mg/L
	Sr	88	126.680	10.00		mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72					
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115					
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159					
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209					

Sample ID: Standard 1
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Corr. Coef.	Be	9	Correlation Coefficient not > 0.998
Corr. Coef.	Al	27	Correlation Coefficient not > 0.998
Corr. Coef.	Ti	49	Correlation Coefficient not > 0.998
Corr. Coef.	V	51	Correlation Coefficient not > 0.998
Corr. Coef.	Cr	52	Correlation Coefficient not > 0.998
Corr. Coef.	Cr	53	Correlation Coefficient not > 0.998
Corr. Coef.	Mn	55	Correlation Coefficient not > 0.998
Corr. Coef.	Co	59	Correlation Coefficient not > 0.998
Corr. Coef.	Ni	60	Correlation Coefficient not > 0.998
Corr. Coef.	Cu	65	Correlation Coefficient not > 0.998
Corr. Coef.	Zn	66	Correlation Coefficient not > 0.998
Corr. Coef.	As	75	Correlation Coefficient not > 0.998
Corr. Coef.	Se	82	Correlation Coefficient not > 0.998
Corr. Coef.	Mo	98	Correlation Coefficient not > 0.998
Corr. Coef.	Ag	107	Correlation Coefficient not > 0.998
Corr. Coef.	Cd	114	Correlation Coefficient not > 0.998
Corr. Coef.	Sn	118	Correlation Coefficient not > 0.998
Corr. Coef.	Sb	123	Correlation Coefficient not > 0.998
Corr. Coef.	Ba	135	Correlation Coefficient not > 0.998
Corr. Coef.	Tl	203	Correlation Coefficient not > 0.998
Corr. Coef.	Tl	205	Correlation Coefficient not > 0.998
Corr. Coef.	Pb	206	Correlation Coefficient not > 0.998
Corr. Coef.	Pb	207	Correlation Coefficient not > 0.998
Corr. Coef.	Pb	208	Correlation Coefficient not > 0.998
Corr. Coef.	U	238	Correlation Coefficient not > 0.998
Corr. Coef.	Na	23	Correlation Coefficient not > 0.998
Corr. Coef.	Mg	24	Correlation Coefficient not > 0.998
Corr. Coef.	K	39	Correlation Coefficient not > 0.998
Corr. Coef.	Ca	43	Correlation Coefficient not > 0.998
Corr. Coef.	Fe	54	Correlation Coefficient not > 0.998
Corr. Coef.	Fe	57	Correlation Coefficient not > 0.998

Sample ID: Standard 1
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Method 6020 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Monday, April 11, 2011 09:10:30
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 2
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

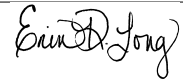
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19886.448	0.01				ug/L
|	Be	9	145.334	0.00				ug/L
|	Al	27	5001.261	0.01				ug/L
|>	Sc	45	176884.411	176884.41				ug/L
⌈	Ti	49	466.724	0.00				ug/L
|	V	51	5954.279	0.01				ug/L
|	Cr	52	11247.768	0.01				ug/L
|	Cr	53	1093.503	-0.00				ug/L
|	Mn	55	4918.926	0.01				ug/L
|	Co	59	3677.046	0.01				ug/L
|	Ni	60	830.043	0.00				ug/L
|	Cu	65	947.054	0.00				ug/L
|	Zn	66	1429.450	0.00				ug/L
|>	Ge	72	312998.504	312998.50				ug/L
|	As	75	251.677	0.00				ug/L
|	Se	77	118.001	0.00				ug/L
|	Se	82	42.763	0.00				ug/L
⌊	Rb	85	44.001	0.00				mg/L
	Y	89	228671.139	2687.10				ug/L
	Rh	103	16.334	2.33				ug/L
⌈	Mo	98	2287.970	0.01				ug/L
|	Ag	107	2599.697	0.01				ug/L
|	Cd	114	488.129	0.00				ug/L
|>	In	115	315876.524	315876.52				ug/L
|	Sn	118	1909.382	0.01				ug/L
⌊	Sb	123	1559.461	0.00				ug/L
⌈	Ba	135	664.362	0.00				ug/L
|	Ce	140	20.002	-0.00				ug/L
|>	Tb	159	436800.654	436800.65				ug/L
⌈	Ho	165	16.668	-0.00				ug/L
|	Tl	203	3564.671	0.01				ug/L
|	Tl	205	8704.657	0.02				ug/L
|	Pb	206	3147.193	0.01				ug/L
|	Pb	207	2978.474	0.01				ug/L
|	Pb	208	13216.918	0.03				ug/L
|	U	238	18454.197	0.04				ug/L
|>	Bi	209	417560.175	417560.17				ug/L

Sample ID: Standard 2
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Na	23	268541.472	1.17			mg/L
Mg	24	148165.241	0.83			mg/L
K	39	643215.841	1.70			mg/L
Ca	43	933.471	0.00			mg/L
Fe	54	60446.031	0.11			mg/L
Fe	57	14952.666	0.05			mg/L
Sc-1	45	176884.411	176884.41			mg/L
Cl	35	18803.664	-4728.68			mg/L
Kr	83	65.668	2.33			mg/L
Br	81	7806.385	357.61			mg/L
P	31	7983.198	-68.71			mg/L
S	34	120805.615	-3542.16			mg/L
Sr	88	143.349	26.67			mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72					
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
In	115					
Sn	118					
Sb	123					
Ba	135					
Ce	140					
Tb	159					
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
Bi	209					

Sample ID: Standard 2
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 2
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Method 6020 - Summary Report

Sample ID: Standard 2

Sample Date/Time: Monday, April 11, 2011 09:10:30
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 2
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19886.448	0.01				ug/L
|	Be	9	145.334	0.00				ug/L
|	Al	27	5001.261	0.01				ug/L
|>	Sc	45	176884.411	176884.41				ug/L
⌈	Ti	49	466.724	0.00				ug/L
|	V	51	5954.279	0.01				ug/L
|	Cr	52	11247.768	0.01				ug/L
|	Cr	53	1093.503	-0.00				ug/L
|	Mn	55	4918.926	0.01				ug/L
|	Co	59	3677.046	0.01				ug/L
|	Ni	60	830.043	0.00				ug/L
|	Cu	65	947.054	0.00				ug/L
|	Zn	66	1429.450	0.00				ug/L
|>	Ge	72	312998.504	312998.50				ug/L
|	As	75	251.677	0.00				ug/L
|	Se	77	118.001	0.00				ug/L
|	Se	82	42.763	0.00				ug/L
⌊	Rb	85	44.001	0.00				mg/L
	Y	89	228671.139	2687.10				ug/L
	Rh	103	16.334	2.33				ug/L
⌈	Mo	98	2287.970	0.01				ug/L
|	Ag	107	2599.697	0.01				ug/L
|	Cd	114	488.129	0.00				ug/L
|>	In	115	315876.524	315876.52				ug/L
|	Sn	118	1909.382	0.01				ug/L
⌊	Sb	123	1559.461	0.00				ug/L
⌈	Ba	135	664.362	0.00				ug/L
|	Ce	140	20.002	-0.00				ug/L
|>	Tb	159	436800.654	436800.65				ug/L
⌈	Ho	165	16.668	-0.00				ug/L
|	Tl	203	3564.671	0.01				ug/L
|	Tl	205	8704.657	0.02				ug/L
|	Pb	206	3147.193	0.01				ug/L
|	Pb	207	2978.474	0.01				ug/L
|	Pb	208	13216.918	0.03				ug/L
|	U	238	18454.197	0.04				ug/L
|>	Bi	209	417560.175	417560.17				ug/L

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Na	23	268541.472	1.17			mg/L
Mg	24	148165.241	0.83			mg/L
K	39	643215.841	1.70			mg/L
Ca	43	933.471	0.00			mg/L
Fe	54	60446.031	0.11			mg/L
Fe	57	14952.666	0.05			mg/L
Sc-1	45	176884.411	176884.41			mg/L
Cl	35	18803.664	-4728.68			mg/L
Kr	83	65.668	2.33			mg/L
Br	81	7806.385	357.61			mg/L
P	31	7983.198	-68.71			mg/L
S	34	120805.615	-3542.16			mg/L
Sr	88	143.349	26.67			mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72					
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
In	115					
Sn	118					
Sb	123					
Ba	135					
Ce	140					
Tb	159					
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
Bi	209					

Sample ID: Standard 2
Report Date/Time: Monday, April 11, 2011 13:17:06
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Corr. Coef.	Be	9	Correlation Coefficient not > 0.998
Corr. Coef.	Al	27	Correlation Coefficient not > 0.998
Corr. Coef.	Ti	49	Correlation Coefficient not > 0.998
Corr. Coef.	V	51	Correlation Coefficient not > 0.998
Corr. Coef.	Cr	52	Correlation Coefficient not > 0.998
Corr. Coef.	Cr	53	Correlation Coefficient not > 0.998
Corr. Coef.	Mn	55	Correlation Coefficient not > 0.998
Corr. Coef.	Co	59	Correlation Coefficient not > 0.998
Corr. Coef.	Ni	60	Correlation Coefficient not > 0.998
Corr. Coef.	Cu	65	Correlation Coefficient not > 0.998
Corr. Coef.	Zn	66	Correlation Coefficient not > 0.998
Corr. Coef.	As	75	Correlation Coefficient not > 0.998
Corr. Coef.	Se	82	Correlation Coefficient not > 0.998
Corr. Coef.	Mo	98	Correlation Coefficient not > 0.998
Corr. Coef.	Ag	107	Correlation Coefficient not > 0.998
Corr. Coef.	Cd	114	Correlation Coefficient not > 0.998
Corr. Coef.	Sn	118	Correlation Coefficient not > 0.998
Corr. Coef.	Sb	123	Correlation Coefficient not > 0.998
Corr. Coef.	Ba	135	Correlation Coefficient not > 0.998
Corr. Coef.	Tl	203	Correlation Coefficient not > 0.998
Corr. Coef.	Tl	205	Correlation Coefficient not > 0.998
Corr. Coef.	Pb	206	Correlation Coefficient not > 0.998
Corr. Coef.	Pb	207	Correlation Coefficient not > 0.998
Corr. Coef.	Pb	208	Correlation Coefficient not > 0.998
Corr. Coef.	U	238	Correlation Coefficient not > 0.998
Corr. Coef.	Na	23	Correlation Coefficient not > 0.998
Corr. Coef.	Mg	24	Correlation Coefficient not > 0.998
Corr. Coef.	K	39	Correlation Coefficient not > 0.998
Corr. Coef.	Ca	43	Correlation Coefficient not > 0.998
Corr. Coef.	Fe	54	Correlation Coefficient not > 0.998
Corr. Coef.	Fe	57	Correlation Coefficient not > 0.998

Sample ID: Standard 2
Report Date/Time: Monday, April 11, 2011 13:17:06
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Method 6020 - Summary Report

Sample ID: Standard 3

Sample Date/Time: Monday, April 11, 2011 09:17:36
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 3
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	16864.260	-0.00				ug/L
|	Be	9	14885.072	0.09	50.0000	0.230	0.461	ug/L
|	Al	27	274602.861	1.64	50.0000	0.648	1.296	ug/L
⌊>	Sc	45	165457.695	165457.69				ug/L
⌈	Ti	49	53112.655	0.17	100.0000	1.123	1.123	ug/L
|	V	51	419265.647	1.36	50.0000	0.511	1.022	ug/L
|	Cr	52	363566.000	1.16	50.0000	0.664	1.328	ug/L
|	Cr	53	42437.441	0.13	50.0000	1.057	2.115	ug/L
|	Mn	55	532689.383	1.74	50.0000	0.533	1.066	ug/L
|	Co	59	432624.313	1.41	50.0000	1.364	2.728	ug/L
|	Ni	60	91096.965	0.30	50.0000	0.402	0.804	ug/L
|	Cu	65	96389.958	0.31	50.0000	0.143	0.285	ug/L
|	Zn	66	58799.956	0.19	50.0000	0.349	0.699	ug/L
| >	Ge	72	306382.094	306382.09				ug/L
|	As	75	52830.307	0.17	50.0000	0.241	0.482	ug/L
|	Se	77	4248.903	0.01	50.0000	1.107	2.214	ug/L
|	Se	82	5295.244	0.02	50.0000	0.845	1.691	ug/L
⌊	Rb	85	2128.248	0.01				mg/L
	Y	89	218459.377	-7524.66				ug/L
	Rh	103	32.667	18.67				ug/L
⌈	Mo	98	284721.008	0.92	100.0000	0.552	0.552	ug/L
|	Ag	107	300533.890	0.97	50.0000	0.341	0.681	ug/L
|	Cd	114	62314.428	0.20	50.0000	0.392	0.785	ug/L
| >	In	115	310763.977	310763.98				ug/L
|	Sn	118	220071.908	0.71	50.0000	0.198	0.395	ug/L
⌊	Sb	123	190222.693	0.61	50.0000	0.544	1.088	ug/L
⌈	Ba	135	81068.092	0.19	50.0000	0.770	1.539	ug/L
|	Ce	140	63.340	0.00				ug/L
⌊>	Tb	159	433739.195	433739.19				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	422632.309	1.02	50.0000	0.885	1.770	ug/L
|	Tl	205	1035981.278	2.51	50.0000	0.057	0.114	ug/L
|	Pb	206	343470.176	0.83	50.0000	0.658	1.316	ug/L
|	Pb	207	322629.968	0.78	50.0000	0.750	1.501	ug/L
|	Pb	208	1432748.525	3.47	50.0000	0.662	1.325	ug/L
|	U	238	2320228.420	5.62	50.0000	0.924	1.848	ug/L
⌊>	Bi	209	412958.670	412958.67				ug/L

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Na	23	24542409.279	147.97	5.0000	0.094	1.875	mg/L	
Mg	24	16488643.061	99.67	5.0000	0.107	2.134	mg/L	
K	39	33266693.094	199.14	5.0000	0.042	0.835	mg/L	
Ca	43	78941.613	0.48	5.0000	0.110	2.201	mg/L	
Fe	54	2599082.940	15.48	5.0000	0.034	0.671	mg/L	
Fe	57	1070626.232	6.44	5.0000	0.080	1.597	mg/L	
Sc-1	45	165457.695	165457.69				mg/L	
Cl	35	18183.184	-5349.16				mg/L	
Kr	83	66.668	3.33				mg/L	
Br	81	6905.052	-543.72				mg/L	
P	31	8208.058	156.15				mg/L	
S	34	142287.851	17940.08				mg/L	
Sr	88	2190.459	2073.78				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72					
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
In	115					
Sn	118					
Sb	123					
Ba	135					
Ce	140					
Tb	159					
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
Bi	209					

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 3
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Method 6020 - Summary Report

Sample ID: Standard 3

Sample Date/Time: Monday, April 11, 2011 09:17:36
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 3
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	16864.260	-0.00				ug/L
|	Be	9	14885.072	0.09	50.0000	0.230	0.461	ug/L
|	Al	27	274602.861	1.64	50.0000	0.648	1.296	ug/L
⌊>	Sc	45	165457.695	165457.69				ug/L
⌈	Ti	49	53112.655	0.17	100.0000	1.123	1.123	ug/L
|	V	51	419265.647	1.36	50.0000	0.511	1.022	ug/L
|	Cr	52	363566.000	1.16	50.0000	0.664	1.328	ug/L
|	Cr	53	42437.441	0.13	50.0000	1.057	2.115	ug/L
|	Mn	55	532689.383	1.74	50.0000	0.533	1.066	ug/L
|	Co	59	432624.313	1.41	50.0000	1.364	2.728	ug/L
|	Ni	60	91096.965	0.30	50.0000	0.402	0.804	ug/L
|	Cu	65	96389.958	0.31	50.0000	0.143	0.285	ug/L
|	Zn	66	58799.956	0.19	50.0000	0.349	0.699	ug/L
| >	Ge	72	306382.094	306382.09				ug/L
|	As	75	52830.307	0.17	50.0000	0.241	0.482	ug/L
|	Se	77	4248.903	0.01	50.0000	1.107	2.214	ug/L
|	Se	82	5295.244	0.02	50.0000	0.845	1.691	ug/L
⌊	Rb	85	2128.248	0.01				mg/L
	Y	89	218459.377	-7524.66				ug/L
	Rh	103	32.667	18.67				ug/L
⌈	Mo	98	284721.008	0.92	100.0000	0.552	0.552	ug/L
|	Ag	107	300533.890	0.97	50.0000	0.341	0.681	ug/L
|	Cd	114	62314.428	0.20	50.0000	0.392	0.785	ug/L
| >	In	115	310763.977	310763.98				ug/L
|	Sn	118	220071.908	0.71	50.0000	0.198	0.395	ug/L
⌊	Sb	123	190222.693	0.61	50.0000	0.544	1.088	ug/L
⌈	Ba	135	81068.092	0.19	50.0000	0.770	1.539	ug/L
|	Ce	140	63.340	0.00				ug/L
⌊>	Tb	159	433739.195	433739.19				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	422632.309	1.02	50.0000	0.885	1.770	ug/L
|	Tl	205	1035981.278	2.51	50.0000	0.057	0.114	ug/L
|	Pb	206	343470.176	0.83	50.0000	0.658	1.316	ug/L
|	Pb	207	322629.968	0.78	50.0000	0.750	1.501	ug/L
|	Pb	208	1432748.525	3.47	50.0000	0.662	1.325	ug/L
|	U	238	2320228.420	5.62	50.0000	0.924	1.848	ug/L
⌊>	Bi	209	412958.670	412958.67				ug/L

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Na	23	24542409.279	147.97	5.0000	0.094	1.875	mg/L
Mg	24	16488643.061	99.67	5.0000	0.107	2.134	mg/L
K	39	33266693.094	199.14	5.0000	0.042	0.835	mg/L
Ca	43	78941.613	0.48	5.0000	0.110	2.201	mg/L
Fe	54	2599082.940	15.48	5.0000	0.034	0.671	mg/L
Fe	57	1070626.232	6.44	5.0000	0.080	1.597	mg/L
> Sc-1	45	165457.695	165457.69				mg/L
Cl	35	18183.184	-5349.16				mg/L
Kr	83	66.668	3.33				mg/L
Br	81	6905.052	-543.72				mg/L
P	31	8208.058	156.15				mg/L
S	34	142287.851	17940.08				mg/L
Sr	88	2190.459	2073.78				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72					
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115					
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159					
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209					

Sample ID: Standard 3
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 3
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Method 6020 - Summary Report

Sample ID: Standard 4

Sample Date/Time: Monday, April 11, 2011 09:24:42
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 4
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17615.505	0.01				ug/L
|	Be	9	29001.331	0.18	100.1480	2.859	2.854	ug/L
|	Al	27	520961.624	3.22	99.0135	3.200	3.232	ug/L
⌊>	Sc	45	160919.037	160919.04				ug/L
⌈	Ti	49	101388.263	0.34	197.5738	2.612	1.322	ug/L
|	V	51	813389.313	2.71	99.7256	0.534	0.536	ug/L
|	Cr	52	690303.429	2.28	99.0594	1.197	1.208	ug/L
|	Cr	53	78259.869	0.26	97.4562	3.698	3.794	ug/L
|	Mn	55	1025555.786	3.42	99.2206	0.628	0.633	ug/L
|	Co	59	823815.098	2.75	98.6579	1.349	1.367	ug/L
|	Ni	60	177729.401	0.59	99.8856	1.913	1.915	ug/L
|	Cu	65	182832.758	0.61	98.4986	1.149	1.166	ug/L
|	Zn	66	112183.624	0.37	99.1356	0.841	0.848	ug/L
⌊>	Ge	72	299719.348	299719.35				ug/L
|	As	75	102137.954	0.34	99.3253	1.316	1.325	ug/L
|	Se	77	8215.374	0.03	99.9017	2.201	2.203	ug/L
|	Se	82	9991.962	0.03	98.1962	0.896	0.912	ug/L
⌊	Rb	85	4009.511	0.01				mg/L
	Y	89	212985.395	-12998.64				ug/L
	Rh	103	65.668	51.67				ug/L
⌈	Mo	98	554701.296	1.84	200.2716	2.019	1.008	ug/L
|	Ag	107	581456.845	1.93	99.8068	1.507	1.510	ug/L
|	Cd	114	120416.561	0.40	99.7212	1.325	1.328	ug/L
⌊>	In	115	301895.411	301895.41				ug/L
|	Sn	118	425878.645	1.41	99.8159	0.779	0.780	ug/L
⌊	Sb	123	370845.961	1.23	100.1721	1.083	1.081	ug/L
⌈	Ba	135	160948.159	0.37	99.8449	1.666	1.668	ug/L
|	Ce	140	103.344	0.00				ug/L
⌊>	Tb	159	431951.240	431951.24				ug/L
⌈	Ho	165	20.002	-0.00				ug/L
|	Tl	203	830566.626	2.06	100.3325	2.519	2.510	ug/L
|	Tl	205	2088166.691	5.18	101.5891	4.431	4.362	ug/L
|	Pb	206	674370.505	1.67	100.3006	0.118	0.118	ug/L
|	Pb	207	635305.970	1.58	100.4495	0.784	0.780	ug/L
|	Pb	208	2812643.879	6.97	100.2956	0.807	0.805	ug/L
|	U	238	4575216.005	11.35	100.4871	0.782	0.778	ug/L
⌊>	Bi	209	403151.391	403151.39				ug/L

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Na	23	48370115.012	300.52	10.0762	0.377	3.742	mg/L	
Mg	24	31941726.636	198.69	9.9848	0.427	4.279	mg/L	
K	39	62865712.196	388.94	9.8833	0.211	2.140	mg/L	
Ca	43	150144.299	0.93	9.8965	0.100	1.012	mg/L	
Fe	54	4914046.572	30.32	9.8954	0.243	2.456	mg/L	
Fe	57	2089419.272	12.96	10.0325	0.293	2.919	mg/L	
Sc-1	45	160919.037	160919.04				mg/L	
Cl	35	16805.445	-6726.90				mg/L	
Kr	83	60.001	-3.33				mg/L	
Br	81	6646.209	-802.57				mg/L	
P	31	7203.265	-848.65				mg/L	
S	34	138386.973	14039.20				mg/L	
Sr	88	3721.066	3604.39				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72					
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
In	115					
Sn	118					
Sb	123					
Ba	135					
Ce	140					
Tb	159					
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
Bi	209					

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 4
Report Date/Time: Monday, April 11, 2011 09:26:55
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Method 6020 - Summary Report

Sample ID: Standard 4

Sample Date/Time: Monday, April 11, 2011 09:24:42
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 4
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17615.505	0.01				ug/L
|	Be	9	29001.331	0.18	100.1480	2.859	2.854	ug/L
|	Al	27	520961.624	3.22	99.0135	3.200	3.232	ug/L
⌊>	Sc	45	160919.037	160919.04				ug/L
⌈	Ti	49	101388.263	0.34	197.5738	2.612	1.322	ug/L
|	V	51	813389.313	2.71	99.7256	0.534	0.536	ug/L
|	Cr	52	690303.429	2.28	99.0594	1.197	1.208	ug/L
|	Cr	53	78259.869	0.26	97.4562	3.698	3.794	ug/L
|	Mn	55	1025555.786	3.42	99.2206	0.628	0.633	ug/L
|	Co	59	823815.098	2.75	98.6579	1.349	1.367	ug/L
|	Ni	60	177729.401	0.59	99.8856	1.913	1.915	ug/L
|	Cu	65	182832.758	0.61	98.4986	1.149	1.166	ug/L
|	Zn	66	112183.624	0.37	99.1356	0.841	0.848	ug/L
⌊>	Ge	72	299719.348	299719.35				ug/L
|	As	75	102137.954	0.34	99.3253	1.316	1.325	ug/L
|	Se	77	8215.374	0.03	99.9017	2.201	2.203	ug/L
|	Se	82	9991.962	0.03	98.1962	0.896	0.912	ug/L
⌊	Rb	85	4009.511	0.01				mg/L
	Y	89	212985.395	-12998.64				ug/L
	Rh	103	65.668	51.67				ug/L
⌈	Mo	98	554701.296	1.84	200.2716	2.019	1.008	ug/L
|	Ag	107	581456.845	1.93	99.8068	1.507	1.510	ug/L
|	Cd	114	120416.561	0.40	99.7212	1.325	1.328	ug/L
⌊>	In	115	301895.411	301895.41				ug/L
|	Sn	118	425878.645	1.41	99.8159	0.779	0.780	ug/L
⌊	Sb	123	370845.961	1.23	100.1721	1.083	1.081	ug/L
⌈	Ba	135	160948.159	0.37	99.8449	1.666	1.668	ug/L
|	Ce	140	103.344	0.00				ug/L
⌊>	Tb	159	431951.240	431951.24				ug/L
⌈	Ho	165	20.002	-0.00				ug/L
|	Tl	203	830566.626	2.06	100.3325	2.519	2.510	ug/L
|	Tl	205	2088166.691	5.18	101.5891	4.431	4.362	ug/L
|	Pb	206	674370.505	1.67	100.3006	0.118	0.118	ug/L
|	Pb	207	635305.970	1.58	100.4495	0.784	0.780	ug/L
|	Pb	208	2812643.879	6.97	100.2956	0.807	0.805	ug/L
|	U	238	4575216.005	11.35	100.4871	0.782	0.778	ug/L
⌊>	Bi	209	403151.391	403151.39				ug/L

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Na	23	48370115.012	300.52	10.0762	0.377	3.742	mg/L	
Mg	24	31941726.636	198.69	9.9848	0.427	4.279	mg/L	
K	39	62865712.196	388.94	9.8833	0.211	2.140	mg/L	
Ca	43	150144.299	0.93	9.8965	0.100	1.012	mg/L	
Fe	54	4914046.572	30.32	9.8954	0.243	2.456	mg/L	
Fe	57	2089419.272	12.96	10.0325	0.293	2.919	mg/L	
> Sc-1	45	160919.037	160919.04				mg/L	
Cl	35	16805.445	-6726.90				mg/L	
Kr	83	60.001	-3.33				mg/L	
Br	81	6646.209	-802.57				mg/L	
P	31	7203.265	-848.65				mg/L	
S	34	138386.973	14039.20				mg/L	
Sr	88	3721.066	3604.39				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72					
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115					
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159					
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209					

Sample ID: Standard 4
Report Date/Time: Monday, April 11, 2011 13:17:09

Approved: April 12, 2011

⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: Standard 4
Report Date/Time: Monday, April 11, 2011 13:17:09

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 1

Sample Date/Time: Monday, April 11, 2011 09:31:48
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 11
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17765.781	0.00				ug/L
|	Be	9	14505.179	0.09	48.4294	1.730	3.572	ug/L
|	Al	27	291284.477	1.74	53.3736	3.460	6.482	ug/L
|>	Sc	45	166374.075	166374.07				ug/L
⌈	Ti	49	57222.327	0.19	110.7587	1.886	1.703	ug/L
|	V	51	407481.287	1.34	49.4844	0.341	0.690	ug/L
|	Cr	52	356168.084	1.15	50.2117	0.622	1.239	ug/L
|	Cr	53	41322.675	0.13	50.6921	0.315	0.621	ug/L
|	Mn	55	525648.910	1.74	50.5054	1.043	2.065	ug/L
|	Co	59	417248.620	1.38	49.6405	1.037	2.090	ug/L
|	Ni	60	89239.314	0.30	49.8027	0.616	1.236	ug/L
|	Cu	65	94075.739	0.31	50.3060	0.046	0.091	ug/L
|	Zn	66	57338.828	0.19	49.9396	0.260	0.521	ug/L
|>	Ge	72	301684.705	301684.70				ug/L
|	As	75	51893.115	0.17	50.2191	0.443	0.882	ug/L
|	Se	77	4246.902	0.01	50.8244	0.227	0.446	ug/L
|	Se	82	5186.857	0.02	50.6437	0.497	0.982	ug/L
⌊	Rb	85	2014.223	0.01				mg/L
	Y	89	214388.352	-11595.68				ug/L
	Rh	103	29.000	15.00				ug/L
⌈	Mo	98	308559.354	1.00	108.9342	1.096	1.006	ug/L
|	Ag	107	300579.185	0.97	50.4386	0.944	1.872	ug/L
|	Cd	114	60710.305	0.20	49.1784	1.298	2.639	ug/L
|>	In	115	308760.520	308760.52				ug/L
|	Sn	118	240460.050	0.78	55.0992	0.873	1.585	ug/L
⌊	Sb	123	184126.069	0.60	48.6337	0.881	1.811	ug/L
⌈	Ba	135	80424.936	0.18	49.1978	0.853	1.734	ug/L
|	Ce	140	56.673	0.00				ug/L
|>	Tb	159	438018.854	438018.85				ug/L
⌈	Ho	165	13.335	-0.00				ug/L
|	Tl	203	423143.415	1.03	50.1942	0.547	1.091	ug/L
|	Tl	205	1034096.184	2.52	49.4134	1.088	2.201	ug/L
|	Pb	206	355624.230	0.87	51.9270	0.531	1.023	ug/L
|	Pb	207	314071.106	0.76	48.7460	0.848	1.740	ug/L
|	Pb	208	1434871.574	3.49	50.2277	0.579	1.153	ug/L
|	U	238	2251796.528	5.49	48.5798	0.585	1.204	ug/L
|>	Bi	209	410464.465	410464.46				ug/L

Sample ID: QC Std 1
Report Date/Time: Monday, April 11, 2011 09:34:00
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Na	23	24723637.678	148.48	4.9787	0.289	5.812	mg/L	
Mg	24	16439330.704	98.91	4.9695	0.216	4.342	mg/L	
K	39	32637458.263	194.31	4.9359	0.095	1.926	mg/L	
Ca	43	77211.298	0.46	4.9175	0.168	3.413	mg/L	
Fe	54	2541307.650	15.06	4.9179	0.259	5.267	mg/L	
Fe	57	1047183.684	6.27	4.8544	0.286	5.898	mg/L	
> Sc-1	45	166374.075	166374.07				mg/L	
Cl	35	16989.759	-6542.58				mg/L	
Kr	83	66.001	2.67				mg/L	
Br	81	6959.087	-489.69				mg/L	
P	31	7866.486	-185.42				mg/L	
S	34	140346.476	15998.70				mg/L	
Sr	88	2093.762	1977.08				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9	96.859				
Al	27	106.747				
> Sc	45					
Ti	49	110.759				
V	51	98.969				
Cr	52	100.423				
Cr	53					
Mn	55	101.011				
Co	59	99.281				
Ni	60	99.605				
Cu	65	100.612				
Zn	66	99.879				
> Ge	72		97.176			
As	75	100.438				
Se	77					
Se	82	101.287				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	100.877				
Cd	114	98.357				
> In	115		98.617			
Sn	118					
Sb	123	97.267				
Ba	135	98.396				
Ce	140					
> Tb	159		100.913			
Ho	165					
Tl	203	100.388				
Tl	205					
Pb	206					
Pb	207					
Pb	208	100.455				
U	238	97.160				
> Bi	209		96.938			

Sample ID: QC Std 1
Report Date/Time: Monday, April 11, 2011 09:34:00

Approved: April 12, 2011

⌈	Na	23	99.575
|	Mg	24	99.390
|	K	39	98.719
|	Ca	43	98.351
|	Fe	54	98.357
|	Fe	57	97.087
⌊>	Sc-1	45	
	Cl	35	
	Kr	83	
	Br	81	
	P	31	
	S	34	
	Sr	88	

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 1
Report Date/Time: Monday, April 11, 2011 09:34:00

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 2

Sample Date/Time: Monday, April 11, 2011 09:38:53
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18199.921	0.01				ug/L
|	Be	9	10.667	-0.00	-0.0204	0.008	39.500	ug/L
|	Al	27	2850.415	-0.00	0.0619	0.107	172.155	ug/L
⌊>	Sc	45	165152.839	165152.84				ug/L
⌈	Ti	49	33.337	0.00	-0.0074	0.048	649.996	ug/L
|	V	51	2435.452	-0.00	-0.0061	0.020	327.657	ug/L
|	Cr	52	7946.903	-0.00	-0.0269	0.018	65.321	ug/L
|	Cr	53	510.065	-0.00	-0.2842	0.174	61.144	ug/L
|	Mn	55	1051.066	-0.00	0.0443	0.002	5.133	ug/L
|	Co	59	80.334	0.00	-0.0124	0.001	8.551	ug/L
|	Ni	60	41.334	-0.00	-0.0240	0.005	19.364	ug/L
|	Cu	65	107.668	-0.00	-0.0318	0.001	1.925	ug/L
|	Zn	66	553.021	-0.00	-0.3342	0.011	3.284	ug/L
|>	Ge	72	304159.493	304159.49				ug/L
|	As	75	-173.881	0.00	-0.0002	0.003	1487.425	ug/L
|	Se	77	61.334	-0.00	-0.2438	0.224	91.856	ug/L
|	Se	82	0.771	0.00	0.0052	0.020	393.755	ug/L
⌊	Rb	85	23.000	0.00				mg/L
	Y	89	221222.141	-4761.89				ug/L
	Rh	103	12.667	-1.33				ug/L
⌈	Mo	98	144.655	0.00	0.0613	0.009	14.206	ug/L
|	Ag	107	143.669	0.00	-0.0027	0.001	35.202	ug/L
|	Cd	114	-1.641	-0.00	0.0125	0.006	51.484	ug/L
|>	In	115	311437.350	311437.35				ug/L
|	Sn	118	491.612	0.00	0.0839	0.003	3.553	ug/L
⌊	Sb	123	399.919	0.00	0.1021	0.006	5.552	ug/L
⌈	Ba	135	26.667	-0.00	0.0087	0.001	8.559	ug/L
|	Ce	140	16.668	-0.00				ug/L
⌊>	Tb	159	438656.143	438656.14				ug/L
⌈	Ho	165	16.668	-0.00				ug/L
|	Tl	203	52.001	0.00	-0.0098	0.001	6.381	ug/L
|	Tl	205	93.343	-0.00	-0.0046	0.002	44.886	ug/L
|	Pb	206	368.344	0.00	0.0005	0.001	109.438	ug/L
|	Pb	207	315.675	0.00	-0.0068	0.000	6.696	ug/L
|	Pb	208	1445.722	0.00	-0.0057	0.002	26.576	ug/L
|	U	238	137.336	0.00	0.0116	0.000	0.631	ug/L
⌊>	Bi	209	419268.367	419268.37				ug/L

Sample ID: QC Std 2
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⌈	Na	23	65215.192	0.05	0.0023	0.000	13.733	mg/L
|	Mg	24	1433.580	0.00	-0.0017	0.000	3.085	mg/L
|	K	39	357369.037	0.23	0.0026	0.001	50.603	mg/L
|	Ca	43	216.691	0.00	-0.0022	0.001	58.997	mg/L
|	Fe	54	39190.582	0.00	0.0060	0.005	76.550	mg/L
|	Fe	57	5158.514	-0.00	-0.0013	0.001	55.124	mg/L
⌊>	Sc-1	45	165152.839	165152.84				mg/L
	Cl	35	15871.920	-7660.42				mg/L
	Kr	83	64.668	1.33				mg/L
	Br	81	7079.177	-369.60				mg/L
	P	31	8139.991	88.08				mg/L
	S	34	135137.757	10789.98				mg/L
	Sr	88	96.677	-20.00				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		97.973			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.472			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		101.060			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.017			

Sample ID: QC Std 2
Report Date/Time: Monday, April 11, 2011 09:41:04
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Approved: April 12, 2011

⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 2
Report Date/Time: Monday, April 11, 2011 09:41:04
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 3

Sample Date/Time: Monday, April 11, 2011 09:46:00
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 9
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	17916.038	0.01				ug/L
|	Be	9	10.000	-0.00	-0.0229	0.013	56.639	ug/L
|	Al	27	2667.027	-0.00	0.0252	0.066	263.576	ug/L
⌊>	Sc	45	165576.392	165576.39				ug/L
⌈	Ti	49	50.005	0.00	0.0233	0.018	79.085	ug/L
|	V	51	5976.201	0.01	0.4135	0.046	11.012	ug/L
|	Cr	52	14411.858	0.02	0.8709	0.051	5.855	ug/L
|	Cr	53	1220.197	0.00	0.5745	0.134	23.261	ug/L
|	Mn	55	5868.780	0.02	0.4965	0.003	0.525	ug/L
|	Co	59	3555.334	0.01	0.3923	0.002	0.419	ug/L
|	Ni	60	3082.172	0.01	1.6381	0.020	1.235	ug/L
|	Cu	65	1690.493	0.01	0.7974	0.014	1.696	ug/L
|	Zn	66	7868.841	0.02	5.9984	0.170	2.832	ug/L
|>	Ge	72	308238.945	308238.95				ug/L
|	As	75	311.757	0.00	0.4606	0.078	16.979	ug/L
|	Se	77	98.000	0.00	0.1824	0.275	150.959	ug/L
|	Se	82	51.459	0.00	0.4896	0.150	30.644	ug/L
⌊	Rb	85	21.667	-0.00				mg/L
	Y	89	223809.038	-2175.00				ug/L
	Rh	103	15.000	1.00				ug/L
⌈	Mo	98	81.613	0.00	0.0388	0.004	10.736	ug/L
|	Ag	107	2676.385	0.01	0.4123	0.015	3.643	ug/L
|	Cd	114	261.098	0.00	0.2203	0.018	8.110	ug/L
|>	In	115	316135.378	316135.38				ug/L
|	Sn	118	207.335	0.00	0.0186	0.003	13.767	ug/L
⌊	Sb	123	1601.051	0.00	0.4103	0.013	3.249	ug/L
⌈	Ba	135	1255.091	0.00	0.7613	0.029	3.871	ug/L
|	Ce	140	20.002	-0.00				ug/L
⌊>	Tb	159	437338.409	437338.41				ug/L
⌈	Ho	165	16.668	-0.00				ug/L
|	Tl	203	750.369	0.00	0.0724	0.001	1.333	ug/L
|	Tl	205	1837.019	0.00	0.0781	0.002	2.728	ug/L
|	Pb	206	3164.199	0.01	0.4061	0.011	2.735	ug/L
|	Pb	207	2939.795	0.01	0.3979	0.006	1.472	ug/L
|	Pb	208	13107.850	0.03	0.3999	0.003	0.637	ug/L
|	U	238	18610.154	0.04	0.4065	0.006	1.499	ug/L
⌊>	Bi	209	414163.761	414163.76				ug/L

Sample ID: QC Std 3
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Na	23	19667.976	-0.23	-0.0069	0.000	3.139	mg/L
Mg	24	453.389	-0.00	-0.0020	0.000	0.751	mg/L
K	39	348246.670	0.17	0.0010	0.002	207.526	mg/L
Ca	43	183.353	-0.00	-0.0043	0.001	26.981	mg/L
Fe	54	37314.656	-0.01	0.0021	0.001	47.576	mg/L
Fe	57	5472.045	-0.00	0.0001	0.001	763.172	mg/L
Sc-1	45	165576.392	165576.39				mg/L
Cl	35	15649.575	-7882.77				mg/L
Kr	83	62.334	-1.00				mg/L
Br	81	7463.453	14.68				mg/L
P	31	7632.919	-418.99				mg/L
S	34	135916.645	11568.87				mg/L
Sr	88	116.679	0.00				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51	103.386				
Cr	52	108.856				
Cr	53					
Mn	55	99.295				
Co	59	98.065				
Ni	60	102.381				
Cu	65	99.670				
Zn	66	95.975				
Ge	72		99.287			
As	75	115.152				
Se	77					
Se	82	122.412				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	103.064				
Cd	114	110.139				
In	115		100.972			
Sn	118					
Sb	123	102.584				
Ba	135	101.509				
Ce	140					
Tb	159		100.756			
Ho	165					
Tl	203	90.554				
Tl	205					
Pb	206					
Pb	207					
Pb	208	99.981				
U	238	101.632				
Bi	209		97.811			

Sample ID: QC Std 3
Report Date/Time: Monday, April 11, 2011 09:48:14
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 3
Report Date/Time: Monday, April 11, 2011 09:48:14
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, April 11, 2011 09:53:10
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21205.821	0.02				ug/L
|	Be	9	13.333	-0.00	-0.0117	0.018	152.175	ug/L
|	Al	27	25002913.603	150.17	4611.1486	241.643	5.240	ug/L
⌊>	Sc	45	166610.280	166610.28				ug/L
⌈	Ti	49	53052.391	0.17	100.6747	3.480	3.456	ug/L
|	V	51	2315.504	-0.00	-0.0239	0.004	14.971	ug/L
|	Cr	52	8706.210	0.00	0.0673	0.030	45.203	ug/L
|	Cr	53	1126.843	0.00	0.4633	0.067	14.412	ug/L
|	Mn	55	3123.853	0.01	0.2386	0.010	4.045	ug/L
|	Co	59	1743.503	0.01	0.1815	0.008	4.150	ug/L
|	Ni	60	820.042	0.00	0.4022	0.019	4.793	ug/L
|	Cu	65	733.701	0.00	0.2963	0.006	2.118	ug/L
|	Zn	66	1030.063	0.00	0.0742	0.014	19.312	ug/L
| >	Ge	72	307729.630	307729.63				ug/L
|	As	75	-177.989	0.00	-0.0020	0.046	2307.688	ug/L
|	Se	77	135.334	0.00	0.6323	0.209	33.047	ug/L
|	Se	82	2.139	0.00	0.0184	0.068	368.468	ug/L
⌊	Rb	85	1957.211	0.01				mg/L
	Y	89	211106.216	-14877.82				ug/L
	Rh	103	18.667	4.67				ug/L
⌈	Mo	98	287563.214	0.94	102.4056	1.065	1.040	ug/L
|	Ag	107	218.338	0.00	0.0104	0.001	6.264	ug/L
|	Cd	114	44.701	0.00	0.0504	0.013	25.295	ug/L
| >	In	115	306077.454	306077.45				ug/L
|	Sn	118	196.135	0.00	0.0175	0.003	14.521	ug/L
⌊	Sb	123	202.743	0.00	0.0514	0.004	7.528	ug/L
⌈	Ba	135	58.667	0.00	0.0287	0.006	19.555	ug/L
|	Ce	140	260.030	0.00				ug/L
⌊>	Tb	159	434060.923	434060.92				ug/L
⌈	Ho	165	16.668	-0.00				ug/L
|	Tl	203	42.001	-0.00	-0.0108	0.001	6.045	ug/L
|	Tl	205	76.675	-0.00	-0.0052	0.003	50.572	ug/L
|	Pb	206	451.348	0.00	0.0140	0.003	21.367	ug/L
|	Pb	207	381.344	0.00	0.0046	0.001	14.101	ug/L
|	Pb	208	1780.414	0.00	0.0073	0.001	13.832	ug/L
|	U	238	51.334	0.00	0.0098	0.000	1.634	ug/L
⌊>	Bi	209	409243.535	409243.54				ug/L

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⌈	Na	23	62055411.668	372.45	12.4876	0.751	6.016	mg/L
|	Mg	24	16792970.746	100.83	5.0663	0.160	3.166	mg/L
|	K	39	33602389.096	199.80	5.0755	0.159	3.127	mg/L
|	Ca	43	230639.106	1.38	14.6941	0.492	3.346	mg/L
|	Fe	54	6490417.707	38.74	12.6409	0.371	2.931	mg/L
|	Fe	57	2769471.889	16.60	12.8516	0.727	5.659	mg/L
⌊>	Sc-1	45	166610.280	166610.28				mg/L
	Cl	35	1617050.019	1593517.68				mg/L
	Kr	83	60.667	-2.67				mg/L
	Br	81	7288.659	-160.12				mg/L
	P	31	1509352.956	1501301.05				mg/L
	S	34	293310.620	168962.85				mg/L
	Sr	88	9081.697	8965.02				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		99.123			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.760			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		100.001			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		96.649			

Sample ID: QC Std 4
Report Date/Time: Monday, April 11, 2011 09:55:23

Approved: April 12, 2011

⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 4
Report Date/Time: Monday, April 11, 2011 09:55:23

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, April 11, 2011 10:00:18
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22909.616	0.03				ug/L
|	Be	9	35470.805	0.21	116.6052	2.119	1.818	ug/L
|	Al	27	24525150.923	145.18	4457.9345	144.770	3.247	ug/L
⌊>	Sc	45	168965.987	168965.99				ug/L
⌈	Ti	49	51671.646	0.18	104.1095	0.676	0.650	ug/L
|	V	51	782727.825	2.69	99.2518	1.175	1.184	ug/L
|	Cr	52	698278.209	2.38	103.6868	1.411	1.361	ug/L
|	Cr	53	125053.069	0.43	161.6873	4.215	2.607	ug/L
|	Mn	55	1063179.227	3.67	106.3854	0.829	0.779	ug/L
|	Co	59	858572.040	2.96	106.3439	0.516	0.485	ug/L
|	Ni	60	181485.518	0.63	105.4850	1.059	1.004	ug/L
|	Cu	65	186073.726	0.64	103.6777	0.848	0.817	ug/L
|	Zn	66	113285.572	0.39	103.5742	0.659	0.637	ug/L
|>	Ge	72	289803.995	289803.99				ug/L
|	As	75	96983.931	0.34	97.5449	1.207	1.238	ug/L
|	Se	77	10825.190	0.04	136.4916	1.638	1.200	ug/L
|	Se	82	9659.242	0.03	98.1764	0.400	0.407	ug/L
⌊	Rb	85	1712.830	0.01				mg/L
	Y	89	192650.453	-33333.58				ug/L
	Rh	103	61.334	47.33				ug/L
⌈	Mo	98	257565.060	0.92	100.7734	1.688	1.675	ug/L
|	Ag	107	539732.619	1.94	100.3925	2.407	2.398	ug/L
|	Cd	114	114898.787	0.41	103.1227	3.199	3.102	ug/L
|>	In	115	278601.063	278601.06				ug/L
|	Sn	118	496.279	0.00	0.0982	0.003	2.814	ug/L
⌊	Sb	123	362720.119	1.30	106.1662	1.029	0.969	ug/L
⌈	Ba	135	148125.385	0.35	94.7558	0.998	1.053	ug/L
|	Ce	140	243.361	0.00				ug/L
⌊>	Tb	159	418816.675	418816.68				ug/L
⌈	Ho	165	6.667	-0.00				ug/L
|	Tl	203	834456.910	2.06	100.2996	1.135	1.132	ug/L
|	Tl	205	2074185.890	5.12	100.4250	2.179	2.170	ug/L
|	Pb	206	705550.827	1.74	104.4282	1.442	1.380	ug/L
|	Pb	207	622325.148	1.54	97.9126	0.943	0.963	ug/L
|	Pb	208	2879645.706	7.10	102.1834	0.840	0.822	ug/L
|	U	238	4824826.130	11.91	105.4469	1.592	1.510	ug/L
⌊>	Bi	209	405130.265	405130.27				ug/L

Sample ID: QC Std 5
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Na	23	59971285.077	354.59	11.8889	0.402	3.381	mg/L	
Mg	24	16120913.774	95.44	4.7951	0.166	3.467	mg/L	
K	39	32567196.309	190.84	4.8478	0.070	1.438	mg/L	
Ca	43	224211.702	1.33	14.0789	0.113	0.804	mg/L	
Fe	54	6342297.850	37.31	12.1758	0.314	2.575	mg/L	
Fe	57	2696901.564	15.94	12.3371	0.513	4.155	mg/L	
> Sc-1	45	168965.987	168965.99				mg/L	
Cl	35	67940723.547	67917191.20				mg/L	
Kr	83	67.001	3.67				mg/L	
Br	81	10299.968	2851.19				mg/L	
P	31	1467127.338	1459075.43				mg/L	
S	34	284088.983	159741.21				mg/L	
Sr	88	8227.540	8110.86				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	99.252				
Cr	52	103.687				
Cr	53					
Mn	55	106.385				
Co	59	106.344				
Ni	60	105.485				
Cu	65	103.678				
Zn	66	103.574				
> Ge	72		93.349			
As	75	97.545				
Se	77					
Se	82	98.176				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	100.392				
Cd	114	103.123				
> In	115		88.984			
Sn	118					
Sb	123	106.166				
Ba	135	94.756				
Ce	140					
> Tb	159		96.489			
Ho	165					
Tl	203	100.300				
Tl	205					
Pb	206					
Pb	207					
Pb	208	102.183				
U	238	105.447				
> Bi	209		95.678			

Sample ID: QC Std 5
Report Date/Time: Monday, April 11, 2011 10:02:31

Approved: April 12, 2011

⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 5
Report Date/Time: Monday, April 11, 2011 10:02:31
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 11, 2011 10:07:26
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19084.869	0.01				ug/L
|	Be	9	15927.345	0.10	53.1140	2.853	5.372	ug/L
|	Al	27	292122.170	1.74	53.4241	2.608	4.881	ug/L
⌊>	Sc	45	166679.493	166679.49				ug/L
⌈	Ti	49	52539.585	0.17	97.7362	2.243	2.295	ug/L
|	V	51	427050.985	1.35	49.8425	0.810	1.624	ug/L
|	Cr	52	366544.170	1.14	49.6469	0.317	0.638	ug/L
|	Cr	53	44811.327	0.14	52.8709	0.311	0.587	ug/L
|	Mn	55	546428.951	1.74	50.4479	0.592	1.174	ug/L
|	Co	59	439860.482	1.40	50.2898	1.399	2.782	ug/L
|	Ni	60	91199.923	0.29	48.9150	0.905	1.849	ug/L
|	Cu	65	96833.587	0.31	49.7666	0.853	1.714	ug/L
|	Zn	66	60437.713	0.19	50.5958	0.251	0.497	ug/L
| >	Ge	72	313911.951	313911.95				ug/L
|	As	75	53310.984	0.17	49.5850	0.672	1.355	ug/L
|	Se	77	4484.339	0.01	51.5914	0.996	1.931	ug/L
|	Se	82	5447.044	0.02	51.1178	1.250	2.445	ug/L
⌊	Rb	85	2090.906	0.01				mg/L
	Y	89	219075.771	-6908.26				ug/L
	Rh	103	41.667	27.67				ug/L
⌈	Mo	98	287007.276	0.92	100.1955	1.350	1.347	ug/L
|	Ag	107	300504.725	0.96	49.8565	0.478	0.958	ug/L
|	Cd	114	63891.120	0.20	51.1672	0.730	1.426	ug/L
| >	In	115	312221.143	312221.14				ug/L
|	Sn	118	221435.968	0.71	50.1674	0.577	1.151	ug/L
⌊	Sb	123	191986.063	0.61	50.1399	0.385	0.769	ug/L
⌈	Ba	135	80769.737	0.18	49.0284	0.904	1.844	ug/L
|	Ce	140	30.003	-0.00				ug/L
⌊>	Tb	159	441396.241	441396.24				ug/L
⌈	Ho	165	13.335	-0.00				ug/L
|	Tl	203	418061.739	1.01	49.1801	0.653	1.327	ug/L
|	Tl	205	1021417.726	2.47	48.4079	1.120	2.313	ug/L
|	Pb	206	340175.828	0.82	49.2570	0.634	1.286	ug/L
|	Pb	207	322611.253	0.78	49.6649	1.496	3.012	ug/L
|	Pb	208	1431387.924	3.46	49.6934	0.963	1.937	ug/L
|	U	238	2368589.215	5.72	50.6802	1.093	2.156	ug/L
⌊>	Bi	209	413912.311	413912.31				ug/L

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 10:09:39
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Na	23	26177293.641	156.76	5.2565	0.128	2.443	mg/L	
Mg	24	17352313.760	104.14	5.2326	0.135	2.581	mg/L	
K	39	33386919.104	198.78	5.0495	0.354	7.014	mg/L	
Ca	43	79415.409	0.48	5.0511	0.238	4.715	mg/L	
Fe	54	2633053.991	15.59	5.0899	0.285	5.609	mg/L	
Fe	57	1099564.012	6.58	5.0906	0.326	6.395	mg/L	
> Sc-1	45	166679.493	166679.49				mg/L	
Cl	35	55942.163	32409.82				mg/L	
Kr	83	60.667	-2.67				mg/L	
Br	81	7273.979	-174.79				mg/L	
P	31	9144.863	1092.95				mg/L	
S	34	149715.131	25367.36				mg/L	
Sr	88	1937.051	1820.37				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	99.685				
Cr	52	99.294				
Cr	53					
Mn	55	100.896				
Co	59	100.580				
Ni	60	97.830				
Cu	65	99.533				
Zn	66	101.192				
> Ge	72		101.115			
As	75	99.170				
Se	77					
Se	82	102.236				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	99.713				
Cd	114	102.334				
> In	115		99.722			
Sn	118					
Sb	123	100.280				
Ba	135	98.057				
Ce	140					
> Tb	159		101.691			
Ho	165					
Tl	203	98.360				
Tl	205					
Pb	206					
Pb	207					
Pb	208	99.387				
U	238	101.360				
> Bi	209		97.752			

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 10:09:39
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 10:09:39
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 11, 2011 10:14:32
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18416.990	0.01				ug/L
|	Be	9	17.333	-0.00	0.0008	0.041	4948.371	ug/L
|	Al	27	3050.470	0.00	0.0858	0.087	101.342	ug/L
⌊>	Sc	45	169254.572	169254.57				ug/L
⌈	Ti	49	96.677	0.00	0.1078	0.052	48.662	ug/L
|	V	51	2490.227	-0.00	-0.0096	0.020	212.343	ug/L
|	Cr	52	8325.548	-0.00	-0.0133	0.008	61.953	ug/L
|	Cr	53	2127.110	0.00	1.6302	0.456	27.945	ug/L
|	Mn	55	1849.190	0.00	0.1145	0.014	12.210	ug/L
|	Co	59	99.335	0.00	-0.0105	0.001	8.363	ug/L
|	Ni	60	50.001	0.00	-0.0201	0.002	11.612	ug/L
|	Cu	65	106.002	-0.00	-0.0346	0.003	8.594	ug/L
|	Zn	66	581.023	-0.00	-0.3269	0.009	2.797	ug/L
|>	Ge	72	314874.681	314874.68				ug/L
|	As	75	-99.150	0.00	0.0745	0.026	34.991	ug/L
|	Se	77	78.000	0.00	-0.0744	0.187	250.855	ug/L
|	Se	82	13.774	0.00	0.1264	0.113	89.646	ug/L
⌊	Rb	85	24.667	0.00				mg/L
	Y	89	222104.942	-3879.09				ug/L
	Rh	103	11.000	-3.00				ug/L
⌈	Mo	98	133.098	0.00	0.0565	0.006	10.451	ug/L
|	Ag	107	133.336	0.00	-0.0048	0.002	51.066	ug/L
|	Cd	114	-1.391	-0.00	0.0128	0.006	46.086	ug/L
|>	In	115	316893.507	316893.51				ug/L
|	Sn	118	1768.291	0.00	0.3676	0.046	12.641	ug/L
⌊	Sb	123	99.365	0.00	0.0230	0.000	1.241	ug/L
⌈	Ba	135	31.334	0.00	0.0117	0.002	16.720	ug/L
|	Ce	140	46.671	-0.00				ug/L
⌊>	Tb	159	436301.003	436301.00				ug/L
⌈	Ho	165	26.669	-0.00				ug/L
|	Tl	203	183.337	0.00	0.0055	0.000	2.268	ug/L
|	Tl	205	400.048	0.00	0.0098	0.004	42.763	ug/L
|	Pb	206	360.343	0.00	-0.0006	0.004	575.869	ug/L
|	Pb	207	316.342	0.00	-0.0067	0.001	12.468	ug/L
|	Pb	208	1438.722	0.00	-0.0059	0.001	16.324	ug/L
|	U	238	149.336	0.00	0.0118	0.000	1.525	ug/L
⌊>	Bi	209	419052.541	419052.54				ug/L

Sample ID: QC Std 7
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⌈	Na	23	63111.643	0.02	0.0016	0.001	39.387	mg/L
|	Mg	24	1596.955	0.00	-0.0016	0.000	3.423	mg/L
|	K	39	344194.737	0.10	-0.0007	0.001	145.233	mg/L
|	Ca	43	183.353	-0.00	-0.0046	0.004	81.672	mg/L
|	Fe	54	39916.176	0.00	0.0055	0.004	79.349	mg/L
|	Fe	57	5401.999	-0.00	-0.0007	0.001	89.333	mg/L
⌊>	Sc-1	45	169254.572	169254.57				mg/L
	Cl	35	33414.411	9882.07				mg/L
	Kr	83	64.334	1.00				mg/L
	Br	81	7433.429	-15.34				mg/L
	P	31	7049.176	-1002.73				mg/L
	S	34	134891.378	10543.60				mg/L
	Sr	88	100.011	-16.67				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		101.425			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		101.214			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		100.517			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.966			

Sample ID: QC Std 7
Report Date/Time: Monday, April 11, 2011 10:16:43

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Monday, April 11, 2011 10:16:43
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: PBS 58 WG361054-02

Sample Date/Time: Monday, April 11, 2011 10:21:37
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 12
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

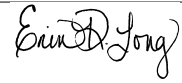
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21022.194	0.02				ug/L
|	Be	9	15.333	-0.00	-0.0082	0.022	260.703	ug/L
|	Al	27	43360.608	0.23	7.0872	0.227	3.198	ug/L
⌊>	Sc	45	176137.997	176138.00				ug/L
⌈	Ti	49	230.026	0.00	0.3446	0.088	25.510	ug/L
|	V	51	2810.009	0.00	0.0191	0.025	131.936	ug/L
|	Cr	52	9748.848	0.00	0.1472	0.027	18.493	ug/L
|	Cr	53	1596.954	0.00	0.9433	0.152	16.141	ug/L
|	Mn	55	2168.590	0.00	0.1385	0.005	3.964	ug/L
|	Co	59	108.002	0.00	-0.0099	0.001	7.118	ug/L
|	Ni	60	202.337	0.00	0.0585	0.010	17.148	ug/L
|	Cu	65	168.670	0.00	-0.0048	0.008	162.923	ug/L
|	Zn	66	3613.689	0.01	2.1623	0.035	1.619	ug/L
|>	Ge	72	323622.591	323622.59				ug/L
|	As	75	-192.535	-0.00	-0.0068	0.017	255.490	ug/L
|	Se	77	88.000	0.00	0.0141	0.061	433.795	ug/L
|	Se	82	-8.597	-0.00	-0.0805	0.032	40.345	ug/L
⌊	Rb	85	195.671	0.00				mg/L
	Y	89	238675.922	12691.89				ug/L
	Rh	103	11.667	-2.33				ug/L
⌈	Mo	98	95.280	0.00	0.0424	0.001	2.850	ug/L
|	Ag	107	121.669	0.00	-0.0073	0.001	15.176	ug/L
|	Cd	114	-0.006	-0.00	0.0138	0.003	19.731	ug/L
|>	In	115	327203.686	327203.69				ug/L
|	Sn	118	398.275	0.00	0.0583	0.005	7.734	ug/L
⌊	Sb	123	131.571	0.00	0.0302	0.005	15.836	ug/L
⌈	Ba	135	275.007	0.00	0.1546	0.016	10.097	ug/L
|	Ce	140	233.359	0.00				ug/L
⌊>	Tb	159	454322.276	454322.28				ug/L
⌈	Ho	165	13.335	-0.00				ug/L
|	Tl	203	151.336	0.00	0.0017	0.002	125.650	ug/L
|	Tl	205	360.043	0.00	0.0078	0.002	26.598	ug/L
|	Pb	206	427.347	0.00	0.0086	0.007	75.851	ug/L
|	Pb	207	376.011	0.00	0.0020	0.001	58.716	ug/L
|	Pb	208	1700.073	0.00	0.0027	0.001	30.319	ug/L
|	U	238	137.669	0.00	0.0116	0.000	3.647	ug/L
⌊>	Bi	209	421658.489	421658.49				ug/L

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Na	23	62249.457	0.01	0.0009	0.000	49.749	mg/L	
Mg	24	15236.480	0.08	0.0022	0.000	8.956	mg/L	
K	39	381502.095	0.23	0.0026	0.001	31.055	mg/L	
Ca	43	430.052	0.00	0.0099	0.004	40.931	mg/L	
Fe	54	84823.879	0.25	0.0857	0.004	4.415	mg/L	
Fe	57	8828.116	0.02	0.0134	0.002	18.574	mg/L	
> Sc-1	45	176137.997	176138.00				mg/L	
Cl	35	32524.245	8991.90				mg/L	
Kr	83	68.668	5.33				mg/L	
Br	81	8490.937	1042.16				mg/L	
P	31	16426.173	8374.26				mg/L	
S	34	147880.659	23532.88				mg/L	
Sr	88	660.088	543.41				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		104.243			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		104.507			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		104.669			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		99.581			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBS 58 WG361054-02
Report Date/Time: Monday, April 11, 2011 10:23:48

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: LCSS 58 WG361054-03

Sample Date/Time: Monday, April 11, 2011 10:28:41
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 13
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21022.162	0.02				ug/L
|	Be	9	7869.096	0.04	24.6930	1.174	4.755	ug/L
|	Al	27	162665.188	0.90	27.8054	1.970	7.083	ug/L
⌊>	Sc	45	176765.696	176765.70				ug/L
⌈	Ti	49	130.014	0.00	0.1627	0.140	86.134	ug/L
|	V	51	231533.094	0.71	26.0169	0.080	0.308	ug/L
|	Cr	52	208953.934	0.62	26.8769	0.162	0.601	ug/L
|	Cr	53	24900.139	0.07	28.0191	0.998	3.564	ug/L
|	Mn	55	309124.196	0.95	27.6046	0.271	0.983	ug/L
|	Co	59	238634.488	0.74	26.4006	0.188	0.710	ug/L
|	Ni	60	50477.922	0.16	26.1858	0.202	0.772	ug/L
|	Cu	65	53331.058	0.16	26.4911	0.447	1.686	ug/L
|	Zn	66	34609.801	0.10	27.6853	0.031	0.112	ug/L
| >	Ge	72	324253.693	324253.69				ug/L
|	As	75	26118.254	0.08	23.6026	0.620	2.625	ug/L
|	Se	77	2082.884	0.01	22.6561	1.131	4.992	ug/L
|	Se	82	2405.476	0.01	21.8487	0.515	2.357	ug/L
⌊	Rb	85	46.667	0.00				mg/L
	Y	89	237456.709	11472.67				ug/L
	Rh	103	22.667	8.67				ug/L
⌈	Mo	98	79.946	0.00	0.0373	0.002	5.113	ug/L
|	Ag	107	142538.420	0.44	22.5827	0.136	0.604	ug/L
|	Cd	114	32017.266	0.10	24.5077	0.337	1.374	ug/L
| >	In	115	326756.290	326756.29				ug/L
|	Sn	118	198.135	0.00	0.0151	0.002	11.000	ug/L
⌊	Sb	123	98711.294	0.30	24.6319	0.218	0.885	ug/L
⌈	Ba	135	43418.174	0.09	25.2643	0.421	1.667	ug/L
|	Ce	140	83.342	0.00				ug/L
⌊>	Tb	159	460342.465	460342.47				ug/L
⌈	Ho	165	6.667	-0.00				ug/L
|	Tl	203	225678.942	0.52	25.5053	0.160	0.627	ug/L
|	Tl	205	557052.655	1.29	25.3631	0.600	2.366	ug/L
|	Pb	206	192604.068	0.45	26.7763	0.526	1.965	ug/L
|	Pb	207	169816.734	0.39	25.0921	0.398	1.587	ug/L
|	Pb	208	782703.681	1.81	26.0848	0.369	1.413	ug/L
|	U	238	1245711.502	2.89	25.6148	0.536	2.092	ug/L
⌊>	Bi	209	430671.588	430671.59				ug/L

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Na	23	70682.641	0.05	0.0025	0.000	8.738	mg/L	
Mg	24	13530.514	0.07	0.0017	0.000	15.069	mg/L	
K	39	358294.795	0.09	-0.0009	0.001	152.965	mg/L	
Ca	43	430.053	0.00	0.0097	0.006	57.984	mg/L	
Fe	54	93965.237	0.30	0.1020	0.009	9.109	mg/L	
Fe	57	12502.395	0.04	0.0293	0.002	6.851	mg/L	
> Sc-1	45	176765.696	176765.70				mg/L	
Cl	35	28216.495	4684.15				mg/L	
Kr	83	59.667	-3.67				mg/L	
Br	81	8391.520	942.75				mg/L	
P	31	15206.988	7155.08				mg/L	
S	34	140547.591	16199.82				mg/L	
Sr	88	620.081	503.40				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		104.446			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		104.365			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		106.056			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		101.710			

Sample ID: LCSS 58 WG361054-03
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSS 58 WG361054-03
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104018901

Sample Date/Time: Monday, April 11, 2011 10:35:46
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 14
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20521.080	0.01				ug/L
|	Be	9	95.334	0.00	0.2394	0.018	7.583	ug/L
|	Al	27	21348029.099	119.28	3662.6753	312.529	8.533	ug/L
⌊>	Sc	45	179055.609	179055.61				ug/L
⌈	Ti	49	2387.191	0.01	4.1452	0.236	5.702	ug/L
|	V	51	95428.863	0.28	10.3312	0.530	5.135	ug/L
|	Cr	52	61254.595	0.16	6.8934	0.380	5.507	ug/L
|	Cr	53	7386.811	0.02	7.4966	0.672	8.963	ug/L
|	Mn	55	1865858.907	5.64	163.5960	7.458	4.559	ug/L
|	Co	59	52465.783	0.16	5.6722	0.335	5.903	ug/L
|	Ni	60	37385.573	0.11	18.9969	0.924	4.865	ug/L
|	Cu	65	46607.348	0.14	22.6799	1.156	5.099	ug/L
|	Zn	66	119068.357	0.36	95.3050	4.807	5.044	ug/L
| >	Ge	72	330799.657	330799.66				ug/L
|	As	75	8120.478	0.03	7.3087	0.183	2.505	ug/L
|	Se	77	180.668	0.00	1.0235	0.192	18.769	ug/L
|	Se	82	101.315	0.00	0.8997	0.237	26.354	ug/L
⌊	Rb	85	47577.080	0.14				mg/L
	Y	89	259338.922	33354.89				ug/L
	Rh	103	71.668	57.67				ug/L
⌈	Mo	98	18768.928	0.06	6.2790	0.197	3.133	ug/L
|	Ag	107	527.686	0.00	0.0572	0.000	0.592	ug/L
|	Cd	114	1103.613	0.00	0.8593	0.044	5.148	ug/L
| >	In	115	326362.894	326362.89				ug/L
|	Sn	118	343.073	0.00	0.0466	0.004	9.454	ug/L
⌊	Sb	123	146.359	0.00	0.0340	0.002	5.473	ug/L
⌈	Ba	135	1493264.022	3.32	888.8352	49.208	5.536	ug/L
|	Ce	140	68262.810	0.15				ug/L
⌊>	Tb	159	450256.493	450256.49				ug/L
⌈	Ho	165	3010.756	0.01				ug/L
|	Tl	203	3783.420	0.01	0.4256	0.012	2.836	ug/L
|	Tl	205	9351.983	0.02	0.4306	0.031	7.191	ug/L
|	Pb	206	89143.118	0.21	12.7590	0.749	5.873	ug/L
|	Pb	207	74761.169	0.18	11.3669	0.590	5.189	ug/L
|	Pb	208	351362.497	0.84	12.0508	0.552	4.582	ug/L
|	U	238	46312.632	0.11	0.9909	0.058	5.813	ug/L
⌊>	Bi	209	417574.346	417574.35				ug/L

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Na	23	6143000.618	33.97	1.1398	0.076	6.703	mg/L	
Mg	24	7303644.303	40.80	2.0491	0.143	6.995	mg/L	
K	39	6917142.980	36.71	0.9299	0.049	5.257	mg/L	
Ca	43	88167.050	0.49	5.2169	0.430	8.238	mg/L	
Fe	54	7306769.523	40.59	13.2449	0.798	6.022	mg/L	
Fe	57	3069360.456	17.12	13.2492	0.792	5.974	mg/L	
> Sc-1	45	179055.609	179055.61				mg/L	
Cl	35	56081.550	32549.21				mg/L	
Kr	83	79.001	15.67				mg/L	
Br	81	9591.935	2143.16				mg/L	
P	31	48602.625	40550.71				mg/L	
S	34	257130.291	132782.52				mg/L	
Sr	88	2020363.119	2020246.44				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		106.554			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		104.239			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		103.733			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		98.617			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1104018901
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Method 6020 - Summary Report

Sample ID: L1104018903

Sample Date/Time: Monday, April 11, 2011 10:42:52
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 15
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21189.100	0.01				ug/L
|	Be	9	200.669	0.00	0.5366	0.041	7.595	ug/L
|	Al	27	27240435.489	144.96	4451.0934	75.567	1.698	ug/L
⌊>	Sc	45	187848.574	187848.57				ug/L
⌈	Ti	49	1393.572	0.00	2.3943	0.410	17.112	ug/L
|	V	51	50680.792	0.15	5.3534	0.226	4.221	ug/L
|	Cr	52	71750.251	0.19	8.2877	0.300	3.624	ug/L
|	Cr	53	8624.585	0.02	8.9212	0.299	3.356	ug/L
|	Mn	55	1767966.098	5.35	155.2180	6.139	3.955	ug/L
|	Co	59	64570.020	0.20	6.9948	0.347	4.963	ug/L
|	Ni	60	23376.210	0.07	11.8800	0.218	1.832	ug/L
|	Cu	65	24126.702	0.07	11.7134	0.452	3.858	ug/L
|	Zn	66	42214.235	0.13	33.3033	1.601	4.809	ug/L
| >	Ge	72	330219.921	330219.92				ug/L
|	As	75	915.456	0.00	0.9723	0.045	4.579	ug/L
|	Se	77	110.667	0.00	0.2469	0.071	28.667	ug/L
|	Se	82	2.594	0.00	0.0205	0.154	750.338	ug/L
⌊	Rb	85	43581.909	0.13				mg/L
	Y	89	324663.575	98679.54				ug/L
	Rh	103	19.000	5.00				ug/L
⌈	Mo	98	109.650	0.00	0.0476	0.006	12.844	ug/L
|	Ag	107	183.670	0.00	0.0029	0.002	64.394	ug/L
|	Cd	114	24.846	0.00	0.0331	0.003	10.216	ug/L
| >	In	115	322943.199	322943.20				ug/L
|	Sn	118	159.735	-0.00	0.0072	0.002	22.083	ug/L
⌊	Sb	123	57.737	0.00	0.0120	0.002	20.896	ug/L
⌈	Ba	135	85526.841	0.19	51.0599	3.058	5.989	ug/L
|	Ce	140	320836.501	0.71				ug/L
⌊>	Tb	159	448792.112	448792.11				ug/L
⌈	Ho	165	7093.231	0.02				ug/L
|	Tl	203	403.679	0.00	0.0308	0.003	9.776	ug/L
|	Tl	205	1090.168	0.00	0.0418	0.001	2.246	ug/L
|	Pb	206	41081.773	0.10	5.7932	0.308	5.309	ug/L
|	Pb	207	34179.405	0.08	5.1149	0.240	4.699	ug/L
|	Pb	208	160855.286	0.38	5.4320	0.257	4.727	ug/L
|	U	238	16759.565	0.04	0.3606	0.021	5.769	ug/L
⌊>	Bi	209	421648.832	421648.83				ug/L

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Na	23	453514.081	2.07	0.0700	0.002	2.659	mg/L	
Mg	24	7007263.832	37.28	1.8720	0.054	2.897	mg/L	
K	39	2018860.141	8.82	0.2208	0.005	2.142	mg/L	
Ca	43	16872.622	0.09	0.9372	0.045	4.802	mg/L	
Fe	54	5717968.004	30.20	9.8540	0.220	2.232	mg/L	
Fe	57	2423352.381	12.86	9.9534	0.450	4.524	mg/L	
> Sc-1	45	187848.574	187848.57				mg/L	
Cl	35	24872.898	1340.56				mg/L	
Kr	83	85.001	21.67				mg/L	
Br	81	8185.354	736.58				mg/L	
P	31	49229.561	41177.65				mg/L	
S	34	128636.709	4288.93				mg/L	
Sr	88	53944.005	53827.33				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		106.368			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		103.147			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		103.395			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		99.579			

Sample ID: L1104018903
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021612 WG361054-01

Sample Date/Time: Monday, April 11, 2011 10:49:58
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 16
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19969.943	0.01				ug/L
|	Be	9	60.000	0.00	0.1301	0.020	15.734	ug/L
|	Al	27	12288827.525	68.75	2111.0007	178.894	8.474	ug/L
⌊>	Sc	45	179297.605	179297.60				ug/L
⌈	Ti	49	3330.888	0.01	5.8781	0.171	2.912	ug/L
|	V	51	42191.136	0.12	4.4535	0.108	2.417	ug/L
|	Cr	52	39657.918	0.09	4.1132	0.212	5.156	ug/L
|	Cr	53	4144.607	0.01	3.8590	0.225	5.837	ug/L
|	Mn	55	2440169.865	7.46	216.5138	14.124	6.523	ug/L
|	Co	59	24733.152	0.08	2.6938	0.131	4.852	ug/L
|	Ni	60	13248.243	0.04	6.7809	0.345	5.095	ug/L
|	Cu	65	10030.798	0.03	4.8683	0.210	4.319	ug/L
|	Zn	66	32092.104	0.10	25.3910	1.245	4.903	ug/L
|>	Ge	72	327137.623	327137.62				ug/L
|	As	75	2252.930	0.01	2.1707	0.115	5.308	ug/L
|	Se	77	101.334	0.00	0.1540	0.066	42.783	ug/L
|	Se	82	17.047	0.00	0.1519	0.087	57.383	ug/L
⌊	Rb	85	29622.480	0.09				mg/L
	Y	89	262982.562	36998.53				ug/L
	Rh	103	21.000	7.00				ug/L
⌈	Mo	98	566.341	0.00	0.2017	0.008	3.910	ug/L
|	Ag	107	235.672	0.00	0.0112	0.001	6.561	ug/L
|	Cd	114	104.258	0.00	0.0944	0.007	7.117	ug/L
|>	In	115	323194.990	323194.99				ug/L
|	Sn	118	234.269	0.00	0.0235	0.001	4.607	ug/L
⌊	Sb	123	80.528	0.00	0.0177	0.001	3.779	ug/L
⌈	Ba	135	40016.383	0.09	24.1568	1.138	4.710	ug/L
|	Ce	140	185051.480	0.42				ug/L
⌊>	Tb	159	443850.338	443850.34				ug/L
⌈	Ho	165	2860.698	0.01				ug/L
|	Tl	203	488.017	0.00	0.0404	0.001	3.408	ug/L
|	Tl	205	1150.183	0.00	0.0444	0.010	23.412	ug/L
|	Pb	206	39582.708	0.09	5.5573	0.255	4.580	ug/L
|	Pb	207	32779.757	0.08	4.8834	0.273	5.583	ug/L
|	Pb	208	154832.564	0.36	5.2056	0.209	4.008	ug/L
|	U	238	10388.510	0.02	0.2259	0.012	5.329	ug/L
⌊>	Bi	209	423274.317	423274.32				ug/L

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⌈	Na	23	150143.636	0.49	0.0172	0.002	9.105	mg/L
|	Mg	24	19975731.121	111.57	5.6060	0.341	6.082	mg/L
|	K	39	2295370.206	10.91	0.2739	0.023	8.378	mg/L
|	Ca	43	196373.905	1.10	11.6448	0.771	6.623	mg/L
|	Fe	54	3149279.945	17.38	5.6736	0.504	8.882	mg/L
|	Fe	57	1291975.152	7.19	5.5642	0.369	6.640	mg/L
⌊>	Sc-1	45	179297.605	179297.60				mg/L
	Cl	35	32548.218	9015.88				mg/L
	Kr	83	71.334	8.00				mg/L
	Br	81	9087.461	1638.69				mg/L
	P	31	45696.381	37644.47				mg/L
	S	34	167754.133	43406.36				mg/L
	Sr	88	102358.331	102241.65				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		105.375			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		103.227			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.257			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.963			

Sample ID: L1104021612 WG361054-01
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021613S WG361054-04

Sample Date/Time: Monday, April 11, 2011 10:57:05
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 17
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20253.829	0.01				ug/L
|	Be	9	1895.513	0.01	5.6651	0.029	0.513	ug/L
|	Al	27	15728967.658	85.41	2622.5527	68.893	2.627	ug/L
⌊>	Sc	45	184079.436	184079.44				ug/L
⌈	Ti	49	3257.529	0.01	5.6966	0.787	13.818	ug/L
|	V	51	96063.029	0.28	10.4281	0.508	4.876	ug/L
|	Cr	52	91495.048	0.25	10.9006	0.658	6.037	ug/L
|	Cr	53	9972.648	0.03	10.4699	0.755	7.209	ug/L
|	Mn	55	3417914.412	10.35	300.4503	14.659	4.879	ug/L
|	Co	59	89020.093	0.27	9.6630	0.515	5.326	ug/L
|	Ni	60	27098.698	0.08	13.7907	0.858	6.220	ug/L
|	Cu	65	24453.836	0.07	11.8864	0.670	5.635	ug/L
|	Zn	66	41899.121	0.12	33.0878	1.477	4.465	ug/L
| >	Ge	72	330003.998	330004.00				ug/L
|	As	75	8228.246	0.03	7.4211	0.383	5.157	ug/L
|	Se	77	579.350	0.00	5.4746	0.232	4.239	ug/L
|	Se	82	560.063	0.00	4.9967	0.470	9.404	ug/L
⌊	Rb	85	36183.057	0.11				mg/L
	Y	89	276566.368	50582.33				ug/L
	Rh	103	21.334	7.33				ug/L
⌈	Mo	98	610.490	0.00	0.2123	0.015	6.968	ug/L
|	Ag	107	29413.857	0.09	4.5936	0.205	4.460	ug/L
|	Cd	114	8003.316	0.02	6.0774	0.429	7.063	ug/L
| >	In	115	330060.327	330060.33				ug/L
|	Sn	118	198.935	0.00	0.0148	0.002	14.306	ug/L
⌊	Sb	123	2034.256	0.01	0.5001	0.025	4.904	ug/L
⌈	Ba	135	67409.177	0.15	40.5092	2.257	5.571	ug/L
|	Ce	140	245618.929	0.55				ug/L
⌊>	Tb	159	445866.003	445866.00				ug/L
⌈	Ho	165	3437.603	0.01				ug/L
|	Tl	203	46532.544	0.11	5.4211	0.191	3.520	ug/L
|	Tl	205	115043.616	0.28	5.4051	0.266	4.916	ug/L
|	Pb	206	91857.093	0.22	13.1694	0.933	7.087	ug/L
|	Pb	207	77663.437	0.19	11.8282	0.695	5.877	ug/L
|	Pb	208	364515.618	0.87	12.5235	0.723	5.776	ug/L
|	U	238	271162.597	0.65	5.7684	0.360	6.237	ug/L
⌊>	Bi	209	416886.477	416886.48				ug/L

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Na	23	129604.370	0.36	0.0127	0.001	5.877	mg/L
Mg	24	18365330.453	99.72	5.0102	0.200	3.984	mg/L
K	39	2686226.721	12.66	0.3186	0.004	1.408	mg/L
Ca	43	151768.722	0.82	8.7413	0.191	2.187	mg/L
Fe	54	4061578.762	21.82	7.1233	0.187	2.630	mg/L
Fe	57	1671249.312	9.04	6.9994	0.183	2.617	mg/L
> Sc-1	45	184079.436	184079.44				mg/L
Cl	35	51068.752	27536.41				mg/L
Kr	83	72.334	9.00				mg/L
Br	81	8989.377	1540.60				mg/L
P	31	50488.641	42436.73				mg/L
S	34	153973.446	29625.67				mg/L
Sr	88	88405.158	88288.48				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		106.298			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		105.420			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		102.721			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		98.454			

Sample ID: L1104021613S WG361054-04
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021614SD WG361054-05

Sample Date/Time: Monday, April 11, 2011 11:04:12
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 18
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21005.431	0.02				ug/L
|	Be	9	2109.557	0.01	6.7629	0.783	11.572	ug/L
|	Al	27	17066454.328	99.17	3045.1123	228.514	7.504	ug/L
⌊>	Sc	45	172391.980	172391.98				ug/L
⌈	Ti	49	3390.914	0.01	5.9461	0.160	2.683	ug/L
|	V	51	101620.028	0.30	11.0752	0.673	6.076	ug/L
|	Cr	52	94890.116	0.26	11.3772	0.599	5.261	ug/L
|	Cr	53	10613.375	0.03	11.2289	0.797	7.100	ug/L
|	Mn	55	2456169.172	7.46	216.3944	11.933	5.514	ug/L
|	Co	59	82185.947	0.25	8.9403	0.513	5.741	ug/L
|	Ni	60	28057.342	0.09	14.3129	0.788	5.508	ug/L
|	Cu	65	25310.991	0.08	12.3342	0.710	5.753	ug/L
|	Zn	66	45170.497	0.14	35.8195	2.164	6.040	ug/L
| >	Ge	72	329210.702	329210.70				ug/L
|	As	75	7911.973	0.02	7.1596	0.146	2.044	ug/L
|	Se	77	577.350	0.00	5.4676	0.251	4.595	ug/L
|	Se	82	575.058	0.00	5.1434	0.219	4.260	ug/L
⌊	Rb	85	37575.525	0.11				mg/L
	Y	89	279918.793	53934.76				ug/L
	Rh	103	25.000	11.00				ug/L
⌈	Mo	98	633.638	0.00	0.2244	0.006	2.693	ug/L
|	Ag	107	30817.749	0.10	4.9168	0.176	3.579	ug/L
|	Cd	114	8068.246	0.02	6.2563	0.377	6.020	ug/L
| >	In	115	323155.672	323155.67				ug/L
|	Sn	118	133.068	-0.00	0.0013	0.002	134.052	ug/L
⌊	Sb	123	1995.287	0.01	0.5010	0.022	4.390	ug/L
⌈	Ba	135	65149.378	0.15	39.1551	1.457	3.721	ug/L
|	Ce	140	303339.484	0.68				ug/L
⌊>	Tb	159	445744.868	445744.87				ug/L
⌈	Ho	165	4077.912	0.01				ug/L
|	Tl	203	46058.977	0.11	5.4074	0.126	2.326	ug/L
|	Tl	205	112102.723	0.27	5.3076	0.116	2.194	ug/L
|	Pb	206	92865.705	0.22	13.4199	0.731	5.443	ug/L
|	Pb	207	80532.862	0.19	12.3647	0.662	5.357	ug/L
|	Pb	208	372286.607	0.90	12.8929	0.639	4.956	ug/L
|	U	238	282694.336	0.68	6.0610	0.387	6.381	ug/L
⌊>	Bi	209	413685.673	413685.67				ug/L

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⌈	Na	23	133647.187	0.43	0.0151	0.001	9.513	mg/L
|	Mg	24	18525947.843	107.71	5.4120	0.439	8.104	mg/L
|	K	39	2769223.654	14.17	0.3568	0.033	9.169	mg/L
|	Ca	43	144037.712	0.84	8.8833	0.937	10.547	mg/L
|	Fe	54	4040175.884	23.27	7.5945	0.725	9.553	mg/L
|	Fe	57	1641714.567	9.51	7.3645	0.702	9.536	mg/L
⌊>	Sc-1	45	172391.980	172391.98				mg/L
	Cl	35	23151.436	-380.91				mg/L
	Kr	83	73.001	9.67				mg/L
	Br	81	8683.104	1234.33				mg/L
	P	31	53541.685	45489.77				mg/L
	S	34	153047.290	28699.52				mg/L
	Sr	88	85533.326	85416.65				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		106.043			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		103.215			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.693			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.698			

Sample ID: L1104021614SD WG361054-05
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1104021614SD WG361054-05
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Method 6020 - Summary Report

Sample ID: L1104021604

Sample Date/Time: Monday, April 11, 2011 11:11:19
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 19
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19669.437	0.01				ug/L
|	Be	9	127.334	0.00	0.3403	0.033	9.704	ug/L
|	Al	27	25432900.015	142.41	4373.0461	486.343	11.121	ug/L
⌊>	Sc	45	178394.006	178394.01				ug/L
⌈	Ti	49	1536.942	0.00	2.6619	0.577	21.684	ug/L
|	V	51	45907.777	0.13	4.8472	0.280	5.779	ug/L
|	Cr	52	53471.253	0.14	5.9159	0.519	8.765	ug/L
|	Cr	53	5828.963	0.01	5.7669	0.800	13.881	ug/L
|	Mn	55	1248122.186	3.79	110.1304	6.601	5.994	ug/L
|	Co	59	20389.353	0.06	2.2055	0.140	6.366	ug/L
|	Ni	60	13280.972	0.04	6.7627	0.463	6.850	ug/L
|	Cu	65	12645.137	0.04	6.1290	0.406	6.622	ug/L
|	Zn	66	31992.471	0.10	25.1762	1.126	4.473	ug/L
| >	Ge	72	328685.298	328685.30				ug/L
|	As	75	2124.652	0.01	2.0473	0.174	8.483	ug/L
|	Se	77	119.334	0.00	0.3493	0.279	79.943	ug/L
|	Se	82	25.032	0.00	0.2224	0.214	96.277	ug/L
⌊	Rb	85	32112.814	0.10				mg/L
	Y	89	304403.891	78419.86				ug/L
	Rh	103	21.667	7.67				ug/L
⌈	Mo	98	143.578	0.00	0.0595	0.001	2.128	ug/L
|	Ag	107	351.676	0.00	0.0303	0.003	10.524	ug/L
|	Cd	114	54.811	0.00	0.0566	0.004	7.213	ug/L
| >	In	115	320354.321	320354.32				ug/L
|	Sn	118	102.667	-0.00	-0.0051	0.002	37.303	ug/L
⌊	Sb	123	59.695	0.00	0.0126	0.004	28.240	ug/L
⌈	Ba	135	97724.602	0.22	59.9207	3.788	6.321	ug/L
|	Ce	140	266978.399	0.61				ug/L
⌊>	Tb	159	437015.467	437015.47				ug/L
⌈	Ho	165	5235.243	0.01				ug/L
|	Tl	203	525.352	0.00	0.0457	0.002	3.396	ug/L
|	Tl	205	1313.551	0.00	0.0530	0.004	7.071	ug/L
|	Pb	206	30711.097	0.07	4.3768	0.192	4.394	ug/L
|	Pb	207	25904.139	0.06	3.9172	0.217	5.548	ug/L
|	Pb	208	121513.136	0.29	4.1460	0.206	4.976	ug/L
|	U	238	19351.281	0.05	0.4206	0.030	7.158	ug/L
⌊>	Bi	209	416140.762	416140.76				ug/L

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Na	23	94594.936	0.18	0.0069	0.001	10.583	mg/L	
Mg	24	4484540.541	25.13	1.2613	0.029	2.312	mg/L	
K	39	1807953.041	8.20	0.2052	0.002	1.122	mg/L	
Ca	43	24980.378	0.14	1.4708	0.059	4.042	mg/L	
Fe	54	3848797.966	21.33	6.9628	0.454	6.514	mg/L	
Fe	57	1612378.997	9.00	6.9684	0.428	6.141	mg/L	
> Sc-1	45	178394.006	178394.01				mg/L	
Cl	35	17666.933	-5865.41				mg/L	
Kr	83	73.001	9.67				mg/L	
Br	81	8135.979	687.21				mg/L	
P	31	32817.847	24765.94				mg/L	
S	34	124343.274	-4.50				mg/L	
Sr	88	53652.473	53535.79				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		105.873			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		102.320			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		100.682			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		98.278			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

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Data not used due to a possible pipetting error.

Method 6020 - Summary Report

Sample ID: L1104021604PS WG361117-01

Sample Date/Time: Monday, April 11, 2011 11:18:26
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 20
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21372.835	0.02				ug/L
|	Be	9	21694.853	0.12	68.3919	0.839	1.227	ug/L
|	Al	27	30982909.818	175.72	5395.7359	169.327	3.138	ug/L
⌊>	Sc	45	176156.269	176156.27				ug/L
⌈	Ti	49	1920.377	0.01	3.3607	0.285	8.467	ug/L
|	V	51	577269.518	1.76	64.7665	3.185	4.918	ug/L
|	Cr	52	532217.805	1.60	69.6651	4.677	6.714	ug/L
|	Cr	53	62340.599	0.19	70.9302	5.733	8.082	ug/L
|	Mn	55	2175034.428	6.65	192.9393	10.127	5.249	ug/L
|	Co	59	579599.826	1.77	63.6187	3.750	5.895	ug/L
|	Ni	60	131197.801	0.40	67.5671	3.980	5.891	ug/L
|	Cu	65	136029.417	0.42	67.1379	2.953	4.398	ug/L
|	Zn	66	112806.424	0.34	91.3077	4.205	4.606	ug/L
⌊>	Ge	72	327079.764	327079.76				ug/L
|	As	75	69289.295	0.21	61.8169	2.183	3.532	ug/L
|	Se	77	5667.606	0.02	62.7969	1.944	3.096	ug/L
|	Se	82	6988.148	0.02	62.9445	2.537	4.030	ug/L
⌊	Rb	85	32873.281	0.10				mg/L
	Y	89	308488.209	82504.17				ug/L
	Rh	103	49.334	35.33				ug/L
⌈	Mo	98	186.400	0.00	0.0745	0.007	9.307	ug/L
|	Ag	107	349662.381	1.10	56.9568	1.668	2.928	ug/L
|	Cd	114	80305.759	0.25	63.1315	1.714	2.715	ug/L
⌊>	In	115	318089.374	318089.37				ug/L
|	Sn	118	201.469	0.00	0.0170	0.004	22.189	ug/L
⌊	Sb	123	233794.204	0.74	59.9435	1.962	3.273	ug/L
⌈	Ba	135	207926.895	0.47	125.7714	5.630	4.476	ug/L
|	Ce	140	307210.576	0.69				ug/L
⌊>	Tb	159	442966.954	442966.95				ug/L
⌈	Ho	165	5965.717	0.01				ug/L
|	Tl	203	475298.412	1.15	55.7858	1.038	1.861	ug/L
|	Tl	205	1172941.068	2.83	55.4553	1.559	2.812	ug/L
|	Pb	206	462271.352	1.11	66.8036	2.448	3.664	ug/L
|	Pb	207	408032.143	0.98	62.6775	2.234	3.564	ug/L
|	Pb	208	1887966.672	4.55	65.4077	2.396	3.662	ug/L
|	U	238	2869289.942	6.92	61.2469	3.086	5.039	ug/L
⌊>	Bi	209	414841.994	414841.99				ug/L

Sample ID: L1104021604PS WG361117-01
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Na	23	104547.646	0.25	0.0090	0.001	5.686	mg/L
Mg	24	5262222.819	29.86	1.4988	0.055	3.658	mg/L
K	39	1838246.598	8.50	0.2127	0.006	2.733	mg/L
Ca	43	27380.233	0.15	1.6348	0.057	3.482	mg/L
Fe	54	4440531.623	24.96	8.1474	0.172	2.112	mg/L
Fe	57	1903071.931	10.77	8.3373	0.232	2.778	mg/L
Sc-1	45	176156.269	176156.27				mg/L
Cl	35	16247.857	-7284.49				mg/L
Kr	83	87.335	24.00				mg/L
Br	81	8043.904	595.13				mg/L
P	31	36699.988	28648.08				mg/L
S	34	113505.975	-10841.80				mg/L
Sr	88	60445.115	60328.44				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
Ge	72		105.356			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
In	115		101.596			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
Tb	159		102.053			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
Bi	209		97.971			

Sample ID: L1104021604PS WG361117-01
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	Na	23
	Mg	24
	K	39
	Ca	43
	Fe	54
	Fe	57
>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1104021604PS WG361117-01
Report Date/Time: Monday, April 11, 2011 11:20:39
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021604SDL WG361117-02

Sample Date/Time: Monday, April 11, 2011 11:25:34
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 21
Method File: C:\elandata\Method\6020a.mth
Sample Description: 25

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19201.759	0.01				ug/L
|	Be	9	26.000	0.00	0.0310	0.023	73.205	ug/L
|	Al	27	4478154.206	27.17	834.4243	31.948	3.829	ug/L
⌊>	Sc	45	164763.337	164763.34				ug/L
⌈	Ti	49	240.027	0.00	0.3556	0.098	27.541	ug/L
|	V	51	9914.754	0.02	0.8118	0.022	2.697	ug/L
|	Cr	52	15758.231	0.02	0.9247	0.026	2.796	ug/L
|	Cr	53	1316.886	0.00	0.5943	0.139	23.310	ug/L
|	Mn	55	220457.931	0.67	19.4261	0.207	1.063	ug/L
|	Co	59	3719.396	0.01	0.3849	0.014	3.741	ug/L
|	Ni	60	2451.992	0.01	1.2116	0.022	1.811	ug/L
|	Cu	65	2328.628	0.01	1.0572	0.019	1.767	ug/L
|	Zn	66	8060.995	0.02	5.7372	0.086	1.495	ug/L
|>	Ge	72	328326.806	328326.81				ug/L
|	As	75	213.842	0.00	0.3557	0.012	3.358	ug/L
|	Se	77	78.667	0.00	-0.1050	0.034	32.118	ug/L
|	Se	82	-7.310	-0.00	-0.0679	0.065	95.869	ug/L
⌊	Rb	85	5750.711	0.02				mg/L
	Y	89	239931.609	13947.58				ug/L
	Rh	103	12.333	-1.67				ug/L
⌈	Mo	98	39.238	0.00	0.0240	0.002	8.238	ug/L
|	Ag	107	156.336	0.00	-0.0013	0.003	209.841	ug/L
|	Cd	114	24.730	0.00	0.0331	0.003	8.628	ug/L
|>	In	115	320377.280	320377.28				ug/L
|	Sn	118	135.334	-0.00	0.0021	0.002	113.066	ug/L
⌊	Sb	123	372.377	0.00	0.0922	0.008	8.994	ug/L
⌈	Ba	135	17273.747	0.04	10.6203	0.206	1.940	ug/L
|	Ce	140	46991.509	0.11				ug/L
⌊>	Tb	159	435546.017	435546.02				ug/L
⌈	Ho	165	960.142	0.00				ug/L
|	Tl	203	138.669	0.00	0.0006	0.002	422.022	ug/L
|	Tl	205	316.704	0.00	0.0061	0.003	56.350	ug/L
|	Pb	206	5768.722	0.01	0.7867	0.028	3.500	ug/L
|	Pb	207	4769.852	0.01	0.6825	0.011	1.574	ug/L
|	Pb	208	22495.507	0.05	0.7290	0.021	2.851	ug/L
|	U	238	3540.996	0.01	0.0847	0.002	1.875	ug/L
⌊>	Bi	209	412602.766	412602.77				ug/L

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Na	23	36955.222	-0.12	-0.0034	0.000	11.624	mg/L	
Mg	24	854053.597	5.18	0.2585	0.008	3.156	mg/L	
K	39	571257.782	1.54	0.0357	0.002	6.534	mg/L	
Ca	43	4408.081	0.03	0.2683	0.020	7.561	mg/L	
Fe	54	714590.661	4.10	1.3433	0.005	0.407	mg/L	
Fe	57	285167.532	1.70	1.3148	0.038	2.878	mg/L	
> Sc-1	45	164763.337	164763.34				mg/L	
Cl	35	13969.085	-9563.26				mg/L	
Kr	83	74.001	10.67				mg/L	
Br	81	7815.720	366.95				mg/L	
P	31	8671.092	619.18				mg/L	
S	34	104175.943	-20171.83				mg/L	
Sr	88	9578.889	9462.21				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		105.758			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		102.327			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		100.343			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		97.443			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1104021604SDL WG361117-02
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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 11, 2011 11:32:42
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21255.945	0.02				ug/L
|	Be	9	16279.241	0.10	53.4892	1.972	3.686	ug/L
|	Al	27	289790.074	1.70	52.2013	1.785	3.419	ug/L
|>	Sc	45	169016.908	169016.91				ug/L
⌈	Ti	49	52432.331	0.16	92.5636	0.389	0.420	ug/L
|	V	51	436882.559	1.31	48.3887	0.804	1.662	ug/L
|	Cr	52	383242.272	1.13	49.2577	0.505	1.026	ug/L
|	Cr	53	43766.603	0.13	48.9521	0.825	1.685	ug/L
|	Mn	55	571938.390	1.73	50.1199	0.402	0.801	ug/L
|	Co	59	450437.626	1.36	48.8795	0.837	1.712	ug/L
|	Ni	60	95141.102	0.29	48.4326	0.789	1.630	ug/L
|	Cu	65	98910.424	0.30	48.2471	0.711	1.473	ug/L
|	Zn	66	60842.805	0.18	48.3129	0.410	0.849	ug/L
|>	Ge	72	330727.704	330727.70				ug/L
|	As	75	55647.771	0.17	49.1307	0.971	1.977	ug/L
|	Se	77	4677.762	0.01	51.0569	1.587	3.108	ug/L
|	Se	82	5706.821	0.02	50.8310	0.938	1.845	ug/L
⌊	Rb	85	2168.257	0.01				mg/L
	Y	89	230049.069	4065.03				ug/L
	Rh	103	32.334	18.33				ug/L
⌈	Mo	98	301854.344	0.92	100.7832	1.239	1.229	ug/L
|	Ag	107	310695.941	0.95	49.3011	0.640	1.298	ug/L
|	Cd	114	64537.522	0.20	49.4321	0.791	1.601	ug/L
|>	In	115	326467.696	326467.70				ug/L
|	Sn	118	229250.346	0.70	49.6710	0.289	0.582	ug/L
⌊	Sb	123	196134.239	0.60	48.9899	0.704	1.438	ug/L
⌈	Ba	135	82449.710	0.18	49.3863	0.578	1.171	ug/L
|	Ce	140	43.338	-0.00				ug/L
|>	Tb	159	447263.639	447263.64				ug/L
⌈	Ho	165	20.002	-0.00				ug/L
|	Tl	203	418897.648	1.01	49.3105	1.132	2.296	ug/L
|	Tl	205	1045394.251	2.53	49.5559	0.810	1.634	ug/L
|	Pb	206	341518.911	0.82	49.4788	1.023	2.068	ug/L
|	Pb	207	321350.504	0.78	49.4900	0.645	1.303	ug/L
|	Pb	208	1424713.483	3.44	49.4859	0.708	1.431	ug/L
|	U	238	2360001.581	5.70	50.5167	0.336	0.664	ug/L
|>	Bi	209	413701.138	413701.14				ug/L

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Na	23	24989098.996	147.56	4.9480	0.190	3.842	mg/L	
Mg	24	17038123.603	100.83	5.0662	0.114	2.254	mg/L	
K	39	33618002.864	197.00	5.0043	0.078	1.558	mg/L	
Ca	43	81132.610	0.48	5.0829	0.033	0.655	mg/L	
Fe	54	2722843.789	15.88	5.1856	0.165	3.188	mg/L	
Fe	57	1141103.680	6.72	5.2043	0.239	4.591	mg/L	
> Sc-1	45	169016.908	169016.91				mg/L	
Cl	35	14415.718	-9116.62				mg/L	
Kr	83	65.334	2.00				mg/L	
Br	81	8346.819	898.05				mg/L	
P	31	8373.508	321.60				mg/L	
S	34	138531.680	14183.91				mg/L	
Sr	88	2123.772	2007.09				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	96.777				
Cr	52	98.515				
Cr	53					
Mn	55	100.240				
Co	59	97.759				
Ni	60	96.865				
Cu	65	96.494				
Zn	66	96.626				
> Ge	72		106.531			
As	75	98.261				
Se	77					
Se	82	101.662				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	98.602				
Cd	114	98.864				
> In	115		104.272			
Sn	118					
Sb	123	97.980				
Ba	135	98.773				
Ce	140					
> Tb	159		103.043			
Ho	165					
Tl	203	98.621				
Tl	205					
Pb	206					
Pb	207					
Pb	208	98.972				
U	238	101.033				
> Bi	209		97.702			

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 11:34:54
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 11:34:54
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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 11, 2011 11:39:48
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19051.503	0.01				ug/L
|	Be	9	12.000	-0.00	-0.0177	0.025	140.100	ug/L
|	Al	27	2767.058	-0.00	0.0206	0.110	533.340	ug/L
⌊>	Sc	45	174579.191	174579.19				ug/L
⌈	Ti	49	43.338	0.00	0.0049	0.010	211.969	ug/L
|	V	51	2724.749	0.00	0.0015	0.009	586.292	ug/L
|	Cr	52	8658.834	-0.00	-0.0281	0.009	31.523	ug/L
|	Cr	53	333.372	-0.00	-0.5382	0.075	13.948	ug/L
|	Mn	55	2752.073	0.00	0.1848	0.006	3.204	ug/L
|	Co	59	97.001	0.00	-0.0114	0.002	15.566	ug/L
|	Ni	60	60.334	0.00	-0.0162	0.002	13.872	ug/L
|	Cu	65	100.002	-0.00	-0.0402	0.006	15.566	ug/L
|	Zn	66	527.019	-0.00	-0.3955	0.010	2.489	ug/L
|>	Ge	72	331771.983	331771.98				ug/L
|	As	75	-179.080	0.00	0.0094	0.062	658.959	ug/L
|	Se	77	67.334	-0.00	-0.2390	0.189	79.259	ug/L
|	Se	82	8.426	0.00	0.0727	0.048	65.710	ug/L
⌊	Rb	85	21.334	-0.00				mg/L
	Y	89	235866.539	9882.50				ug/L
	Rh	103	12.667	-1.33				ug/L
⌈	Mo	98	114.723	0.00	0.0483	0.003	5.588	ug/L
|	Ag	107	104.002	-0.00	-0.0103	0.002	23.816	ug/L
|	Cd	114	-1.912	-0.00	0.0124	0.004	34.426	ug/L
|>	In	115	331342.488	331342.49				ug/L
|	Sn	118	3038.462	0.01	0.6213	0.020	3.225	ug/L
⌊	Sb	123	148.368	0.00	0.0339	0.002	5.043	ug/L
⌈	Ba	135	29.000	0.00	0.0098	0.003	31.744	ug/L
|	Ce	140	40.004	-0.00				ug/L
⌊>	Tb	159	447460.826	447460.83				ug/L
⌈	Ho	165	30.003	0.00				ug/L
|	Tl	203	40.000	-0.00	-0.0111	0.001	8.048	ug/L
|	Tl	205	83.342	-0.00	-0.0050	0.000	4.815	ug/L
|	Pb	206	349.676	-0.00	-0.0015	0.001	70.031	ug/L
|	Pb	207	317.342	0.00	-0.0060	0.001	19.894	ug/L
|	Pb	208	1440.389	0.00	-0.0053	0.001	14.186	ug/L
|	U	238	112.668	0.00	0.0111	0.000	3.350	ug/L
⌊>	Bi	209	414194.233	414194.23				ug/L

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⌈	Na	23	60438.136	-0.00	0.0007	0.000	50.384	mg/L
|	Mg	24	1440.249	0.00	-0.0017	0.000	1.775	mg/L
|	K	39	324170.320	-0.07	-0.0052	0.001	23.581	mg/L
|	Ca	43	253.362	0.00	-0.0007	0.002	267.250	mg/L
|	Fe	54	44228.728	0.02	0.0113	0.004	36.777	mg/L
|	Fe	57	5672.176	-0.00	-0.0003	0.000	142.651	mg/L
⌊>	Sc-1	45	174579.191	174579.19				mg/L
	Cl	35	13947.721	-9584.62				mg/L
	Kr	83	66.001	2.67				mg/L
	Br	81	8258.745	809.97				mg/L
	P	31	8522.397	470.49				mg/L
	S	34	122150.834	-2196.94				mg/L
	Sr	88	93.343	-23.34				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		106.868			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		105.829			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		103.088			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.818			

Sample ID: QC Std 7
Report Date/Time: Monday, April 11, 2011 11:41:59

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Monday, April 11, 2011 11:41:59

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, April 11, 2011 11:46:55
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 9
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21456.382	0.02				ug/L
|	Be	9	17.333	-0.00	-0.0001	0.021	21104.092	ug/L
|	Al	27	2500.317	-0.00	-0.0207	0.063	305.863	ug/L
|>	Sc	45	171220.151	171220.15				ug/L
⌈	Ti	49	36.670	0.00	-0.0086	0.064	744.261	ug/L
|	V	51	6362.921	0.01	0.3935	0.001	0.261	ug/L
|	Cr	52	15402.342	0.02	0.8212	0.005	0.582	ug/L
|	Cr	53	1253.537	0.00	0.4832	0.094	19.484	ug/L
|	Mn	55	6286.372	0.02	0.4844	0.012	2.578	ug/L
|	Co	59	3810.097	0.01	0.3834	0.009	2.231	ug/L
|	Ni	60	3196.876	0.01	1.5491	0.046	2.953	ug/L
|	Cu	65	1742.503	0.00	0.7453	0.024	3.232	ug/L
|	Zn	66	8106.032	0.02	5.5927	0.078	1.395	ug/L
|>	Ge	72	337626.460	337626.46				ug/L
|	As	75	256.485	0.00	0.3866	0.056	14.552	ug/L
|	Se	77	109.334	0.00	0.2050	0.023	11.342	ug/L
|	Se	82	43.114	0.00	0.3731	0.073	19.668	ug/L
⌊	Rb	85	23.667	-0.00				mg/L
	Y	89	245402.669	19418.63				ug/L
	Rh	103	15.333	1.33				ug/L
⌈	Mo	98	58.498	0.00	0.0297	0.004	12.983	ug/L
|	Ag	107	2723.732	0.01	0.3969	0.003	0.740	ug/L
|	Cd	114	289.074	0.00	0.2305	0.009	3.742	ug/L
|>	In	115	333373.295	333373.29				ug/L
|	Sn	118	150.668	-0.00	0.0041	0.003	69.298	ug/L
⌊	Sb	123	1644.058	0.00	0.3995	0.006	1.391	ug/L
⌈	Ba	135	1282.762	0.00	0.7602	0.020	2.681	ug/L
|	Ce	140	33.337	-0.00				ug/L
|>	Tb	159	447699.174	447699.17				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	722.367	0.00	0.0689	0.003	5.057	ug/L
|	Tl	205	1873.698	0.00	0.0795	0.009	11.663	ug/L
|	Pb	206	3136.190	0.01	0.4005	0.008	1.885	ug/L
|	Pb	207	2833.430	0.01	0.3800	0.002	0.450	ug/L
|	Pb	208	12950.792	0.03	0.3930	0.006	1.565	ug/L
|	U	238	18966.826	0.05	0.4127	0.004	0.978	ug/L
|>	Bi	209	415596.159	415596.16				ug/L

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Na	23	16184.708	-0.25	-0.0078	0.000	0.446	mg/L
Mg	24	410.049	-0.00	-0.0020	0.000	0.434	mg/L
K	39	311698.561	-0.11	-0.0062	0.001	14.965	mg/L
Ca	43	210.023	0.00	-0.0030	0.001	24.788	mg/L
Fe	54	42327.487	0.01	0.0092	0.003	37.655	mg/L
Fe	57	6305.951	0.00	0.0031	0.000	9.772	mg/L
Sc-1	45	171220.151	171220.15				mg/L
Cl	35	12992.438	-10539.90				mg/L
Kr	83	63.668	0.33				mg/L
Br	81	8364.164	915.39				mg/L
P	31	8521.640	469.73				mg/L
S	34	113761.119	-10586.66				mg/L
Sr	88	66.674	-50.01				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
Sc	45					
Ti	49					
V	51	98.363				
Cr	52	102.656				
Cr	53					
Mn	55	96.874				
Co	59	95.841				
Ni	60	96.818				
Cu	65	93.159				
Zn	66	89.483				
Ge	72		108.753			
As	75	96.648				
Se	77					
Se	82	93.268				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	99.215				
Cd	114	115.253				
In	115		106.478			
Sn	118					
Sb	123	99.884				
Ba	135	101.357				
Ce	140					
Tb	159		103.143			
Ho	165					
Tl	203	86.091				
Tl	205					
Pb	206					
Pb	207					
Pb	208	98.239				
U	238	103.184				
Bi	209		98.149			

Sample ID: QC Std 8
Report Date/Time: Monday, April 11, 2011 11:49:09

Approved: April 12, 2011

⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 8
Report Date/Time: Monday, April 11, 2011 11:49:09
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Method 6020 - Summary Report

Sample ID: L1104021602

Sample Date/Time: Monday, April 11, 2011 12:01:11
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 23
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20905.173	0.02				ug/L
|	Be	9	106.001	0.00	0.2875	0.082	28.429	ug/L
|	Al	27	20435800.981	119.09	3656.7936	477.648	13.062	ug/L
⌊>	Sc	45	172001.018	172001.02				ug/L
⌈	Ti	49	1690.313	0.00	2.8588	0.326	11.421	ug/L
|	V	51	55279.687	0.16	5.7430	0.362	6.299	ug/L
|	Cr	52	52695.675	0.13	5.6384	0.443	7.856	ug/L
|	Cr	53	5652.170	0.01	5.4015	0.569	10.534	ug/L
|	Mn	55	1922621.324	5.70	165.4262	9.971	6.027	ug/L
|	Co	59	24819.101	0.07	2.6216	0.189	7.191	ug/L
|	Ni	60	18132.364	0.05	9.0182	0.870	9.651	ug/L
|	Cu	65	14682.288	0.04	6.9502	0.538	7.742	ug/L
|	Zn	66	39512.165	0.12	30.4837	2.070	6.792	ug/L
|>	Ge	72	337154.828	337154.83				ug/L
|	As	75	2860.436	0.01	2.6351	0.174	6.600	ug/L
|	Se	77	104.001	0.00	0.1484	0.039	26.101	ug/L
|	Se	82	8.061	0.00	0.0680	0.082	120.000	ug/L
⌊	Rb	85	22497.175	0.07				mg/L
	Y	89	308137.056	82153.02				ug/L
	Rh	103	14.000	-0.00				ug/L
⌈	Mo	98	328.840	0.00	0.1201	0.004	3.050	ug/L
|	Ag	107	381.011	0.00	0.0337	0.004	10.699	ug/L
|	Cd	114	107.104	0.00	0.0956	0.008	8.266	ug/L
|>	In	115	327472.739	327472.74				ug/L
|	Sn	118	115.067	-0.00	-0.0029	0.001	32.398	ug/L
⌊	Sb	123	57.609	0.00	0.0117	0.004	33.891	ug/L
⌈	Ba	135	72287.147	0.16	42.7984	1.553	3.629	ug/L
|	Ce	140	259080.208	0.57				ug/L
⌊>	Tb	159	452340.246	452340.25				ug/L
⌈	Ho	165	5722.215	0.01				ug/L
|	Tl	203	546.354	0.00	0.0474	0.002	4.185	ug/L
|	Tl	205	1310.218	0.00	0.0522	0.008	16.257	ug/L
|	Pb	206	39678.447	0.09	5.6009	0.284	5.076	ug/L
|	Pb	207	33506.142	0.08	5.0206	0.264	5.253	ug/L
|	Pb	208	157090.376	0.37	5.3111	0.282	5.313	ug/L
|	U	238	13553.000	0.03	0.2936	0.016	5.331	ug/L
⌊>	Bi	209	421042.904	421042.90				ug/L

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⌈	Na	23	111617.434	0.30	0.0109	0.003	24.044	mg/L
|	Mg	24	4440005.320	25.85	1.2976	0.121	9.357	mg/L
|	K	39	1594314.819	7.34	0.1833	0.010	5.400	mg/L
|	Ca	43	22631.273	0.13	1.3842	0.146	10.561	mg/L
|	Fe	54	4522448.076	26.13	8.5272	1.024	12.010	mg/L
|	Fe	57	1884354.679	10.95	8.4730	0.872	10.290	mg/L
⌊>	Sc-1	45	172001.018	172001.02				mg/L
	Cl	35	14964.523	-8567.82				mg/L
	Kr	83	69.668	6.33				mg/L
	Br	81	8452.238	1003.46				mg/L
	P	31	46056.613	38004.70				mg/L
	S	34	113897.293	-10450.48				mg/L
	Sr	88	42464.518	42347.84				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		108.601			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		104.593			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		104.213			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.436			

Sample ID: L1104021602
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021603

Sample Date/Time: Monday, April 11, 2011 12:08:17
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 24
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22308.221	0.02				ug/L
|	Be	9	78.000	0.00	0.1849	0.018	9.633	ug/L
|	Al	27	16440759.402	91.40	2806.6046	110.282	3.929	ug/L
⌊>	Sc	45	180042.413	180042.41				ug/L
⌈	Ti	49	1907.041	0.01	3.2296	0.379	11.727	ug/L
|	V	51	52383.882	0.15	5.4225	0.067	1.241	ug/L
|	Cr	52	44295.333	0.10	4.5498	0.033	0.736	ug/L
|	Cr	53	4304.691	0.01	3.8930	0.262	6.738	ug/L
|	Mn	55	2792800.916	8.28	240.1769	5.312	2.212	ug/L
|	Co	59	28764.265	0.09	3.0395	0.026	0.841	ug/L
|	Ni	60	14543.714	0.04	7.2182	0.061	0.841	ug/L
|	Cu	65	12347.410	0.04	5.8267	0.147	2.528	ug/L
|	Zn	66	29474.670	0.09	22.5162	0.416	1.847	ug/L
|>	Ge	72	337352.681	337352.68				ug/L
|	As	75	3118.874	0.01	2.8561	0.052	1.826	ug/L
|	Se	77	106.667	0.00	0.1756	0.214	121.841	ug/L
|	Se	82	17.739	0.00	0.1518	0.120	79.253	ug/L
⌊	Rb	85	33385.303	0.10				mg/L
	Y	89	285636.922	59652.89				ug/L
	Rh	103	18.000	4.00				ug/L
⌈	Mo	98	299.916	0.00	0.1100	0.006	5.085	ug/L
|	Ag	107	273.006	0.00	0.0164	0.000	1.440	ug/L
|	Cd	114	112.554	0.00	0.0993	0.007	7.030	ug/L
|>	In	115	328911.985	328911.98				ug/L
|	Sn	118	123.601	-0.00	-0.0012	0.002	153.871	ug/L
⌊	Sb	123	81.943	0.00	0.0177	0.002	11.262	ug/L
⌈	Ba	135	73883.690	0.16	44.2206	0.822	1.860	ug/L
|	Ce	140	241641.932	0.54				ug/L
⌊>	Tb	159	447662.380	447662.38				ug/L
⌈	Ho	165	3587.671	0.01				ug/L
|	Tl	203	443.348	0.00	0.0351	0.004	11.371	ug/L
|	Tl	205	1116.841	0.00	0.0427	0.003	7.789	ug/L
|	Pb	206	75707.263	0.18	10.6438	0.120	1.132	ug/L
|	Pb	207	63520.431	0.15	9.4849	0.132	1.387	ug/L
|	Pb	208	298362.280	0.70	10.0506	0.083	0.822	ug/L
|	U	238	14089.729	0.03	0.3024	0.004	1.404	ug/L
⌊>	Bi	209	424662.967	424662.97				ug/L

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⌈	Na	23	52258.298	-0.06	-0.0012	0.001	66.966	mg/L
|	Mg	24	4834614.243	26.92	1.3512	0.107	7.908	mg/L
|	K	39	2544800.142	12.23	0.3075	0.020	6.376	mg/L
|	Ca	43	28874.526	0.16	1.6900	0.090	5.304	mg/L
|	Fe	54	3529119.727	19.39	6.3296	0.247	3.902	mg/L
|	Fe	57	1465453.019	8.12	6.2879	0.376	5.976	mg/L
⌊>	Sc-1	45	180042.413	180042.41				mg/L
	Cl	35	17208.796	-6323.55				mg/L
	Kr	83	68.334	5.00				mg/L
	Br	81	9452.466	2003.69				mg/L
	P	31	48097.404	40045.49				mg/L
	S	34	127389.133	3041.36				mg/L
	Sr	88	48341.395	48224.72				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		108.665			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		105.053			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		103.135			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.291			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021605

Sample Date/Time: Monday, April 11, 2011 12:15:22
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 25
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20988.672	0.01				ug/L
|	Be	9	82.000	0.00	0.1944	0.044	22.524	ug/L
|	Al	27	15097176.281	83.21	2554.9916	144.536	5.657	ug/L
⌊>	Sc	45	181363.473	181363.47				ug/L
⌈	Ti	49	2920.719	0.01	4.9757	0.262	5.261	ug/L
|	V	51	48024.750	0.13	4.9364	0.359	7.263	ug/L
|	Cr	52	45778.540	0.11	4.7303	0.385	8.136	ug/L
|	Cr	53	4638.215	0.01	4.2565	0.625	14.689	ug/L
|	Mn	55	2527370.838	7.47	216.8977	11.214	5.170	ug/L
|	Co	59	31029.464	0.09	3.2744	0.208	6.359	ug/L
|	Ni	60	16554.897	0.05	8.2081	0.634	7.729	ug/L
|	Cu	65	12137.492	0.04	5.7145	0.319	5.589	ug/L
|	Zn	66	34483.433	0.10	26.4264	1.435	5.431	ug/L
|>	Ge	72	338127.232	338127.23				ug/L
|	As	75	2905.577	0.01	2.6676	0.153	5.746	ug/L
|	Se	77	86.000	0.00	-0.0516	0.125	242.753	ug/L
|	Se	82	22.725	0.00	0.1963	0.141	71.671	ug/L
⌊	Rb	85	30256.346	0.09				mg/L
	Y	89	276042.053	50058.02				ug/L
	Rh	103	25.334	11.33				ug/L
⌈	Mo	98	537.298	0.00	0.1890	0.014	7.229	ug/L
|	Ag	107	235.005	0.00	0.0105	0.002	19.242	ug/L
|	Cd	114	82.723	0.00	0.0766	0.022	28.938	ug/L
|>	In	115	328458.538	328458.54				ug/L
|	Sn	118	236.136	0.00	0.0231	0.004	16.806	ug/L
⌊	Sb	123	78.071	0.00	0.0168	0.004	25.766	ug/L
⌈	Ba	135	48116.172	0.11	29.0372	1.984	6.834	ug/L
|	Ce	140	287873.033	0.65				ug/L
⌊>	Tb	159	444204.462	444204.46				ug/L
⌈	Ho	165	3240.852	0.01				ug/L
|	Tl	203	497.684	0.00	0.0428	0.002	3.907	ug/L
|	Tl	205	1246.870	0.00	0.0502	0.006	10.983	ug/L
|	Pb	206	57120.508	0.14	8.2378	0.437	5.307	ug/L
|	Pb	207	47915.499	0.12	7.3380	0.380	5.183	ug/L
|	Pb	208	224821.288	0.54	7.7679	0.394	5.072	ug/L
|	U	238	9148.949	0.02	0.2046	0.011	5.220	ug/L
⌊>	Bi	209	413421.511	413421.51				ug/L

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Na	23	104844.614	0.23	0.0085	0.001	8.074	mg/L
Mg	24	24103879.815	132.88	6.6770	0.344	5.151	mg/L
K	39	2812503.065	13.58	0.3418	0.012	3.619	mg/L
Ca	43	211822.730	1.17	12.3881	0.352	2.841	mg/L
Fe	54	3824603.914	20.86	6.8076	0.359	5.280	mg/L
Fe	57	1613208.945	8.86	6.8590	0.381	5.550	mg/L
> Sc-1	45	181363.473	181363.47				mg/L
Cl	35	20248.485	-3283.86				mg/L
Kr	83	70.001	6.67				mg/L
Br	81	9142.181	1693.41				mg/L
P	31	46345.173	38293.26				mg/L
S	34	151704.812	27357.04				mg/L
Sr	88	86808.281	86691.60				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		108.915			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		104.908			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		102.338			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		97.636			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021606

Sample Date/Time: Monday, April 11, 2011 12:22:29
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 26
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21990.920	0.02				ug/L
|	Be	9	106.667	0.00	0.2805	0.068	24.153	ug/L
|	Al	27	22606137.490	127.01	3900.0960	149.978	3.845	ug/L
⌊>	Sc	45	177738.435	177738.43				ug/L
⌈	Ti	49	2700.636	0.01	4.5235	0.381	8.432	ug/L
|	V	51	44872.537	0.12	4.5150	0.333	7.376	ug/L
|	Cr	52	55981.280	0.14	5.9297	0.619	10.439	ug/L
|	Cr	53	5565.455	0.01	5.1897	0.785	15.122	ug/L
|	Mn	55	3213652.375	9.35	271.4725	21.957	8.088	ug/L
|	Co	59	34360.128	0.10	3.5705	0.249	6.985	ug/L
|	Ni	60	22396.404	0.07	10.9434	0.963	8.803	ug/L
|	Cu	65	14789.121	0.04	6.8711	0.548	7.975	ug/L
|	Zn	66	42029.826	0.12	31.8666	2.201	6.908	ug/L
|>	Ge	72	343397.286	343397.29				ug/L
|	As	75	2907.837	0.01	2.6301	0.053	2.013	ug/L
|	Se	77	101.334	0.00	0.0995	0.174	175.158	ug/L
|	Se	82	11.977	0.00	0.1003	0.087	86.468	ug/L
⌊	Rb	85	28513.898	0.08				mg/L
	Y	89	301921.502	75937.47				ug/L
	Rh	103	17.334	3.33				ug/L
⌈	Mo	98	335.917	0.00	0.1203	0.010	8.489	ug/L
|	Ag	107	304.341	0.00	0.0207	0.001	6.149	ug/L
|	Cd	114	84.071	0.00	0.0768	0.008	10.845	ug/L
|>	In	115	333666.046	333666.05				ug/L
|	Sn	118	107.067	-0.00	-0.0051	0.001	21.769	ug/L
⌊	Sb	123	48.655	0.00	0.0093	0.002	16.430	ug/L
⌈	Ba	135	95675.583	0.21	57.0283	4.706	8.252	ug/L
|	Ce	140	311787.005	0.69				ug/L
⌊>	Tb	159	449436.976	449436.98				ug/L
⌈	Ho	165	4571.510	0.01				ug/L
|	Tl	203	509.018	0.00	0.0428	0.001	2.569	ug/L
|	Tl	205	1350.228	0.00	0.0536	0.012	22.352	ug/L
|	Pb	206	50669.605	0.12	7.1284	0.526	7.384	ug/L
|	Pb	207	42321.783	0.10	6.3221	0.530	8.381	ug/L
|	Pb	208	200078.032	0.47	6.7437	0.532	7.887	ug/L
|	U	238	10424.571	0.02	0.2267	0.023	10.222	ug/L
⌊>	Bi	209	423461.510	423461.51				ug/L

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Na	23	92795.016	0.17	0.0066	0.001	12.458	mg/L	
Mg	24	10411885.782	58.63	2.9451	0.136	4.601	mg/L	
K	39	1902528.899	8.79	0.2201	0.010	4.760	mg/L	
Ca	43	62015.657	0.35	3.6911	0.230	6.244	mg/L	
Fe	54	4568857.142	25.48	8.3153	0.627	7.543	mg/L	
Fe	57	1918501.401	10.77	8.3366	0.466	5.593	mg/L	
> Sc-1	45	177738.435	177738.43				mg/L	
Cl	35	15936.029	-7596.31				mg/L	
Kr	83	79.334	16.00				mg/L	
Br	81	8298.778	850.00				mg/L	
P	31	41758.008	33706.10				mg/L	
S	34	132306.908	7959.13				mg/L	
Sr	88	60989.141	60872.46				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		110.612			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		106.572			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		103.544			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		100.007			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021607

Sample Date/Time: Monday, April 11, 2011 12:29:35
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 27
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20437.541	0.01				ug/L
|	Be	9	101.334	0.00	0.2493	0.018	7.036	ug/L
|	Al	27	20113808.841	109.04	3348.2434	203.367	6.074	ug/L
⌊>	Sc	45	184299.946	184299.95				ug/L
⌈	Ti	49	3500.966	0.01	5.9423	0.572	9.619	ug/L
|	V	51	68723.567	0.19	7.1426	0.386	5.399	ug/L
|	Cr	52	54485.978	0.13	5.8042	0.496	8.549	ug/L
|	Cr	53	5692.192	0.01	5.3848	0.351	6.518	ug/L
|	Mn	55	3962670.203	11.64	337.8459	21.327	6.313	ug/L
|	Co	59	43346.656	0.13	4.5517	0.257	5.657	ug/L
|	Ni	60	18367.739	0.05	9.0491	0.571	6.314	ug/L
|	Cu	65	14208.243	0.04	6.6588	0.360	5.404	ug/L
|	Zn	66	37364.511	0.11	28.5054	1.762	6.182	ug/L
|>	Ge	72	340379.016	340379.02				ug/L
|	As	75	3739.048	0.01	3.3635	0.190	5.661	ug/L
|	Se	77	113.334	0.00	0.2390	0.073	30.532	ug/L
|	Se	82	17.047	0.00	0.1453	0.123	84.735	ug/L
⌊	Rb	85	38803.872	0.11				mg/L
	Y	89	286364.281	60380.25				ug/L
	Rh	103	16.000	2.00				ug/L
⌈	Mo	98	596.307	0.00	0.2101	0.011	5.029	ug/L
|	Ag	107	302.341	0.00	0.0215	0.003	14.127	ug/L
|	Cd	114	105.842	0.00	0.0950	0.006	6.546	ug/L
|>	In	115	325831.431	325831.43				ug/L
|	Sn	118	123.867	-0.00	-0.0009	0.001	106.332	ug/L
⌊	Sb	123	75.691	0.00	0.0163	0.002	14.128	ug/L
⌈	Ba	135	76042.720	0.17	45.5673	2.101	4.611	ug/L
|	Ce	140	319904.952	0.72				ug/L
⌊>	Tb	159	447240.488	447240.49				ug/L
⌈	Ho	165	4264.674	0.01				ug/L
|	Tl	203	581.023	0.00	0.0519	0.001	2.742	ug/L
|	Tl	205	1330.222	0.00	0.0536	0.006	10.908	ug/L
|	Pb	206	76743.779	0.18	10.9713	0.548	4.999	ug/L
|	Pb	207	63801.703	0.15	9.6875	0.451	4.651	ug/L
|	Pb	208	300690.119	0.72	10.2999	0.530	5.143	ug/L
|	U	238	12816.687	0.03	0.2804	0.018	6.423	ug/L
⌊>	Bi	209	417790.283	417790.28				ug/L

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Na	23	91028.520	0.15	0.0056	0.001	9.684	mg/L	
Mg	24	17198740.993	93.29	4.6875	0.286	6.108	mg/L	
K	39	2838241.385	13.47	0.3391	0.005	1.461	mg/L	
Ca	43	140727.953	0.76	8.0930	0.127	1.570	mg/L	
Fe	54	4848633.471	26.06	8.5047	0.413	4.858	mg/L	
Fe	57	2037474.901	11.02	8.5273	0.389	4.565	mg/L	
> Sc-1	45	184299.946	184299.95				mg/L	
Cl	35	17899.345	-5633.00				mg/L	
Kr	83	71.334	8.00				mg/L	
Br	81	9090.137	1641.36				mg/L	
P	31	47678.297	39626.39				mg/L	
S	34	147377.029	23029.25				mg/L	
Sr	88	78407.815	78291.14				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		109.640			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		104.069			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		103.038			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		98.668			

Sample ID: L1104021607
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021608

Sample Date/Time: Monday, April 11, 2011 12:36:42
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 28
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21790.492	0.02				ug/L
|	Be	9	114.667	0.00	0.3075	0.026	8.606	ug/L
|	Al	27	18533210.640	106.00	3254.8011	142.460	4.377	ug/L
⌊>	Sc	45	174918.594	174918.59				ug/L
⌈	Ti	49	3437.606	0.01	5.9329	0.626	10.558	ug/L
|	V	51	66459.480	0.19	7.0235	0.278	3.960	ug/L
|	Cr	52	50383.268	0.12	5.3916	0.255	4.731	ug/L
|	Cr	53	5565.439	0.01	5.3542	0.175	3.263	ug/L
|	Mn	55	4348985.338	13.00	377.2202	26.741	7.089	ug/L
|	Co	59	45732.503	0.14	4.8874	0.347	7.098	ug/L
|	Ni	60	17330.554	0.05	8.6851	0.537	6.182	ug/L
|	Cu	65	13847.741	0.04	6.6026	0.367	5.557	ug/L
|	Zn	66	35007.710	0.10	27.1330	1.785	6.577	ug/L
| >	Ge	72	334394.132	334394.13				ug/L
|	As	75	3606.251	0.01	3.3033	0.186	5.645	ug/L
|	Se	77	108.001	0.00	0.2010	0.210	104.347	ug/L
|	Se	82	24.638	0.00	0.2141	0.197	92.195	ug/L
⌊	Rb	85	37786.988	0.11				mg/L
	Y	89	283264.505	57280.47				ug/L
	Rh	103	23.334	9.33				ug/L
⌈	Mo	98	544.413	0.00	0.1935	0.005	2.455	ug/L
|	Ag	107	321.008	0.00	0.0247	0.001	4.284	ug/L
|	Cd	114	93.496	0.00	0.0860	0.014	16.037	ug/L
| >	In	115	324509.065	324509.07				ug/L
|	Sn	118	140.401	-0.00	0.0028	0.003	109.410	ug/L
⌊	Sb	123	94.066	0.00	0.0210	0.001	6.303	ug/L
⌈	Ba	135	76408.615	0.17	46.1206	2.173	4.711	ug/L
|	Ce	140	340412.323	0.77				ug/L
⌊>	Tb	159	443878.133	443878.13				ug/L
⌈	Ho	165	4084.578	0.01				ug/L
|	Tl	203	589.357	0.00	0.0532	0.002	3.844	ug/L
|	Tl	205	1336.892	0.00	0.0541	0.012	21.313	ug/L
|	Pb	206	70836.220	0.17	10.1679	0.558	5.486	ug/L
|	Pb	207	59020.904	0.14	8.9975	0.470	5.219	ug/L
|	Pb	208	279154.244	0.67	9.6011	0.459	4.777	ug/L
|	U	238	14135.141	0.03	0.3096	0.015	4.725	ug/L
⌊>	Bi	209	415799.134	415799.13				ug/L

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⌈	Na	23	97038.238	0.21	0.0077	0.001	10.165	mg/L
|	Mg	24	17445302.775	99.82	5.0154	0.228	4.547	mg/L
|	K	39	2848219.559	14.36	0.3618	0.018	4.963	mg/L
|	Ca	43	169853.390	0.97	10.2969	0.306	2.974	mg/L
|	Fe	54	4423452.146	25.05	8.1746	0.453	5.540	mg/L
|	Fe	57	1847355.691	10.52	8.1427	0.471	5.784	mg/L
⌊>	Sc-1	45	174918.594	174918.59				mg/L
	Cl	35	19118.927	-4413.42				mg/L
	Kr	83	80.001	16.67				mg/L
	Br	81	9511.857	2063.08				mg/L
	P	31	52004.249	43952.34				mg/L
	S	34	153334.057	28986.28				mg/L
	Sr	88	87792.948	87676.27				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		107.712			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		103.647			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.263			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.197			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

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Method 6020 - Summary Report

Sample ID: L1104021609

Sample Date/Time: Monday, April 11, 2011 12:43:49
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 29
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22007.635	0.02				ug/L
|	Be	9	96.667	0.00	0.2315	0.023	9.771	ug/L
|	Al	27	20623422.367	110.57	3395.3080	12.106	0.357	ug/L
⌊>	Sc	45	186476.388	186476.39				ug/L
⌈	Ti	49	3390.915	0.01	5.7621	0.286	4.960	ug/L
|	V	51	50409.555	0.14	5.1702	0.340	6.580	ug/L
|	Cr	52	56317.113	0.14	6.0522	0.439	7.247	ug/L
|	Cr	53	5969.051	0.01	5.7062	0.481	8.425	ug/L
|	Mn	55	3531265.538	10.40	301.6653	14.448	4.789	ug/L
|	Co	59	42599.883	0.13	4.4821	0.286	6.377	ug/L
|	Ni	60	21971.709	0.06	10.8568	0.582	5.360	ug/L
|	Cu	65	14315.070	0.04	6.7240	0.386	5.734	ug/L
|	Zn	66	40100.222	0.12	30.7143	2.070	6.739	ug/L
|>	Ge	72	339574.085	339574.08				ug/L
|	As	75	3374.985	0.01	3.0580	0.179	5.847	ug/L
|	Se	77	114.001	0.00	0.2484	0.101	40.623	ug/L
|	Se	82	10.687	0.00	0.0903	0.035	39.195	ug/L
⌊	Rb	85	28983.909	0.09				mg/L
	Y	89	281053.536	55069.50				ug/L
	Rh	103	20.000	6.00				ug/L
⌈	Mo	98	520.850	0.00	0.1830	0.009	4.902	ug/L
|	Ag	107	276.673	0.00	0.0170	0.002	10.928	ug/L
|	Cd	114	97.825	0.00	0.0881	0.010	11.313	ug/L
|>	In	115	329334.168	329334.17				ug/L
|	Sn	118	117.067	-0.00	-0.0027	0.002	63.251	ug/L
⌊	Sb	123	61.071	0.00	0.0125	0.001	8.530	ug/L
⌈	Ba	135	73476.930	0.17	44.4263	2.777	6.251	ug/L
|	Ce	140	247500.790	0.56				ug/L
⌊>	Tb	159	443194.455	443194.45				ug/L
⌈	Ho	165	3844.459	0.01				ug/L
|	Tl	203	571.689	0.00	0.0516	0.006	11.647	ug/L
|	Tl	205	1336.890	0.00	0.0546	0.001	1.834	ug/L
|	Pb	206	53952.165	0.13	7.7865	0.394	5.059	ug/L
|	Pb	207	45558.207	0.11	6.9827	0.475	6.802	ug/L
|	Pb	208	212932.453	0.51	7.3624	0.409	5.560	ug/L
|	U	238	10654.471	0.03	0.2372	0.021	9.026	ug/L
⌊>	Bi	209	413084.534	413084.53				ug/L

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⌈	Na	23	109831.153	0.24	0.0088	0.001	5.995	mg/L
|	Mg	24	25478990.097	136.74	6.8711	0.379	5.522	mg/L
|	K	39	2139915.633	9.56	0.2398	0.014	5.965	mg/L
|	Ca	43	186665.058	1.00	10.6164	0.605	5.697	mg/L
|	Fe	54	5084888.105	27.05	8.8267	0.365	4.133	mg/L
|	Fe	57	2152395.473	11.52	8.9150	0.492	5.517	mg/L
⌊>	Sc-1	45	186476.388	186476.39				mg/L
	Cl	35	17726.368	-5805.97				mg/L
	Kr	83	74.334	11.00				mg/L
	Br	81	9010.738	1561.96				mg/L
	P	31	38544.992	30493.08				mg/L
	S	34	153768.175	29420.40				mg/L
	Sr	88	86579.402	86462.72				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		109.381			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		105.188			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.106			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.556			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021610

Sample Date/Time: Monday, April 11, 2011 12:50:56
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 30
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21088.892	0.01				ug/L
|	Be	9	74.667	0.00	0.1735	0.051	29.491	ug/L
|	Al	27	14636832.031	81.16	2492.0276	190.979	7.664	ug/L
⌊>	Sc	45	180430.182	180430.18				ug/L
⌈	Ti	49	2784.001	0.01	4.6608	0.448	9.613	ug/L
|	V	51	51603.570	0.14	5.2319	0.413	7.888	ug/L
|	Cr	52	44465.267	0.10	4.4647	0.304	6.802	ug/L
|	Cr	53	4404.749	0.01	3.9115	0.437	11.182	ug/L
|	Mn	55	2605463.294	7.58	219.8568	13.673	6.219	ug/L
|	Co	59	30705.197	0.09	3.1850	0.229	7.176	ug/L
|	Ni	60	15518.874	0.05	7.5605	0.381	5.042	ug/L
|	Cu	65	12731.248	0.04	5.8963	0.380	6.449	ug/L
|	Zn	66	37568.013	0.11	28.3664	1.939	6.834	ug/L
|>	Ge	72	343765.956	343765.96				ug/L
|	As	75	3015.413	0.01	2.7185	0.101	3.721	ug/L
|	Se	77	88.000	0.00	-0.0446	0.168	375.932	ug/L
|	Se	82	11.383	0.00	0.0952	0.164	172.661	ug/L
⌊	Rb	85	28383.857	0.08				mg/L
	Y	89	278662.149	52678.12				ug/L
	Rh	103	15.667	1.67				ug/L
⌈	Mo	98	608.636	0.00	0.2093	0.016	7.661	ug/L
|	Ag	107	245.672	0.00	0.0116	0.006	50.128	ug/L
|	Cd	114	97.570	0.00	0.0868	0.006	7.271	ug/L
|>	In	115	333971.000	333971.00				ug/L
|	Sn	118	176.135	-0.00	0.0095	0.004	38.419	ug/L
⌊	Sb	123	68.360	0.00	0.0141	0.000	2.137	ug/L
⌈	Ba	135	57309.898	0.13	34.2541	1.791	5.228	ug/L
|	Ce	140	213765.538	0.48				ug/L
⌊>	Tb	159	448307.442	448307.44				ug/L
⌈	Ho	165	3077.451	0.01				ug/L
|	Tl	203	453.348	0.00	0.0367	0.001	3.598	ug/L
|	Tl	205	1060.163	0.00	0.0405	0.008	19.531	ug/L
|	Pb	206	50779.678	0.12	7.1899	0.377	5.238	ug/L
|	Pb	207	41973.167	0.10	6.3091	0.358	5.680	ug/L
|	Pb	208	198649.911	0.47	6.7375	0.382	5.673	ug/L
|	U	238	9311.765	0.02	0.2047	0.008	4.009	ug/L
⌊>	Bi	209	420646.169	420646.17				ug/L

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⌈	Na	23	87950.994	0.14	0.0054	0.001	18.042	mg/L
|	Mg	24	18934535.939	104.99	5.2751	0.263	4.980	mg/L
|	K	39	2771102.185	13.43	0.3381	0.023	6.757	mg/L
|	Ca	43	167528.208	0.93	9.8523	0.717	7.279	mg/L
|	Fe	54	5691283.099	31.33	10.2235	0.877	8.581	mg/L
|	Fe	57	2391467.862	13.23	10.2387	0.746	7.284	mg/L
⌊>	Sc-1	45	180430.182	180430.18				mg/L
	Cl	35	20366.052	-3166.29				mg/L
	Kr	83	71.001	7.67				mg/L
	Br	81	9793.468	2344.69				mg/L
	P	31	56879.449	48827.54				mg/L
	S	34	160495.604	36147.83				mg/L
	Sr	88	91076.639	90959.96				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		110.731			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		106.669			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		103.284			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.342			

Sample ID: L1104021610
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

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Method 6020 - Summary Report

Sample ID: L1104021611

Sample Date/Time: Monday, April 11, 2011 12:58:04
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 31
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22859.443	0.02				ug/L
|	Be	9	140.668	0.00	0.3637	0.048	13.177	ug/L
|	Al	27	29103709.942	156.24	4797.6304	189.069	3.941	ug/L
⌊>	Sc	45	186150.452	186150.45				ug/L
⌈	Ti	49	1797.008	0.01	3.0423	0.239	7.858	ug/L
|	V	51	53823.961	0.15	5.5808	0.395	7.072	ug/L
|	Cr	52	59703.999	0.15	6.5393	0.415	6.349	ug/L
|	Cr	53	6285.939	0.02	6.1064	0.284	4.645	ug/L
|	Mn	55	3475591.119	10.30	298.9405	16.347	5.468	ug/L
|	Co	59	36302.903	0.11	3.8427	0.172	4.476	ug/L
|	Ni	60	19882.977	0.06	9.8875	0.457	4.622	ug/L
|	Cu	65	16457.058	0.05	7.7976	0.457	5.859	ug/L
|	Zn	66	30582.451	0.09	23.3963	1.426	6.095	ug/L
| >	Ge	72	337233.118	337233.12				ug/L
|	As	75	3571.413	0.01	3.2473	0.091	2.804	ug/L
|	Se	77	111.334	0.00	0.2285	0.081	35.312	ug/L
|	Se	82	16.093	0.00	0.1382	0.124	89.940	ug/L
⌊	Rb	85	27399.113	0.08				mg/L
	Y	89	309160.528	83176.49				ug/L
	Rh	103	19.334	5.33				ug/L
⌈	Mo	98	213.881	0.00	0.0824	0.006	6.806	ug/L
|	Ag	107	315.341	0.00	0.0238	0.003	11.107	ug/L
|	Cd	114	100.824	0.00	0.0915	0.014	14.903	ug/L
| >	In	115	324684.047	324684.05				ug/L
|	Sn	118	135.201	-0.00	0.0016	0.001	58.905	ug/L
⌊	Sb	123	47.026	0.00	0.0092	0.001	13.064	ug/L
⌈	Ba	135	118720.821	0.27	71.7588	3.675	5.122	ug/L
|	Ce	140	679387.077	1.53				ug/L
⌊>	Tb	159	443305.653	443305.65				ug/L
⌈	Ho	165	6359.331	0.02				ug/L
|	Tl	203	499.351	0.00	0.0425	0.004	9.824	ug/L
|	Tl	205	1193.524	0.00	0.0472	0.003	7.349	ug/L
|	Pb	206	57933.729	0.14	8.2790	0.242	2.917	ug/L
|	Pb	207	48330.862	0.12	7.3333	0.325	4.438	ug/L
|	Pb	208	226121.936	0.54	7.7405	0.297	3.837	ug/L
|	U	238	24909.658	0.06	0.5373	0.032	5.893	ug/L
⌊>	Bi	209	417124.339	417124.34				ug/L

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Na	23	96615.096	0.17	0.0065	0.001	10.906	mg/L	
Mg	24	4638729.713	24.90	1.2496	0.069	5.509	mg/L	
K	39	1765986.969	7.56	0.1888	0.007	3.621	mg/L	
Ca	43	27754.773	0.15	1.5660	0.111	7.094	mg/L	
Fe	54	4858280.799	25.85	8.4370	0.369	4.379	mg/L	
Fe	57	2021398.719	10.82	8.3765	0.453	5.411	mg/L	
> Sc-1	45	186150.452	186150.45				mg/L	
Cl	35	14858.365	-8673.98				mg/L	
Kr	83	66.001	2.67				mg/L	
Br	81	8571.679	1122.90				mg/L	
P	31	31923.618	23871.71				mg/L	
S	34	121543.808	-2803.97				mg/L	
Sr	88	66289.581	66172.90				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		108.627			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		103.703			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		102.131			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		98.510			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 11, 2011 13:05:12
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21473.046	0.02				ug/L
|	Be	9	16364.713	0.09	51.8354	1.761	3.397	ug/L
|	Al	27	303349.517	1.71	52.6825	1.431	2.717	ug/L
⌊>	Sc	45	175358.882	175358.88				ug/L
⌈	Ti	49	55569.636	0.16	96.0441	2.783	2.898	ug/L
|	V	51	447502.306	1.32	48.5284	0.311	0.642	ug/L
|	Cr	52	388485.589	1.12	48.8841	0.936	1.914	ug/L
|	Cr	53	45450.944	0.13	49.7898	1.199	2.408	ug/L
|	Mn	55	588427.505	1.74	50.4913	0.702	1.390	ug/L
|	Co	59	463513.277	1.37	49.2455	0.433	0.879	ug/L
|	Ni	60	97748.506	0.29	48.7183	0.927	1.902	ug/L
|	Cu	65	101282.944	0.30	48.3690	1.341	2.772	ug/L
|	Zn	66	62467.140	0.18	48.5723	0.839	1.727	ug/L
|>	Ge	72	337777.056	337777.06				ug/L
|	As	75	57641.483	0.17	49.8220	0.777	1.560	ug/L
|	Se	77	4905.870	0.01	52.4716	1.685	3.212	ug/L
|	Se	82	5953.891	0.02	51.9192	0.249	0.480	ug/L
⌊	Rb	85	2302.955	0.01				mg/L
	Y	89	235326.742	9342.71				ug/L
	Rh	103	47.334	33.33				ug/L
⌈	Mo	98	309702.617	0.92	100.8164	0.857	0.850	ug/L
|	Ag	107	317501.441	0.95	49.1229	0.648	1.319	ug/L
|	Cd	114	66937.349	0.20	49.9943	1.676	3.353	ug/L
|>	In	115	334828.623	334828.62				ug/L
|	Sn	118	236967.734	0.71	50.0606	0.166	0.332	ug/L
⌊	Sb	123	202821.014	0.61	49.3972	0.720	1.457	ug/L
⌈	Ba	135	84852.666	0.19	50.0920	0.296	0.592	ug/L
|	Ce	140	73.341	0.00				ug/L
⌊>	Tb	159	453825.497	453825.50				ug/L
⌈	Ho	165	23.336	-0.00				ug/L
|	Tl	203	418437.229	1.01	49.3419	0.503	1.020	ug/L
|	Tl	205	1037613.468	2.51	49.2867	0.737	1.496	ug/L
|	Pb	206	344301.604	0.83	49.9737	0.120	0.239	ug/L
|	Pb	207	320152.361	0.77	49.3960	0.426	0.862	ug/L
|	Pb	208	1429131.814	3.46	49.7296	0.168	0.337	ug/L
|	U	238	2341914.583	5.67	50.2251	0.551	1.097	ug/L
⌊>	Bi	209	412901.071	412901.07				ug/L

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Na	23	25280085.439	143.85	4.8235	0.076	1.578	mg/L	
Mg	24	17356540.533	99.04	4.9762	0.152	3.046	mg/L	
K	39	33891243.795	191.46	4.8634	0.133	2.728	mg/L	
Ca	43	81448.513	0.46	4.9232	0.253	5.140	mg/L	
Fe	54	2853280.574	16.05	5.2386	0.125	2.387	mg/L	
Fe	57	1171858.110	6.66	5.1556	0.335	6.492	mg/L	
> Sc-1	45	175358.882	175358.88				mg/L	
Cl	35	14049.864	-9482.48				mg/L	
Kr	83	75.001	11.67				mg/L	
Br	81	8526.968	1078.19				mg/L	
P	31	9344.395	1292.48				mg/L	
S	34	148964.674	24616.90				mg/L	
Sr	88	2410.532	2293.85				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	97.057				
Cr	52	97.768				
Cr	53					
Mn	55	100.983				
Co	59	98.491				
Ni	60	97.437				
Cu	65	96.738				
Zn	66	97.145				
> Ge	72		108.802			
As	75	99.644				
Se	77					
Se	82	103.838				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	98.246				
Cd	114	99.989				
> In	115		106.943			
Sn	118					
Sb	123	98.794				
Ba	135	100.184				
Ce	140					
> Tb	159		104.555			
Ho	165					
Tl	203	98.684				
Tl	205					
Pb	206					
Pb	207					
Pb	208	99.459				
U	238	100.450				
> Bi	209		97.513			

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 13:07:25

Approved: April 12, 2011

⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 11, 2011 13:12:18
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20120.333	0.01				ug/L
|	Be	9	18.667	0.00	0.0036	0.020	553.480	ug/L
|	Al	27	3267.201	0.00	0.1108	0.018	16.305	ug/L
⌊>	Sc	45	172916.246	172916.25				ug/L
⌈	Ti	49	43.338	0.00	0.0017	0.038	2199.561	ug/L
|	V	51	2906.020	0.00	0.0099	0.008	84.209	ug/L
|	Cr	52	9124.919	-0.00	-0.0106	0.020	185.701	ug/L
|	Cr	53	353.375	-0.00	-0.5299	0.048	9.054	ug/L
|	Mn	55	2851.768	0.00	0.1843	0.003	1.399	ug/L
|	Co	59	89.668	0.00	-0.0125	0.002	15.597	ug/L
|	Ni	60	48.667	-0.00	-0.0231	0.003	13.367	ug/L
|	Cu	65	104.668	-0.00	-0.0398	0.008	19.714	ug/L
|	Zn	66	525.352	-0.00	-0.4121	0.028	6.892	ug/L
|>	Ge	72	344383.615	344383.61				ug/L
|	As	75	-176.558	0.00	0.0172	0.067	391.040	ug/L
|	Se	77	82.000	0.00	-0.1116	0.165	147.850	ug/L
|	Se	82	4.791	0.00	0.0398	0.207	521.508	ug/L
⌊	Rb	85	33.000	0.00				mg/L
	Y	89	244289.007	18304.97				ug/L
	Rh	103	12.667	-1.33				ug/L
⌈	Mo	98	119.499	0.00	0.0487	0.005	9.519	ug/L
|	Ag	107	103.002	-0.00	-0.0110	0.001	7.857	ug/L
|	Cd	114	-8.860	-0.00	0.0073	0.008	115.930	ug/L
|>	In	115	342993.969	342993.97				ug/L
|	Sn	118	3347.760	0.01	0.6632	0.018	2.733	ug/L
⌊	Sb	123	61.490	0.00	0.0120	0.003	28.557	ug/L
⌈	Ba	135	36.334	0.00	0.0136	0.007	53.282	ug/L
|	Ce	140	36.670	-0.00				ug/L
⌊>	Tb	159	459263.888	459263.89				ug/L
⌈	Ho	165	16.668	-0.00				ug/L
|	Tl	203	34.667	-0.00	-0.0118	0.000	2.309	ug/L
|	Tl	205	76.675	-0.00	-0.0054	0.002	32.419	ug/L
|	Pb	206	361.343	0.00	-0.0007	0.002	256.981	ug/L
|	Pb	207	340.009	0.00	-0.0034	0.003	95.903	ug/L
|	Pb	208	1466.723	0.00	-0.0052	0.001	25.552	ug/L
|	U	238	99.668	0.00	0.0108	0.000	2.459	ug/L
⌊>	Bi	209	421285.356	421285.36				ug/L

Sample ID: QC Std 7
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Erin D. Long

Na	23	61762.975	0.01	0.0011	0.000	27.666	mg/L	
Mg	24	1666.972	0.00	-0.0016	0.000	0.929	mg/L	
K	39	347640.961	0.08	-0.0013	0.001	86.374	mg/L	
Ca	43	173.352	-0.00	-0.0054	0.003	62.552	mg/L	
Fe	54	42913.072	0.02	0.0095	0.002	25.978	mg/L	
Fe	57	6409.362	0.00	0.0032	0.001	20.857	mg/L	
> Sc-1	45	172916.246	172916.25				mg/L	
Cl	35	13487.762	-10044.58				mg/L	
Kr	83	62.334	-1.00				mg/L	
Br	81	8892.622	1443.85				mg/L	
P	31	9548.603	1496.69				mg/L	
S	34	135809.144	11461.37				mg/L	
Sr	88	126.680	10.00				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		110.930			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		109.551			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		105.808			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		99.493			

Sample ID: QC Std 7
Report Date/Time: Monday, April 11, 2011 13:14:30
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Monday, April 11, 2011 13:14:30

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021604PS ~~WG361117-02~~ WG361117-01

Sample Date/Time: Monday, April 11, 2011 13:23:29
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 38
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22324.999	0.03				ug/L
|	Be	9	16842.842	0.10	54.3610	3.234	5.950	ug/L
|	Al	27	27160808.376	158.08	4853.9100	405.577	8.356	ug/L
⌊>	Sc	45	172342.218	172342.22				ug/L
⌈	Ti	49	1797.008	0.01	3.0317	0.064	2.118	ug/L
|	V	51	468524.548	1.38	50.7414	1.425	2.808	ug/L
|	Cr	52	424207.408	1.23	53.3924	0.525	0.983	ug/L
|	Cr	53	47845.726	0.14	52.3622	1.638	3.129	ug/L
|	Mn	55	1935487.621	5.72	165.9253	1.173	0.707	ug/L
|	Co	59	471108.907	1.39	49.9709	0.606	1.212	ug/L
|	Ni	60	109587.970	0.32	54.5343	0.261	0.478	ug/L
|	Cu	65	113487.517	0.34	54.1199	0.711	1.314	ug/L
|	Zn	66	96899.963	0.28	75.6630	1.133	1.498	ug/L
|>	Ge	72	338338.224	338338.22				ug/L
|	As	75	60675.412	0.18	52.3479	0.352	0.672	ug/L
|	Se	77	5170.003	0.02	55.2550	1.483	2.684	ug/L
|	Se	82	6251.715	0.02	54.4277	0.835	1.535	ug/L
⌊	Rb	85	35556.798	0.11				mg/L
	Y	89	314905.645	88921.61				ug/L
	Rh	103	35.000	21.00				ug/L
⌈	Mo	98	178.437	0.00	0.0700	0.008	10.743	ug/L
|	Ag	107	315930.181	0.96	49.9153	0.549	1.100	ug/L
|	Cd	114	67111.442	0.20	51.1818	1.679	3.280	ug/L
|>	In	115	327865.838	327865.84				ug/L
|	Sn	118	310.405	0.00	0.0392	0.003	7.988	ug/L
⌊	Sb	123	198521.081	0.61	49.3715	0.476	0.964	ug/L
⌈	Ba	135	188510.930	0.42	111.6055	1.633	1.463	ug/L
|	Ce	140	289085.042	0.64				ug/L
⌊>	Tb	159	452571.778	452571.78				ug/L
⌈	Ho	165	6019.084	0.01				ug/L
|	Tl	203	425086.280	1.01	49.1924	1.126	2.289	ug/L
|	Tl	205	1053048.708	2.50	49.0904	1.809	3.684	ug/L
|	Pb	206	389618.594	0.93	55.5049	1.125	2.028	ug/L
|	Pb	207	341905.445	0.81	51.7737	1.176	2.271	ug/L
|	Pb	208	1574884.309	3.74	53.7876	1.310	2.435	ug/L
|	U	238	2332966.599	5.54	49.0995	1.074	2.187	ug/L
⌊>	Bi	209	420774.731	420774.73				ug/L

Sample ID: L1104021604PS ~~WG361117-02~~ WG361117-01
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Na	23	123284.600	0.37	0.0131	0.002	15.361	mg/L
Mg	24	4796529.254	27.88	1.3996	0.089	6.333	mg/L
K	39	1884371.324	9.02	0.2260	0.015	6.477	mg/L
Ca	43	25491.680	0.15	1.5573	0.072	4.644	mg/L
Fe	54	4064001.432	23.40	7.6362	0.435	5.700	mg/L
Fe	57	1690388.839	9.80	7.5855	0.499	6.577	mg/L
> Sc-1	45	172342.218	172342.22				mg/L
Cl	35	13113.261	-10419.08				mg/L
Kr	83	78.668	15.33				mg/L
Br	81	8851.932	1403.16				mg/L
P	31	35593.916	27542.01				mg/L
S	34	118014.758	-6333.02				mg/L
Sr	88	58560.151	58443.47				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		108.983			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		104.719			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		104.266			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		99.372			

Sample ID: L1104021604PS ~~WG361117-02~~ WG361117-01
Report Date/Time: Monday, April 11, 2011 13:25:41

Approved: April 12, 2011

⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Sample ID: L1104021604PS ~~WG361117-02~~ WG361117-01
Report Date/Time: Monday, April 11, 2011 13:25:41

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021615

Sample Date/Time: Monday, April 11, 2011 13:30:36
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 32
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22241.434	0.02				ug/L
|	Be	9	107.334	0.00	0.2689	0.023	8.588	ug/L
|	Al	27	26396388.087	143.93	4419.4142	158.621	3.589	ug/L
⌊>	Sc	45	183434.409	183434.41				ug/L
⌈	Ti	49	1800.342	0.01	3.0790	0.127	4.121	ug/L
|	V	51	55246.261	0.16	5.7969	0.114	1.961	ug/L
|	Cr	52	55544.737	0.14	6.0743	0.104	1.704	ug/L
|	Cr	53	6002.405	0.01	5.8569	0.403	6.883	ug/L
|	Mn	55	3365680.636	10.08	292.3913	5.371	1.837	ug/L
|	Co	59	39538.743	0.12	4.2292	0.044	1.035	ug/L
|	Ni	60	15132.927	0.05	7.5898	0.063	0.834	ug/L
|	Cu	65	14581.771	0.04	6.9682	0.114	1.630	ug/L
|	Zn	66	27960.651	0.08	21.5424	0.262	1.217	ug/L
|>	Ge	72	333924.004	333924.00				ug/L
|	As	75	3633.067	0.01	3.3319	0.037	1.103	ug/L
|	Se	77	114.667	0.00	0.2771	0.073	26.263	ug/L
|	Se	82	16.337	0.00	0.1419	0.085	60.060	ug/L
⌊	Rb	85	49008.628	0.15				mg/L
	Y	89	276655.537	50671.50				ug/L
	Rh	103	15.333	1.33				ug/L
⌈	Mo	98	300.368	0.00	0.1118	0.002	1.852	ug/L
|	Ag	107	284.674	0.00	0.0190	0.003	13.356	ug/L
|	Cd	114	37.675	0.00	0.0429	0.004	10.167	ug/L
|>	In	115	323644.846	323644.85				ug/L
|	Sn	118	104.801	-0.00	-0.0049	0.002	37.136	ug/L
⌊	Sb	123	418.586	0.00	0.1028	0.007	6.576	ug/L
⌈	Ba	135	86238.128	0.19	51.8985	0.875	1.685	ug/L
|	Ce	140	286077.438	0.64				ug/L
⌊>	Tb	159	445225.485	445225.49				ug/L
⌈	Ho	165	3811.107	0.01				ug/L
|	Tl	203	753.369	0.00	0.0708	0.002	2.987	ug/L
|	Tl	205	1743.661	0.00	0.0718	0.010	13.548	ug/L
|	Pb	206	56767.580	0.13	7.9877	0.113	1.409	ug/L
|	Pb	207	46662.431	0.11	6.9711	0.168	2.413	ug/L
|	Pb	208	222102.560	0.52	7.4867	0.131	1.748	ug/L
|	U	238	23168.378	0.05	0.4929	0.013	2.575	ug/L
⌊>	Bi	209	423621.958	423621.96				ug/L

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Na	23	181120.511	0.64	0.0222	0.000	1.586	mg/L	
Mg	24	4571035.295	24.92	1.2507	0.025	1.970	mg/L	
K	39	1932106.145	8.60	0.2154	0.006	3.007	mg/L	
Ca	43	21278.083	0.11	1.2168	0.057	4.662	mg/L	
Fe	54	4637311.199	25.06	8.1782	0.275	3.358	mg/L	
Fe	57	1994099.303	10.85	8.3960	0.429	5.108	mg/L	
> Sc-1	45	183434.409	183434.41				mg/L	
Cl	35	13685.358	-9846.98				mg/L	
Kr	83	76.334	13.00				mg/L	
Br	81	8460.912	1012.14				mg/L	
P	31	32275.340	24223.43				mg/L	
S	34	114525.055	-9822.72				mg/L	
Sr	88	45698.746	45582.07				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		107.561			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		103.371			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		102.573			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		100.045			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021616

Sample Date/Time: Monday, April 11, 2011 13:37:44
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 33
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21239.225	0.02				ug/L
|	Be	9	102.001	0.00	0.2762	0.075	26.991	ug/L
|	Al	27	18903476.718	111.23	3415.5453	111.586	3.267	ug/L
⌊>	Sc	45	169849.899	169849.90				ug/L
⌈	Ti	49	3344.235	0.01	5.6088	0.850	15.160	ug/L
|	V	51	74378.631	0.21	7.6648	0.381	4.972	ug/L
|	Cr	52	51726.182	0.12	5.3757	0.306	5.688	ug/L
|	Cr	53	5105.147	0.01	4.6730	0.106	2.263	ug/L
|	Mn	55	3776444.612	10.97	318.2901	12.038	3.782	ug/L
|	Co	59	41637.456	0.12	4.3211	0.235	5.429	ug/L
|	Ni	60	18707.695	0.05	9.1124	0.388	4.257	ug/L
|	Cu	65	18193.755	0.05	8.4538	0.471	5.570	ug/L
|	Zn	66	57259.471	0.16	43.6075	2.624	6.016	ug/L
| >	Ge	72	344138.724	344138.72				ug/L
|	As	75	6100.560	0.02	5.3237	0.178	3.344	ug/L
|	Se	77	98.667	0.00	0.0692	0.190	274.479	ug/L
|	Se	82	17.064	0.00	0.1442	0.107	73.990	ug/L
⌊	Rb	85	36105.130	0.10				mg/L
	Y	89	291314.742	65330.71				ug/L
	Rh	103	18.000	4.00				ug/L
⌈	Mo	98	806.214	0.00	0.2743	0.021	7.630	ug/L
|	Ag	107	1076.735	0.00	0.1408	0.007	5.255	ug/L
|	Cd	114	203.890	0.00	0.1667	0.014	8.194	ug/L
| >	In	115	333404.659	333404.66				ug/L
|	Sn	118	292.671	0.00	0.0343	0.001	3.176	ug/L
⌊	Sb	123	235.324	0.00	0.0550	0.003	4.695	ug/L
⌈	Ba	135	68267.494	0.15	40.7296	1.989	4.883	ug/L
|	Ce	140	331001.375	0.74				ug/L
⌊>	Tb	159	449154.998	449155.00				ug/L
⌈	Ho	165	3927.834	0.01				ug/L
|	Tl	203	774.704	0.00	0.0732	0.001	1.202	ug/L
|	Tl	205	1877.031	0.00	0.0779	0.008	10.560	ug/L
|	Pb	206	95912.072	0.23	13.5100	0.575	4.254	ug/L
|	Pb	207	80404.846	0.19	12.0318	0.481	4.002	ug/L
|	Pb	208	379073.463	0.89	12.7962	0.470	3.671	ug/L
|	U	238	14185.554	0.03	0.3047	0.017	5.462	ug/L
⌊>	Bi	209	424215.892	424215.89				ug/L

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⌈	Na	23	88434.860	0.17	0.0066	0.001	12.116	mg/L
|	Mg	24	16378746.952	96.54	4.8506	0.155	3.188	mg/L
|	K	39	3492653.417	18.66	0.4710	0.021	4.541	mg/L
|	Ca	43	127847.965	0.75	7.9747	0.290	3.633	mg/L
|	Fe	54	4669635.722	27.25	8.8944	0.072	0.811	mg/L
|	Fe	57	1932658.982	11.34	8.7784	0.107	1.220	mg/L
⌊>	Sc-1	45	169849.899	169849.90				mg/L
	Cl	35	18476.388	-5055.95				mg/L
	Kr	83	69.334	6.00				mg/L
	Br	81	10195.196	2746.42				mg/L
	P	31	65061.798	57009.89				mg/L
	S	34	143873.830	19526.06				mg/L
	Sr	88	87382.754	87266.08				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		110.851			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		106.488			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		103.479			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		100.185			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021617

Sample Date/Time: Monday, April 11, 2011 13:44:53
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 34
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22174.696	0.02				ug/L
|	Be	9	90.667	0.00	0.2320	0.039	16.882	ug/L
|	Al	27	25544377.974	146.99	4513.4371	525.574	11.645	ug/L
⌊>	Sc	45	174256.559	174256.56				ug/L
⌈	Ti	49	1006.818	0.00	1.6853	0.206	12.229	ug/L
|	V	51	37874.701	0.10	3.8658	0.067	1.743	ug/L
|	Cr	52	46368.415	0.11	4.8586	0.104	2.140	ug/L
|	Cr	53	4544.822	0.01	4.1945	0.217	5.176	ug/L
|	Mn	55	2941005.184	8.78	254.6731	2.964	1.164	ug/L
|	Co	59	41457.175	0.12	4.4210	0.010	0.232	ug/L
|	Ni	60	11115.954	0.03	5.5451	0.136	2.460	ug/L
|	Cu	65	9953.718	0.03	4.7131	0.094	2.003	ug/L
|	Zn	66	20724.330	0.06	15.7013	0.249	1.587	ug/L
|>	Ge	72	335014.246	335014.25				ug/L
|	As	75	1657.027	0.01	1.6053	0.028	1.771	ug/L
|	Se	77	112.667	0.00	0.2517	0.113	44.722	ug/L
|	Se	82	2.017	0.00	0.0153	0.082	539.440	ug/L
⌊	Rb	85	27317.879	0.08				mg/L
	Y	89	267764.031	41780.00				ug/L
	Rh	103	16.667	2.67				ug/L
⌈	Mo	98	142.578	0.00	0.0589	0.006	10.695	ug/L
|	Ag	107	234.672	0.00	0.0112	0.003	29.274	ug/L
|	Cd	114	42.305	0.00	0.0466	0.011	23.420	ug/L
|>	In	115	321935.985	321935.98				ug/L
|	Sn	118	103.467	-0.00	-0.0051	0.002	39.602	ug/L
⌊	Sb	123	102.738	0.00	0.0234	0.003	13.937	ug/L
⌈	Ba	135	94999.093	0.21	57.1919	0.524	0.916	ug/L
|	Ce	140	443564.075	1.00				ug/L
⌊>	Tb	159	445017.435	445017.43				ug/L
⌈	Ho	165	3240.852	0.01				ug/L
|	Tl	203	535.686	0.00	0.0465	0.003	6.053	ug/L
|	Tl	205	1380.234	0.00	0.0557	0.006	11.175	ug/L
|	Pb	206	39533.722	0.09	5.6082	0.056	1.004	ug/L
|	Pb	207	32197.757	0.08	4.8461	0.127	2.625	ug/L
|	Pb	208	153202.159	0.36	5.2039	0.067	1.285	ug/L
|	U	238	23579.673	0.06	0.5069	0.008	1.592	ug/L
⌊>	Bi	209	419013.657	419013.66				ug/L

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Na	23	173187.560	0.65	0.0224	0.001	4.165	mg/L	
Mg	24	4203592.197	24.15	1.2122	0.071	5.836	mg/L	
K	39	1443749.134	6.36	0.1585	0.013	8.490	mg/L	
Ca	43	25378.032	0.14	1.5326	0.075	4.880	mg/L	
Fe	54	3017390.673	17.10	5.5836	0.273	4.892	mg/L	
Fe	57	1264380.533	7.23	5.5976	0.261	4.657	mg/L	
> Sc-1	45	174256.559	174256.56				mg/L	
Cl	35	13754.124	-9778.22				mg/L	
Kr	83	74.668	11.33				mg/L	
Br	81	8745.825	1297.05				mg/L	
P	31	22708.427	14656.52				mg/L	
S	34	123552.671	-795.10				mg/L	
Sr	88	44094.746	43978.07				mg/L	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	6					
	Be	9					
	Al	27					
>	Sc	45					
	Ti	49					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Co	59					
	Ni	60					
	Cu	65					
	Zn	66					
>	Ge	72		107.912			
	As	75					
	Se	77					
	Se	82					
	Rb	85					
	Y	89					
	Rh	103					
	Mo	98					
	Ag	107					
	Cd	114					
>	In	115		102.825			
	Sn	118					
	Sb	123					
	Ba	135					
	Ce	140					
>	Tb	159		102.526			
	Ho	165					
	Tl	203					
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
	U	238					
>	Bi	209		98.957			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021618

Sample Date/Time: Monday, April 11, 2011 13:52:00
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 35
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22792.759	0.02				ug/L
|	Be	9	76.667	0.00	0.1758	0.050	28.634	ug/L
|	Al	27	13237012.261	71.83	2205.5873	33.710	1.528	ug/L
⌊>	Sc	45	184300.707	184300.71				ug/L
⌈	Ti	49	2824.016	0.01	4.7609	0.281	5.901	ug/L
|	V	51	43352.262	0.12	4.3801	0.066	1.501	ug/L
|	Cr	52	42573.536	0.10	4.2635	0.075	1.771	ug/L
|	Cr	53	4341.376	0.01	3.8759	0.047	1.217	ug/L
|	Mn	55	2488227.980	7.29	211.4428	1.341	0.634	ug/L
|	Co	59	32299.746	0.09	3.3755	0.063	1.865	ug/L
|	Ni	60	17146.862	0.05	8.4189	0.193	2.297	ug/L
|	Cu	65	11998.315	0.03	5.5913	0.068	1.217	ug/L
|	Zn	66	28534.952	0.08	21.5048	0.413	1.919	ug/L
|>	Ge	72	341345.823	341345.82				ug/L
|	As	75	2920.759	0.01	2.6558	0.032	1.207	ug/L
|	Se	77	88.667	0.00	-0.0302	0.167	553.701	ug/L
|	Se	82	19.731	0.00	0.1680	0.044	26.154	ug/L
⌊	Rb	85	25687.549	0.08				mg/L
	Y	89	274010.939	48026.90				ug/L
	Rh	103	21.000	7.00				ug/L
⌈	Mo	98	605.120	0.00	0.2092	0.004	2.107	ug/L
|	Ag	107	250.672	0.00	0.0125	0.002	17.648	ug/L
|	Cd	114	85.705	0.00	0.0784	0.016	20.804	ug/L
|>	In	115	332156.042	332156.04				ug/L
|	Sn	118	126.001	-0.00	-0.0010	0.003	263.124	ug/L
⌊	Sb	123	115.820	0.00	0.0258	0.003	11.808	ug/L
⌈	Ba	135	45229.523	0.10	26.9311	0.101	0.374	ug/L
|	Ce	140	238726.670	0.53				ug/L
⌊>	Tb	159	449866.063	449866.06				ug/L
⌈	Ho	165	2910.716	0.01				ug/L
|	Tl	203	578.022	0.00	0.0518	0.002	3.720	ug/L
|	Tl	205	1383.568	0.00	0.0562	0.005	8.280	ug/L
|	Pb	206	44933.512	0.11	6.4154	0.037	0.570	ug/L
|	Pb	207	37724.735	0.09	5.7178	0.054	0.944	ug/L
|	Pb	208	176578.198	0.42	6.0386	0.053	0.873	ug/L
|	U	238	8577.097	0.02	0.1909	0.004	1.896	ug/L
⌊>	Bi	209	416792.325	416792.33				ug/L

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⌈	Na	23	105042.636	0.22	0.0082	0.001	6.498	mg/L
|	Mg	24	25319781.632	137.39	6.9039	0.159	2.305	mg/L
|	K	39	3279452.301	15.88	0.4002	0.016	4.042	mg/L
|	Ca	43	213115.389	1.16	12.2725	0.403	3.281	mg/L
|	Fe	54	3651796.870	19.59	6.3952	0.166	2.597	mg/L
|	Fe	57	1484072.238	8.03	6.2145	0.309	4.973	mg/L
⌊>	Sc-1	45	184300.707	184300.71				mg/L
	Cl	35	17553.399	-5978.94				mg/L
	Kr	83	69.334	6.00				mg/L
	Br	81	9130.834	1682.06				mg/L
	P	31	38748.944	30697.03				mg/L
	S	34	157175.555	32827.78				mg/L
	Sr	88	91304.540	91187.86				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		109.951			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		106.089			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		103.643			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.432			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021619

Sample Date/Time: Monday, April 11, 2011 13:59:06
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 36
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21306.054	0.02				ug/L
|	Be	9	132.001	0.00	0.3546	0.091	25.689	ug/L
|	Al	27	29239076.035	164.08	5038.2752	162.730	3.230	ug/L
|>	Sc	45	178139.475	178139.47				ug/L
⌈	Ti	49	1917.044	0.01	3.2294	0.452	14.006	ug/L
|	V	51	71358.932	0.20	7.4488	0.647	8.688	ug/L
|	Cr	52	59222.829	0.15	6.4296	0.640	9.950	ug/L
|	Cr	53	5985.745	0.01	5.7301	0.948	16.550	ug/L
|	Mn	55	4263086.487	12.56	364.4149	32.114	8.812	ug/L
|	Co	59	64990.410	0.19	6.8535	0.596	8.702	ug/L
|	Ni	60	18576.524	0.05	9.1774	0.911	9.921	ug/L
|	Cu	65	14065.068	0.04	6.6088	0.576	8.722	ug/L
|	Zn	66	29683.470	0.09	22.5387	1.976	8.769	ug/L
|>	Ge	72	339477.522	339477.52				ug/L
|	As	75	3440.078	0.01	3.1152	0.146	4.674	ug/L
|	Se	77	108.001	0.00	0.1842	0.133	72.091	ug/L
|	Se	82	14.650	0.00	0.1245	0.073	58.585	ug/L
⌊	Rb	85	41551.609	0.12				mg/L
	Y	89	292826.406	66842.37				ug/L
	Rh	103	17.000	3.00				ug/L
⌈	Mo	98	218.360	0.00	0.0829	0.006	7.189	ug/L
|	Ag	107	298.341	0.00	0.0204	0.001	6.967	ug/L
|	Cd	114	69.496	0.00	0.0666	0.006	9.415	ug/L
|>	In	115	329253.659	329253.66				ug/L
|	Sn	118	101.334	-0.00	-0.0060	0.001	12.390	ug/L
⌊	Sb	123	73.614	0.00	0.0156	0.003	16.985	ug/L
⌈	Ba	135	104648.982	0.23	62.3433	3.998	6.413	ug/L
|	Ce	140	413195.755	0.92				ug/L
|>	Tb	159	449836.025	449836.02				ug/L
⌈	Ho	165	4601.525	0.01				ug/L
|	Tl	203	640.360	0.00	0.0581	0.003	5.436	ug/L
|	Tl	205	1616.960	0.00	0.0661	0.006	9.245	ug/L
|	Pb	206	52730.805	0.12	7.4379	0.394	5.303	ug/L
|	Pb	207	43581.063	0.10	6.5258	0.350	5.369	ug/L
|	Pb	208	205726.900	0.48	6.9505	0.440	6.334	ug/L
|	U	238	17412.375	0.04	0.3736	0.025	6.814	ug/L
|>	Bi	209	422318.682	422318.68				ug/L

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Na	23	119158.097	0.32	0.0115	0.001	4.648	mg/L
Mg	24	4655086.446	26.12	1.3111	0.034	2.562	mg/L
K	39	2165702.746	10.22	0.2565	0.007	2.788	mg/L
Ca	43	30543.450	0.17	1.8035	0.212	11.729	mg/L
Fe	54	4936862.239	27.46	8.9629	0.723	8.064	mg/L
Fe	57	2107179.921	11.79	9.1245	0.859	9.415	mg/L
> Sc-1	45	178139.475	178139.47				mg/L
Cl	35	15056.661	-8475.68				mg/L
Kr	83	78.668	15.33				mg/L
Br	81	9389.741	1940.97				mg/L
P	31	33494.050	25442.14				mg/L
S	34	130881.188	6533.41				mg/L
Sr	88	91554.532	91437.85				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		109.350			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		105.162			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		103.636			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		99.737			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021620

Sample Date/Time: Monday, April 11, 2011 14:06:12
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 37
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21389.547	0.01				ug/L
|	Be	9	91.334	0.00	0.2228	0.066	29.839	ug/L
|	Al	27	13446531.104	73.98	2271.6823	122.585	5.396	ug/L
⌊>	Sc	45	181719.579	181719.58				ug/L
⌈	Ti	49	2934.058	0.01	5.0451	0.336	6.670	ug/L
|	V	51	51033.178	0.14	5.3113	0.276	5.205	ug/L
|	Cr	52	44283.718	0.11	4.5867	0.349	7.611	ug/L
|	Cr	53	4328.041	0.01	3.9524	0.522	13.213	ug/L
|	Mn	55	2143647.273	6.39	185.5613	12.027	6.481	ug/L
|	Co	59	30242.369	0.09	3.2188	0.224	6.974	ug/L
|	Ni	60	14691.271	0.04	7.3405	0.393	5.358	ug/L
|	Cu	65	21141.253	0.06	10.1091	0.796	7.871	ug/L
|	Zn	66	39611.076	0.12	30.7446	1.584	5.152	ug/L
| >	Ge	72	335356.225	335356.22				ug/L
|	As	75	8112.052	0.02	7.2075	0.276	3.828	ug/L
|	Se	77	118.001	0.00	0.3079	0.316	102.779	ug/L
|	Se	82	24.713	0.00	0.2133	0.152	71.126	ug/L
⌊	Rb	85	26003.048	0.08				mg/L
	Y	89	273774.563	47790.53				ug/L
	Rh	103	21.667	7.67				ug/L
⌈	Mo	98	952.077	0.00	0.3252	0.008	2.484	ug/L
|	Ag	107	269.340	0.00	0.0157	0.003	22.002	ug/L
|	Cd	114	133.725	0.00	0.1151	0.008	6.965	ug/L
| >	In	115	329899.697	329899.70				ug/L
|	Sn	118	200.402	0.00	0.0152	0.002	10.651	ug/L
⌊	Sb	123	112.151	0.00	0.0251	0.001	5.191	ug/L
⌈	Ba	135	47522.588	0.11	28.7526	1.313	4.567	ug/L
|	Ce	140	192409.927	0.43				ug/L
⌊>	Tb	159	442841.636	442841.64				ug/L
⌈	Ho	165	3300.876	0.01				ug/L
|	Tl	203	560.688	0.00	0.0499	0.001	2.123	ug/L
|	Tl	205	1230.199	0.00	0.0491	0.002	4.851	ug/L
|	Pb	206	92076.103	0.22	13.2363	0.614	4.640	ug/L
|	Pb	207	77540.957	0.19	11.8417	0.542	4.579	ug/L
|	Pb	208	363588.491	0.87	12.5252	0.561	4.480	ug/L
|	U	238	8683.863	0.02	0.1936	0.011	5.482	ug/L
⌊>	Bi	209	415720.466	415720.47				ug/L

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⌈	Na	23	71374.387	0.04	0.0022	0.000	17.518	mg/L
|	Mg	24	10951173.637	60.26	3.0268	0.091	2.992	mg/L
|	K	39	2351726.148	11.01	0.2765	0.004	1.354	mg/L
|	Ca	43	89411.360	0.49	5.2093	0.338	6.480	mg/L
|	Fe	54	4906664.446	26.77	8.7355	0.399	4.572	mg/L
|	Fe	57	2065423.740	11.33	8.7715	0.585	6.674	mg/L
⌊>	Sc-1	45	181719.579	181719.58				mg/L
	Cl	35	18436.314	-5096.03				mg/L
	Kr	83	71.334	8.00				mg/L
	Br	81	9460.474	2011.70				mg/L
	P	31	50296.201	42244.29				mg/L
	S	34	149634.409	25286.63				mg/L
	Sr	88	65661.612	65544.93				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		108.022			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		105.369			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.024			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.179			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, April 11, 2011 14:13:19
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20938.621	0.03				ug/L
|	Be	9	14.000	-0.00	-0.0057	0.027	471.456	ug/L
|	Al	27	24533113.634	160.26	4920.8634	323.091	6.566	ug/L
⌊>	Sc	45	153420.342	153420.34				ug/L
⌈	Ti	49	50733.437	0.16	91.7669	1.348	1.469	ug/L
|	V	51	2524.363	-0.00	-0.0130	0.009	65.645	ug/L
|	Cr	52	8968.443	0.00	0.0452	0.013	29.295	ug/L
|	Cr	53	946.806	-0.00	0.1885	0.053	28.296	ug/L
|	Mn	55	3225.219	0.01	0.2339	0.004	1.658	ug/L
|	Co	59	1707.830	0.01	0.1681	0.005	2.932	ug/L
|	Ni	60	848.378	0.00	0.3959	0.022	5.667	ug/L
|	Cu	65	710.032	0.00	0.2666	0.017	6.312	ug/L
|	Zn	66	815.708	0.00	-0.1449	0.018	12.566	ug/L
|>	Ge	72	322794.671	322794.67				ug/L
|	As	75	-182.489	0.00	0.0017	0.018	1049.774	ug/L
|	Se	77	134.668	0.00	0.5487	0.037	6.755	ug/L
|	Se	82	-0.267	0.00	-0.0048	0.052	1093.275	ug/L
⌊	Rb	85	1951.877	0.01				mg/L
	Y	89	218193.161	-7790.87				ug/L
	Rh	103	26.667	12.67				ug/L
⌈	Mo	98	285486.715	0.91	99.3108	0.386	0.388	ug/L
|	Ag	107	133.669	0.00	-0.0045	0.002	50.925	ug/L
|	Cd	114	60.425	0.00	0.0622	0.033	53.265	ug/L
|>	In	115	313328.692	313328.69				ug/L
|	Sn	118	126.001	-0.00	0.0006	0.002	270.031	ug/L
⌊	Sb	123	165.367	0.00	0.0404	0.001	1.561	ug/L
⌈	Ba	135	68.001	0.00	0.0343	0.002	4.853	ug/L
|	Ce	140	200.022	0.00				ug/L
⌊>	Tb	159	435436.654	435436.65				ug/L
⌈	Ho	165	50.005	0.00				ug/L
|	Tl	203	32.000	-0.00	-0.0119	0.000	3.563	ug/L
|	Tl	205	50.005	-0.00	-0.0065	0.001	20.009	ug/L
|	Pb	206	437.681	0.00	0.0128	0.004	30.853	ug/L
|	Pb	207	361.677	0.00	0.0022	0.003	125.672	ug/L
|	Pb	208	1679.072	0.00	0.0045	0.002	39.574	ug/L
|	U	238	25.000	0.00	0.0092	0.000	0.089	ug/L
⌊>	Bi	209	404330.988	404330.99				ug/L

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Na	23	58434672.452	381.36	12.7864	0.748	5.854	mg/L	
Mg	24	15963114.234	104.30	5.2406	0.349	6.652	mg/L	
K	39	31190062.013	201.74	5.1247	0.262	5.119	mg/L	
Ca	43	220054.691	1.43	15.2346	0.498	3.271	mg/L	
Fe	54	6641910.353	43.18	14.0892	1.051	7.458	mg/L	
Fe	57	2814509.981	18.35	14.2047	0.806	5.673	mg/L	
> Sc-1	45	153420.342	153420.34				mg/L	
Cl	35	1569218.203	1545685.86				mg/L	
Kr	83	69.001	5.67				mg/L	
Br	81	8341.484	892.71				mg/L	
P	31	1481039.024	1472987.11				mg/L	
S	34	277466.355	153118.58				mg/L	
Sr	88	9318.606	9201.93				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		103.976			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		100.076			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		100.318			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		95.489			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 4
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Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, April 11, 2011 14:20:28
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21673.580	0.04				ug/L
|	Be	9	32613.765	0.22	122.9192	4.627	3.764	ug/L
|	Al	27	21220625.717	143.99	4421.5302	180.910	4.092	ug/L
⌊>	Sc	45	147463.334	147463.33				ug/L
⌈	Ti	49	46402.055	0.17	96.5289	2.161	2.238	ug/L
|	V	51	719835.224	2.56	94.2440	3.198	3.393	ug/L
|	Cr	52	640271.321	2.25	98.1012	1.835	1.870	ug/L
|	Cr	53	113408.694	0.40	151.4052	10.466	6.913	ug/L
|	Mn	55	994308.526	3.54	102.7303	1.557	1.516	ug/L
|	Co	59	806328.240	2.87	103.1120	1.122	1.089	ug/L
|	Ni	60	172137.976	0.61	103.3016	1.555	1.505	ug/L
|	Cu	65	179070.633	0.64	103.0262	2.458	2.386	ug/L
|	Zn	66	106501.859	0.38	100.5161	1.475	1.467	ug/L
|>	Ge	72	280711.003	280711.00				ug/L
|	As	75	93459.470	0.33	97.0392	0.771	0.795	ug/L
|	Se	77	10438.112	0.04	135.8927	2.813	2.070	ug/L
|	Se	82	9251.593	0.03	97.0697	0.855	0.881	ug/L
⌊	Rb	85	1640.484	0.01				mg/L
	Y	89	180566.922	-45417.11				ug/L
	Rh	103	60.001	46.00				ug/L
⌈	Mo	98	234978.457	0.87	95.0950	0.990	1.041	ug/L
|	Ag	107	499706.738	1.86	96.1396	1.326	1.379	ug/L
|	Cd	114	111118.289	0.41	103.1564	2.082	2.019	ug/L
|>	In	115	269332.552	269332.55				ug/L
|	Sn	118	377.474	0.00	0.0714	0.003	3.574	ug/L
⌊	Sb	123	344838.846	1.28	104.4049	0.732	0.701	ug/L
⌈	Ba	135	140661.794	0.34	91.7363	0.551	0.601	ug/L
|	Ce	140	243.361	0.00				ug/L
⌊>	Tb	159	410821.662	410821.66				ug/L
⌈	Ho	165	23.336	-0.00				ug/L
|	Tl	203	804442.769	2.02	98.4535	0.708	0.719	ug/L
|	Tl	205	2003741.759	5.04	98.7797	2.013	2.038	ug/L
|	Pb	206	683495.093	1.72	103.0023	0.290	0.281	ug/L
|	Pb	207	607312.721	1.53	97.2870	0.199	0.204	ug/L
|	Pb	208	2790074.649	7.01	100.8056	0.555	0.550	ug/L
|	U	238	4740256.606	11.91	105.4778	1.095	1.038	ug/L
⌊>	Bi	209	397896.067	397896.07				ug/L

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Na	23	53447062.703	362.48	12.1533	0.652	5.363	mg/L	
Mg	24	14227429.360	96.51	4.8489	0.174	3.589	mg/L	
K	39	27815926.850	186.77	4.7443	0.107	2.251	mg/L	
Ca	43	193642.745	1.31	13.9397	0.411	2.948	mg/L	
Fe	54	5901369.369	39.81	12.9894	0.347	2.674	mg/L	
Fe	57	2525872.876	17.10	13.2389	0.267	2.020	mg/L	
> Sc-1	45	147463.334	147463.33				mg/L	
Cl	35	59279198.393	59255666.05				mg/L	
Kr	83	57.334	-6.00				mg/L	
Br	81	9939.606	2490.83				mg/L	
P	31	1297025.127	1288973.22				mg/L	
S	34	250902.975	126555.20				mg/L	
Sr	88	8110.771	7994.09				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	94.244				
Cr	52	98.101				
Cr	53					
Mn	55	102.730				
Co	59	103.112				
Ni	60	103.302				
Cu	65	103.026				
Zn	66	100.516				
> Ge	72		90.420			
As	75	97.039				
Se	77					
Se	82	97.070				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	96.140				
Cd	114	103.156				
> In	115		86.024			
Sn	118					
Sb	123	104.405				
Ba	135	91.736				
Ce	140					
> Tb	159		94.647			
Ho	165					
Tl	203	98.454				
Tl	205					
Pb	206					
Pb	207					
Pb	208	100.806				
U	238	105.478				
> Bi	209		93.969			

Sample ID: QC Std 5
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 5
Report Date/Time: Monday, April 11, 2011 14:22:41

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 11, 2011 14:27:36
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21706.896	0.03				ug/L
|	Be	9	15985.434	0.10	55.1299	1.952	3.542	ug/L
|	Al	27	278457.338	1.71	52.6531	1.602	3.043	ug/L
|>	Sc	45	161036.911	161036.91				ug/L
⌈	Ti	49	51112.092	0.16	93.2906	2.193	2.351	ug/L
|	V	51	421869.173	1.31	48.3091	0.972	2.011	ug/L
|	Cr	52	365889.062	1.12	48.6048	0.157	0.323	ug/L
|	Cr	53	44784.647	0.14	51.8269	1.956	3.773	ug/L
|	Mn	55	553389.443	1.73	50.1377	0.577	1.151	ug/L
|	Co	59	442487.323	1.38	49.6427	1.050	2.116	ug/L
|	Ni	60	92427.112	0.29	48.6424	0.608	1.251	ug/L
|	Cu	65	96190.037	0.30	48.5063	0.372	0.766	ug/L
|	Zn	66	59508.134	0.18	48.8605	0.427	0.875	ug/L
|>	Ge	72	319896.384	319896.38				ug/L
|	As	75	54135.091	0.17	49.4072	0.382	0.773	ug/L
|	Se	77	4631.073	0.01	52.2997	1.935	3.701	ug/L
|	Se	82	5452.364	0.02	50.2073	1.768	3.521	ug/L
⌊	Rb	85	2133.249	0.01				mg/L
	Y	89	215205.661	-10778.37				ug/L
	Rh	103	35.334	21.33				ug/L
⌈	Mo	98	282840.891	0.90	97.8638	1.850	1.890	ug/L
|	Ag	107	294281.125	0.93	48.3905	0.529	1.094	ug/L
|	Cd	114	63479.934	0.20	50.3877	0.865	1.717	ug/L
|>	In	115	315019.128	315019.13				ug/L
|	Sn	118	224195.436	0.71	50.3417	0.542	1.076	ug/L
⌊	Sb	123	192050.481	0.61	49.7110	0.642	1.291	ug/L
⌈	Ba	135	79833.215	0.18	49.5685	0.434	0.875	ug/L
|	Ce	140	43.338	-0.00				ug/L
|>	Tb	159	431479.740	431479.74				ug/L
⌈	Ho	165	20.002	-0.00				ug/L
|	Tl	203	414296.339	1.02	49.7141	0.652	1.311	ug/L
|	Tl	205	1023036.347	2.52	49.4524	0.667	1.349	ug/L
|	Pb	206	335502.478	0.83	49.5516	0.590	1.190	ug/L
|	Pb	207	318001.559	0.78	49.9315	1.021	2.045	ug/L
|	Pb	208	1413004.864	3.48	50.0335	0.714	1.426	ug/L
|	U	238	2366761.412	5.83	51.6570	1.074	2.079	ug/L
|>	Bi	209	405811.201	405811.20				ug/L

Sample ID: QC Std 6
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Na	23	25051635.556	155.38	5.2102	0.337	6.466	mg/L	
Mg	24	16767610.105	104.19	5.2350	0.212	4.059	mg/L	
K	39	30677930.438	188.64	4.7919	0.167	3.486	mg/L	
Ca	43	75128.710	0.47	4.9421	0.194	3.916	mg/L	
Fe	54	2658689.160	16.28	5.3154	0.087	1.646	mg/L	
Fe	57	1108594.743	6.85	5.3023	0.151	2.856	mg/L	
> Sc-1	45	161036.911	161036.91				mg/L	
Cl	35	48326.186	24793.84				mg/L	
Kr	83	62.667	-0.67				mg/L	
Br	81	7726.318	277.54				mg/L	
P	31	8624.399	572.49				mg/L	
S	34	137003.307	12655.53				mg/L	
Sr	88	2203.797	2087.12				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	96.618				
Cr	52	97.210				
Cr	53					
Mn	55	100.275				
Co	59	99.285				
Ni	60	97.285				
Cu	65	97.013				
Zn	66	97.721				
> Ge	72		103.042			
As	75	98.814				
Se	77					
Se	82	100.415				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	96.781				
Cd	114	100.775				
> In	115		100.616			
Sn	118					
Sb	123	99.422				
Ba	135	99.137				
Ce	140					
> Tb	159		99.407			
Ho	165					
Tl	203	99.428				
Tl	205					
Pb	206					
Pb	207					
Pb	208	100.067				
U	238	103.314				
> Bi	209		95.839			

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 14:29:49

Approved: April 12, 2011

⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 14:29:49

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 11, 2011 14:34:42
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20086.922	0.03				ug/L
|	Be	9	13.333	-0.00	-0.0077	0.020	254.763	ug/L
|	Al	27	2683.699	0.00	0.0705	0.099	140.634	ug/L
⌊>	Sc	45	153198.488	153198.49				ug/L
⌈	Ti	49	110.012	0.00	0.1239	0.028	22.657	ug/L
|	V	51	2413.941	-0.00	-0.0302	0.028	92.371	ug/L
|	Cr	52	8552.075	-0.00	-0.0314	0.020	65.081	ug/L
|	Cr	53	2090.430	0.00	1.4778	0.291	19.669	ug/L
|	Mn	55	1857.858	0.00	0.1081	0.007	6.207	ug/L
|	Co	59	91.668	0.00	-0.0119	0.002	18.008	ug/L
|	Ni	60	62.001	0.00	-0.0150	0.005	30.099	ug/L
|	Cu	65	86.335	-0.00	-0.0465	0.002	3.598	ug/L
|	Zn	66	413.679	-0.00	-0.4836	0.001	0.241	ug/L
|>	Ge	72	328638.231	328638.23				ug/L
|	As	75	-155.781	0.00	0.0284	0.025	87.672	ug/L
|	Se	77	90.667	0.00	0.0303	0.166	548.472	ug/L
|	Se	82	7.829	0.00	0.0679	0.028	40.681	ug/L
⌊	Rb	85	29.000	0.00				mg/L
	Y	89	226468.496	484.46				ug/L
	Rh	103	13.667	-0.33				ug/L
⌈	Mo	98	143.651	0.00	0.0596	0.009	14.332	ug/L
|	Ag	107	91.668	-0.00	-0.0117	0.001	6.881	ug/L
|	Cd	114	-5.378	-0.00	0.0096	0.005	51.316	ug/L
|>	In	115	319392.219	319392.22				ug/L
|	Sn	118	2115.157	0.01	0.4409	0.004	0.898	ug/L
⌊	Sb	123	111.447	0.00	0.0259	0.002	6.337	ug/L
⌈	Ba	135	25.000	-0.00	0.0076	0.004	55.842	ug/L
|	Ce	140	30.003	-0.00				ug/L
⌊>	Tb	159	441359.083	441359.08				ug/L
⌈	Ho	165	23.336	-0.00				ug/L
|	Tl	203	185.337	0.00	0.0059	0.003	55.030	ug/L
|	Tl	205	426.719	0.00	0.0112	0.003	23.876	ug/L
|	Pb	206	364.344	0.00	0.0004	0.003	844.536	ug/L
|	Pb	207	318.008	0.00	-0.0060	0.003	42.314	ug/L
|	Pb	208	1455.056	0.00	-0.0049	0.001	24.671	ug/L
|	U	238	158.670	0.00	0.0121	0.001	6.206	ug/L
⌊>	Bi	209	415353.928	415353.93				ug/L

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⌈	Na	23	40489.185	-0.08	-0.0021	0.000	15.325	mg/L
|	Mg	24	1470.256	0.00	-0.0016	0.000	3.442	mg/L
|	K	39	333647.541	0.25	0.0029	0.002	56.136	mg/L
|	Ca	43	193.355	0.00	-0.0026	0.004	161.461	mg/L
|	Fe	54	42055.444	0.04	0.0181	0.003	15.287	mg/L
|	Fe	57	6105.809	0.01	0.0054	0.001	19.375	mg/L
⌊>	Sc-1	45	153198.488	153198.49				mg/L
	Cl	35	26942.252	3409.91				mg/L
	Kr	83	58.001	-5.33				mg/L
	Br	81	8339.477	890.70				mg/L
	P	31	8336.819	284.91				mg/L
	S	34	133894.650	9546.88				mg/L
	Sr	88	120.013	3.33				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		105.858			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		102.013			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		101.683			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.092			

Sample ID: QC Std 7
Report Date/Time: Monday, April 11, 2011 14:36:53
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Monday, April 11, 2011 14:36:53
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, April 11, 2011 14:41:49
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 9
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21306.082	0.03				ug/L
|	Be	9	8.667	-0.00	-0.0257	0.011	41.258	ug/L
|	Al	27	2550.328	-0.00	0.0299	0.055	182.780	ug/L
⌊>	Sc	45	156820.347	156820.35				ug/L
⌈	Ti	49	106.678	0.00	0.1164	0.057	49.148	ug/L
|	V	51	6145.698	0.01	0.3809	0.011	2.933	ug/L
|	Cr	52	14875.206	0.02	0.7852	0.044	5.571	ug/L
|	Cr	53	2213.800	0.00	1.5951	0.096	6.010	ug/L
|	Mn	55	6166.963	0.02	0.4828	0.009	1.902	ug/L
|	Co	59	3793.091	0.01	0.3882	0.010	2.503	ug/L
|	Ni	60	3166.534	0.01	1.5600	0.084	5.403	ug/L
|	Cu	65	1728.167	0.00	0.7520	0.031	4.166	ug/L
|	Zn	66	8194.105	0.02	5.7693	0.130	2.255	ug/L
|>	Ge	72	332139.211	332139.21				ug/L
|	As	75	275.659	0.00	0.4077	0.029	7.081	ug/L
|	Se	77	124.667	0.00	0.3942	0.095	24.206	ug/L
|	Se	82	48.810	0.00	0.4309	0.066	15.334	ug/L
⌊	Rb	85	19.000	-0.00				mg/L
	Y	89	229653.506	3669.47				ug/L
	Rh	103	12.667	-1.33				ug/L
⌈	Mo	98	69.060	0.00	0.0340	0.004	10.558	ug/L
|	Ag	107	2576.358	0.01	0.3888	0.012	3.127	ug/L
|	Cd	114	287.130	0.00	0.2370	0.017	7.236	ug/L
|>	In	115	321561.247	321561.25				ug/L
|	Sn	118	150.001	-0.00	0.0052	0.001	26.268	ug/L
⌊	Sb	123	1614.177	0.00	0.4068	0.010	2.388	ug/L
⌈	Ba	135	1267.426	0.00	0.7528	0.035	4.663	ug/L
|	Ce	140	30.003	-0.00				ug/L
⌊>	Tb	159	446716.320	446716.32				ug/L
⌈	Ho	165	26.669	-0.00				ug/L
|	Tl	203	765.370	0.00	0.0733	0.003	3.987	ug/L
|	Tl	205	1903.706	0.00	0.0804	0.007	9.077	ug/L
|	Pb	206	3125.853	0.01	0.3962	0.005	1.231	ug/L
|	Pb	207	2912.453	0.01	0.3893	0.004	1.026	ug/L
|	Pb	208	12894.058	0.03	0.3882	0.004	0.909	ug/L
|	U	238	19139.491	0.05	0.4139	0.002	0.390	ug/L
⌊>	Bi	209	418184.023	418184.02				ug/L

Sample ID: QC Std 8
Report Date/Time: Monday, April 11, 2011 14:44:04
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Na	23	14825.803	-0.25	-0.0077	0.000	1.985	mg/L	
Mg	24	416.717	-0.00	-0.0020	0.000	1.612	mg/L	
K	39	325319.666	0.14	0.0003	0.001	186.616	mg/L	
Ca	43	123.347	-0.00	-0.0077	0.003	41.811	mg/L	
Fe	54	39413.343	0.02	0.0105	0.002	22.303	mg/L	
Fe	57	6335.975	0.01	0.0058	0.001	10.461	mg/L	
> Sc-1	45	156820.347	156820.35				mg/L	
Cl	35	21179.072	-2353.27				mg/L	
Kr	83	60.334	-3.00				mg/L	
Br	81	8594.360	1145.59				mg/L	
P	31	7984.528	-67.38				mg/L	
S	34	125429.780	1082.01				mg/L	
Sr	88	103.344	-13.33				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	95.218				
Cr	52	98.151				
Cr	53					
Mn	55	96.558				
Co	59	97.040				
Ni	60	97.499				
Cu	65	94.006				
Zn	66	92.309				
> Ge	72		106.986			
As	75	101.919				
Se	77					
Se	82	107.717				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	97.194				
Cd	114	118.485				
> In	115		102.705			
Sn	118					
Sb	123	101.701				
Ba	135	100.370				
Ce	140					
> Tb	159		102.917			
Ho	165					
Tl	203	91.680				
Tl	205					
Pb	206					
Pb	207					
Pb	208	97.054				
U	238	103.467				
> Bi	209		98.761			

Sample ID: QC Std 8
Report Date/Time: Monday, April 11, 2011 14:44:04

Approved: April 12, 2011

⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 8
Report Date/Time: Monday, April 11, 2011 14:44:04
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Method 6020 - Summary Report

Sample ID: PBS 89 WG361210-03

Sample Date/Time: Monday, April 11, 2011 14:57:14
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 11
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21356.123	0.03				ug/L
|	Be	9	8.667	-0.00	-0.0273	0.014	51.475	ug/L
|	Al	27	16613.793	0.08	2.6173	0.066	2.506	ug/L
⌊>	Sc	45	165374.301	165374.30				ug/L
⌈	Ti	49	140.015	0.00	0.1751	0.055	31.245	ug/L
|	V	51	2822.582	0.00	0.0119	0.015	127.241	ug/L
|	Cr	52	10526.309	0.00	0.2149	0.012	5.600	ug/L
|	Cr	53	1096.837	-0.00	0.3276	0.093	28.457	ug/L
|	Mn	55	1032.730	-0.00	0.0343	0.004	10.782	ug/L
|	Co	59	99.001	0.00	-0.0111	0.000	3.310	ug/L
|	Ni	60	632.026	0.00	0.2737	0.014	5.030	ug/L
|	Cu	65	311.675	0.00	0.0627	0.009	14.964	ug/L
|	Zn	66	3751.075	0.01	2.1957	0.100	4.561	ug/L
|>	Ge	72	332238.772	332238.77				ug/L
|	As	75	-187.226	0.00	0.0023	0.043	1900.340	ug/L
|	Se	77	84.000	0.00	-0.0561	0.030	52.741	ug/L
|	Se	82	5.757	0.00	0.0493	0.131	266.179	ug/L
⌊	Rb	85	51.667	0.00				mg/L
	Y	89	238252.384	12268.35				ug/L
	Rh	103	18.334	4.33				ug/L
⌈	Mo	98	56.201	0.00	0.0290	0.005	16.064	ug/L
|	Ag	107	76.334	-0.00	-0.0147	0.001	6.149	ug/L
|	Cd	114	-2.083	-0.00	0.0122	0.000	2.193	ug/L
|>	In	115	332762.656	332762.66				ug/L
|	Sn	118	186.935	-0.00	0.0119	0.000	3.457	ug/L
⌊	Sb	123	73.031	0.00	0.0153	0.000	1.847	ug/L
⌈	Ba	135	95.668	0.00	0.0483	0.005	9.803	ug/L
|	Ce	140	70.007	0.00				ug/L
⌊>	Tb	159	458844.635	458844.63				ug/L
⌈	Ho	165	20.002	-0.00				ug/L
|	Tl	203	78.668	0.00	-0.0067	0.001	21.684	ug/L
|	Tl	205	203.356	0.00	0.0005	0.003	490.382	ug/L
|	Pb	206	419.346	0.00	0.0076	0.002	28.265	ug/L
|	Pb	207	346.676	0.00	-0.0023	0.002	81.301	ug/L
|	Pb	208	1583.397	0.00	-0.0012	0.001	97.863	ug/L
|	U	238	46.334	0.00	0.0096	0.000	1.885	ug/L
⌊>	Bi	209	420740.670	420740.67				ug/L

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⌈	Na	23	43311.256	-0.09	-0.0021	0.000	10.989	mg/L
|	Mg	24	3957.848	0.02	-0.0009	0.000	6.038	mg/L
|	K	39	323952.637	0.03	-0.0026	0.003	97.335	mg/L
|	Ca	43	246.695	0.00	-0.0001	0.006	5140.844	mg/L
|	Fe	54	78695.005	0.24	0.0840	0.010	12.249	mg/L
|	Fe	57	7486.893	0.01	0.0097	0.004	36.245	mg/L
⌊>	Sc-1	45	165374.301	165374.30				mg/L
	Cl	35	20774.897	-2757.45				mg/L
	Kr	83	66.334	3.00				mg/L
	Br	81	9260.956	1812.18				mg/L
	P	31	15951.549	7899.64				mg/L
	S	34	127437.435	3089.66				mg/L
	Sr	88	296.701	180.02				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		107.018			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		106.283			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		105.711			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		99.364			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBS 89 WG361210-03
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Method 6020 - Summary Report

Sample ID: LCSS 89 WG361210-04

Sample Date/Time: Monday, April 11, 2011 15:04:19
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 12
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21088.903	0.02				ug/L
|	Be	9	7581.540	0.04	24.2383	0.455	1.876	ug/L
|	Al	27	145940.660	0.82	25.3784	0.521	2.055	ug/L
⌊>	Sc	45	173390.353	173390.35				ug/L
⌈	Ti	49	126.680	0.00	0.1509	0.118	78.392	ug/L
|	V	51	212436.913	0.63	23.1265	0.364	1.572	ug/L
|	Cr	52	194075.896	0.55	24.1034	0.421	1.748	ug/L
|	Cr	53	22724.750	0.06	24.6947	0.583	2.359	ug/L
|	Mn	55	288320.945	0.86	24.9757	0.860	3.445	ug/L
|	Co	59	225316.883	0.67	24.1807	0.464	1.917	ug/L
|	Ni	60	48576.537	0.15	24.4431	0.376	1.540	ug/L
|	Cu	65	51721.319	0.15	24.9182	0.627	2.515	ug/L
|	Zn	66	32330.508	0.09	25.0126	0.358	1.432	ug/L
|>	Ge	72	334261.682	334261.68				ug/L
|	As	75	25287.429	0.08	22.1798	0.156	0.702	ug/L
|	Se	77	2027.539	0.01	21.3482	1.177	5.512	ug/L
|	Se	82	2356.435	0.01	20.7679	0.735	3.539	ug/L
⌊	Rb	85	44.001	0.00				mg/L
	Y	89	234480.570	8496.54				ug/L
	Rh	103	27.000	13.00				ug/L
⌈	Mo	98	61.169	0.00	0.0307	0.004	13.678	ug/L
|	Ag	107	134270.720	0.40	20.8666	0.645	3.093	ug/L
|	Cd	114	30141.036	0.09	22.6335	0.787	3.479	ug/L
|>	In	115	333136.335	333136.33				ug/L
|	Sn	118	168.535	-0.00	0.0080	0.003	33.048	ug/L
⌊	Sb	123	92916.287	0.28	22.7427	0.332	1.461	ug/L
⌈	Ba	135	40847.010	0.09	24.0302	0.438	1.821	ug/L
|	Ce	140	83.342	0.00				ug/L
⌊>	Tb	159	455331.042	455331.04				ug/L
⌈	Ho	165	36.670	0.00				ug/L
|	Tl	203	210230.091	0.50	24.3764	0.080	0.327	ug/L
|	Tl	205	518248.056	1.23	24.2126	0.676	2.793	ug/L
|	Pb	206	180667.287	0.43	25.7730	0.561	2.177	ug/L
|	Pb	207	157776.842	0.38	23.9199	0.669	2.795	ug/L
|	Pb	208	730156.253	1.74	24.9649	0.293	1.173	ug/L
|	U	238	1178389.638	2.81	24.8654	0.820	3.299	ug/L
⌊>	Bi	209	419778.384	419778.38				ug/L

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Na	23	114631.338	0.31	0.0112	0.000	1.525	mg/L
Mg	24	4291.353	0.02	-0.0009	0.000	10.843	mg/L
K	39	322971.264	-0.07	-0.0051	0.001	13.947	mg/L
Ca	43	260.029	0.00	-0.0001	0.002	1704.605	mg/L
Fe	54	74965.652	0.20	0.0696	0.003	4.090	mg/L
Fe	57	7156.610	0.01	0.0065	0.001	8.662	mg/L
> Sc-1	45	173390.353	173390.35				mg/L
Cl	35	18919.220	-4613.12				mg/L
Kr	83	63.001	-0.33				mg/L
Br	81	9372.391	1923.62				mg/L
P	31	15142.801	7090.89				mg/L
S	34	122992.502	-1355.27				mg/L
Sr	88	273.364	156.69				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		107.670			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		106.402			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		104.902			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		99.137			

Sample ID: LCSS 89 WG361210-04
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSS 89 WG361210-04
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Method 6020 - Summary Report

Sample ID: L1104021621

Sample Date/Time: Monday, April 11, 2011 15:11:24
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 13
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22358.312	0.02				ug/L
|	Be	9	140.668	0.00	0.3816	0.038	9.866	ug/L
|	Al	27	42481064.991	237.79	7301.5694	482.136	6.603	ug/L
⌊>	Sc	45	178614.621	178614.62				ug/L
⌈	Ti	49	8497.798	0.03	15.1868	0.768	5.057	ug/L
|	V	51	101744.209	0.30	11.2230	0.921	8.208	ug/L
|	Cr	52	86171.261	0.24	10.3589	0.639	6.168	ug/L
|	Cr	53	9875.868	0.03	10.5184	0.515	4.893	ug/L
|	Mn	55	3736424.169	11.48	333.0997	25.018	7.511	ug/L
|	Co	59	63081.060	0.19	6.9379	0.538	7.748	ug/L
|	Ni	60	22693.005	0.07	11.7047	0.708	6.045	ug/L
|	Cu	65	20652.554	0.06	10.1679	0.584	5.741	ug/L
|	Zn	66	54409.270	0.17	43.8335	3.051	6.960	ug/L
| >	Ge	72	325421.047	325421.05				ug/L
|	As	75	4913.726	0.02	4.5598	0.270	5.929	ug/L
|	Se	77	132.001	0.00	0.5060	0.102	20.175	ug/L
|	Se	82	34.696	0.00	0.3118	0.117	37.625	ug/L
⌊	Rb	85	74948.432	0.23				mg/L
	Y	89	300684.415	74700.38				ug/L
	Rh	103	19.667	5.67				ug/L
⌈	Mo	98	546.673	0.00	0.2024	0.013	6.423	ug/L
|	Ag	107	326.675	0.00	0.0279	0.004	12.750	ug/L
|	Cd	114	70.548	0.00	0.0705	0.010	13.784	ug/L
| >	In	115	310767.094	310767.09				ug/L
|	Sn	118	140.134	-0.00	0.0041	0.001	25.388	ug/L
⌊	Sb	123	89.318	0.00	0.0208	0.001	5.966	ug/L
⌈	Ba	135	117986.928	0.27	71.8988	4.597	6.394	ug/L
|	Ce	140	561365.829	1.28				ug/L
⌊>	Tb	159	439579.744	439579.74				ug/L
⌈	Ho	165	6232.568	0.02				ug/L
|	Tl	203	1081.403	0.00	0.1133	0.006	5.255	ug/L
|	Tl	205	2697.303	0.01	0.1207	0.013	11.035	ug/L
|	Pb	206	77701.682	0.19	11.3777	0.637	5.598	ug/L
|	Pb	207	64248.596	0.16	9.9928	0.555	5.550	ug/L
|	Pb	208	305121.477	0.74	10.7056	0.663	6.189	ug/L
|	U	238	27062.007	0.07	0.5960	0.043	7.144	ug/L
⌊>	Bi	209	407684.578	407684.58				ug/L

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Na	23	159590.571	0.54	0.0190	0.001	5.086	mg/L	
Mg	24	6830091.580	38.22	1.9192	0.135	7.028	mg/L	
K	39	3837278.542	19.54	0.4933	0.038	7.669	mg/L	
Ca	43	25949.761	0.14	1.5260	0.131	8.569	mg/L	
Fe	54	7051074.799	39.23	12.8004	0.522	4.078	mg/L	
Fe	57	3016456.012	16.85	13.0421	0.868	6.652	mg/L	
> Sc-1	45	178614.621	178614.62				mg/L	
Cl	35	32332.870	8800.53				mg/L	
Kr	83	73.334	10.00				mg/L	
Br	81	9463.809	2015.04				mg/L	
P	31	41515.770	33463.86				mg/L	
S	34	115322.412	-9025.36				mg/L	
Sr	88	73866.894	73750.22				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		104.822			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		99.258			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		101.273			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		96.281			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021622

Sample Date/Time: Monday, April 11, 2011 15:18:30
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 14
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23143.526	0.03				ug/L
|	Be	9	153.335	0.00	0.4233	0.061	14.427	ug/L
|	Al	27	37034570.436	208.64	6406.4283	478.761	7.473	ug/L
⌊>	Sc	45	177308.728	177308.73				ug/L
⌈	Ti	49	10189.589	0.03	18.2954	2.178	11.902	ug/L
|	V	51	123107.672	0.37	13.6913	1.348	9.849	ug/L
|	Cr	52	79919.916	0.22	9.5611	0.916	9.580	ug/L
|	Cr	53	9098.421	0.02	9.6558	1.253	12.972	ug/L
|	Mn	55	6621916.512	20.42	592.4783	71.952	12.144	ug/L
|	Co	59	59404.018	0.18	6.5555	0.634	9.671	ug/L
|	Ni	60	16972.334	0.05	8.7739	0.909	10.364	ug/L
|	Cu	65	15910.915	0.05	7.8405	0.866	11.045	ug/L
|	Zn	66	43569.178	0.13	35.0658	3.686	10.513	ug/L
| >	Ge	72	324178.089	324178.09				ug/L
|	As	75	3989.996	0.01	3.7457	0.430	11.479	ug/L
|	Se	77	153.335	0.00	0.7540	0.181	24.001	ug/L
|	Se	82	38.401	0.00	0.3464	0.022	6.221	ug/L
⌊	Rb	85	109502.704	0.34				mg/L
	Y	89	287950.931	61966.90				ug/L
	Rh	103	21.667	7.67				ug/L
⌈	Mo	98	606.125	0.00	0.2200	0.016	7.211	ug/L
|	Ag	107	390.345	0.00	0.0376	0.005	12.738	ug/L
|	Cd	114	150.394	0.00	0.1329	0.027	20.583	ug/L
| >	In	115	315406.314	315406.31				ug/L
|	Sn	118	175.335	-0.00	0.0115	0.001	11.325	ug/L
⌊	Sb	123	76.152	0.00	0.0171	0.001	8.532	ug/L
⌈	Ba	135	136584.960	0.31	82.1785	9.497	11.557	ug/L
|	Ce	140	547179.459	1.23				ug/L
⌊>	Tb	159	445207.299	445207.30				ug/L
⌈	Ho	165	5708.875	0.01				ug/L
|	Tl	203	1159.079	0.00	0.1198	0.018	15.153	ug/L
|	Tl	205	2910.721	0.01	0.1282	0.022	17.074	ug/L
|	Pb	206	102140.140	0.24	14.6612	1.651	11.264	ug/L
|	Pb	207	85333.357	0.20	13.0135	1.548	11.892	ug/L
|	Pb	208	403009.586	0.96	13.8639	1.604	11.567	ug/L
|	U	238	32178.254	0.08	0.6928	0.093	13.484	ug/L
⌊>	Bi	209	416726.298	416726.30				ug/L

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Na	23	177428.160	0.65	0.0226	0.004	15.737	mg/L	
Mg	24	5869139.049	33.04	1.6590	0.174	10.485	mg/L	
K	39	7032880.032	37.68	0.9546	0.081	8.529	mg/L	
Ca	43	50986.064	0.29	3.0336	0.314	10.344	mg/L	
Fe	54	5544749.488	30.98	10.1112	1.160	11.476	mg/L	
Fe	57	2305808.442	12.96	10.0304	0.870	8.670	mg/L	
> Sc-1	45	177308.728	177308.73				mg/L	
Cl	35	90878.145	67345.80				mg/L	
Kr	83	69.001	5.67				mg/L	
Br	81	11022.746	3573.97				mg/L	
P	31	69942.299	61890.39				mg/L	
S	34	118909.524	-5438.25				mg/L	
Sr	88	81555.175	81438.50				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		104.422			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		100.739			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		102.569			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		98.416			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021623

Sample Date/Time: Monday, April 11, 2011 15:25:35
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 15
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22274.804	0.02				ug/L
|	Be	9	153.335	0.00	0.4297	0.060	13.981	ug/L
|	Al	27	40132065.146	228.35	7011.7037	119.414	1.703	ug/L
⌊>	Sc	45	175698.142	175698.14				ug/L
⌈	Ti	49	9675.653	0.03	17.6754	0.781	4.420	ug/L
|	V	51	130193.396	0.40	14.7631	0.460	3.117	ug/L
|	Cr	52	78855.080	0.22	9.6078	0.343	3.571	ug/L
|	Cr	53	8654.609	0.02	9.3217	0.045	0.477	ug/L
|	Mn	55	7847073.700	24.63	714.7052	18.127	2.536	ug/L
|	Co	59	59109.255	0.19	6.6401	0.209	3.153	ug/L
|	Ni	60	14694.618	0.05	7.7262	0.322	4.171	ug/L
|	Cu	65	13840.385	0.04	6.9326	0.230	3.317	ug/L
|	Zn	66	36178.761	0.11	29.5113	1.107	3.752	ug/L
| >	Ge	72	318514.620	318514.62				ug/L
|	As	75	3838.367	0.01	3.6726	0.020	0.556	ug/L
|	Se	77	112.667	0.00	0.3150	0.130	41.316	ug/L
|	Se	82	43.360	0.00	0.3989	0.066	16.630	ug/L
⌊	Rb	85	111936.924	0.35				mg/L
	Y	89	289897.484	63913.45				ug/L
	Rh	103	15.667	1.67				ug/L
⌈	Mo	98	539.896	0.00	0.2029	0.008	4.082	ug/L
|	Ag	107	356.677	0.00	0.0338	0.004	11.723	ug/L
|	Cd	114	38.159	0.00	0.0450	0.007	15.272	ug/L
| >	In	115	305977.536	305977.54				ug/L
|	Sn	118	110.001	-0.00	-0.0024	0.003	117.490	ug/L
⌊	Sb	123	48.150	0.00	0.0102	0.001	13.881	ug/L
⌈	Ba	135	155419.087	0.35	94.9579	3.117	3.283	ug/L
|	Ce	140	567280.007	1.29				ug/L
⌊>	Tb	159	438536.775	438536.78				ug/L
⌈	Ho	165	5775.585	0.01				ug/L
|	Tl	203	1160.746	0.00	0.1213	0.003	2.818	ug/L
|	Tl	205	2677.293	0.01	0.1185	0.003	2.843	ug/L
|	Pb	206	73095.757	0.18	10.5834	0.332	3.139	ug/L
|	Pb	207	60431.209	0.15	9.2926	0.401	4.314	ug/L
|	Pb	208	287373.339	0.69	9.9697	0.397	3.980	ug/L
|	U	238	34091.716	0.08	0.7407	0.018	2.414	ug/L
⌊>	Bi	209	412309.837	412309.84				ug/L

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	Na	23	173242.655	0.64	0.0222	0.001	4.630	mg/L
	Mg	24	5295860.891	30.14	1.5131	0.026	1.736	mg/L
	K	39	4371342.581	22.94	0.5798	0.019	3.272	mg/L
	Ca	43	29606.865	0.17	1.7722	0.060	3.407	mg/L
	Fe	54	5672290.326	32.08	10.4676	0.412	3.936	mg/L
	Fe	57	2327150.759	13.22	10.2300	0.272	2.655	mg/L
>	Sc-1	45	175698.142	175698.14				mg/L
	Cl	35	32516.124	8983.78				mg/L
	Kr	83	73.668	10.33				mg/L
	Br	81	9760.097	2311.32				mg/L
	P	31	60137.115	52085.20				mg/L
	S	34	114035.863	-10311.91				mg/L
	Sr	88	75333.838	75217.16				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	6					
	Be	9					
	Al	27					
>	Sc	45					
	Ti	49					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Co	59					
	Ni	60					
	Cu	65					
	Zn	66					
>	Ge	72		102.597			
	As	75					
	Se	77					
	Se	82					
	Rb	85					
	Y	89					
	Rh	103					
	Mo	98					
	Ag	107					
	Cd	114					
>	In	115		97.728			
	Sn	118					
	Sb	123					
	Ba	135					
	Ce	140					
>	Tb	159		101.033			
	Ho	165					
	Tl	203					
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
	U	238					
>	Bi	209		97.373			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

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Method 6020 - Summary Report

Sample ID: L1104021624

Sample Date/Time: Monday, April 11, 2011 15:32:42
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 16
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22993.162	0.03				ug/L
|	Be	9	162.001	0.00	0.4792	0.122	25.524	ug/L
|	Al	27	20185473.243	119.47	3668.6332	250.616	6.831	ug/L
⌊>	Sc	45	169102.805	169102.81				ug/L
⌈	Ti	49	6849.700	0.02	11.9192	0.608	5.100	ug/L
|	V	51	79787.502	0.23	8.5118	0.640	7.520	ug/L
|	Cr	52	53034.608	0.13	5.7524	0.557	9.686	ug/L
|	Cr	53	5812.273	0.01	5.6449	0.389	6.900	ug/L
|	Mn	55	5227005.099	15.66	454.4553	31.846	7.008	ug/L
|	Co	59	64720.396	0.19	6.9414	0.529	7.620	ug/L
|	Ni	60	16535.869	0.05	8.3031	0.626	7.538	ug/L
|	Cu	65	16732.188	0.05	8.0152	0.571	7.129	ug/L
|	Zn	66	48313.872	0.14	37.8442	2.632	6.955	ug/L
| >	Ge	72	333830.190	333830.19				ug/L
|	As	75	6683.665	0.02	5.9939	0.371	6.184	ug/L
|	Se	77	129.334	0.00	0.4391	0.051	11.657	ug/L
|	Se	82	29.406	0.00	0.2577	0.065	25.206	ug/L
⌊	Rb	85	60237.298	0.18				mg/L
	Y	89	281845.149	55861.12				ug/L
	Rh	103	27.667	13.67				ug/L
⌈	Mo	98	758.571	0.00	0.2676	0.021	7.671	ug/L
|	Ag	107	362.010	0.00	0.0317	0.004	13.397	ug/L
|	Cd	114	155.144	0.00	0.1343	0.014	10.075	ug/L
| >	In	115	321935.178	321935.18				ug/L
|	Sn	118	172.801	-0.00	0.0102	0.001	7.839	ug/L
⌊	Sb	123	87.150	0.00	0.0195	0.005	26.880	ug/L
⌈	Ba	135	81382.348	0.18	49.2329	3.012	6.117	ug/L
|	Ce	140	399277.040	0.90				ug/L
⌊>	Tb	159	442928.856	442928.86				ug/L
⌈	Ho	165	4147.943	0.01				ug/L
|	Tl	203	993.059	0.00	0.1008	0.009	8.478	ug/L
|	Tl	205	2220.472	0.01	0.0961	0.015	15.272	ug/L
|	Pb	206	152464.846	0.37	21.9994	1.578	7.174	ug/L
|	Pb	207	127510.691	0.31	19.5503	1.293	6.615	ug/L
|	Pb	208	600097.434	1.44	20.7541	1.495	7.205	ug/L
|	U	238	20123.169	0.05	0.4382	0.032	7.328	ug/L
⌊>	Bi	209	414799.929	414799.93				ug/L

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⌈	Na	23	166989.444	0.64	0.0222	0.003	12.085	mg/L
|	Mg	24	10535783.078	62.35	3.1319	0.128	4.082	mg/L
|	K	39	4691449.212	25.82	0.6531	0.044	6.701	mg/L
|	Ca	43	237919.212	1.41	14.9290	0.842	5.642	mg/L
|	Fe	54	4202772.506	24.63	8.0377	0.550	6.841	mg/L
|	Fe	57	1708831.653	10.07	7.7975	0.581	7.450	mg/L
⌊>	Sc-1	45	169102.805	169102.81				mg/L
	Cl	35	30142.697	6610.35				mg/L
	Kr	83	68.334	5.00				mg/L
	Br	81	11922.444	4473.67				mg/L
	P	31	86402.396	78350.49				mg/L
	S	34	154933.816	30586.04				mg/L
	Sr	88	262616.625	262499.95				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		107.531			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		102.825			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.044			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.961			

Sample ID: L1104021624
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1104021624
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021625 WG361210-01

Sample Date/Time: Monday, April 11, 2011 15:39:48
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 17
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21473.046	0.01				ug/L
|	Be	9	214.669	0.00	0.5929	0.040	6.683	ug/L
|	Al	27	47051661.299	255.44	7843.7209	741.482	9.453	ug/L
⌊>	Sc	45	183892.934	183892.93				ug/L
⌈	Ti	49	6372.667	0.02	11.3149	0.148	1.310	ug/L
|	V	51	114393.675	0.34	12.5902	0.761	6.043	ug/L
|	Cr	52	98147.441	0.27	11.8952	0.892	7.501	ug/L
|	Cr	53	11457.754	0.03	12.2871	1.428	11.623	ug/L
|	Mn	55	4821424.264	14.74	427.7206	27.462	6.421	ug/L
|	Co	59	63677.531	0.19	6.9685	0.399	5.726	ug/L
|	Ni	60	41794.136	0.13	21.4881	1.337	6.221	ug/L
|	Cu	65	28394.975	0.09	13.9420	0.837	6.002	ug/L
|	Zn	66	49327.740	0.15	39.4583	1.953	4.949	ug/L
| >	Ge	72	327032.126	327032.13				ug/L
|	As	75	6716.067	0.02	6.1409	0.351	5.714	ug/L
|	Se	77	135.334	0.00	0.5340	0.323	60.410	ug/L
|	Se	82	30.566	0.00	0.2724	0.110	40.247	ug/L
⌊	Rb	85	59735.387	0.18				mg/L
	Y	89	384922.785	158938.75				ug/L
	Rh	103	24.000	10.00				ug/L
⌈	Mo	98	502.858	0.00	0.1848	0.010	5.192	ug/L
|	Ag	107	373.677	0.00	0.0350	0.005	15.599	ug/L
|	Cd	114	143.390	0.00	0.1277	0.007	5.240	ug/L
| >	In	115	314641.833	314641.83				ug/L
|	Sn	118	105.601	-0.00	-0.0041	0.001	26.118	ug/L
⌊	Sb	123	44.986	0.00	0.0091	0.000	4.232	ug/L
⌈	Ba	135	148918.089	0.33	89.1815	6.894	7.730	ug/L
|	Ce	140	732555.405	1.64				ug/L
⌊>	Tb	159	447392.746	447392.75				ug/L
⌈	Ho	165	12255.443	0.03				ug/L
|	Tl	203	1205.085	0.00	0.1266	0.010	7.617	ug/L
|	Tl	205	3094.122	0.01	0.1384	0.008	5.605	ug/L
|	Pb	206	83852.954	0.20	12.1582	0.514	4.226	ug/L
|	Pb	207	69746.948	0.17	10.7419	0.498	4.638	ug/L
|	Pb	208	328987.406	0.80	11.4305	0.477	4.176	ug/L
|	U	238	28234.826	0.07	0.6154	0.024	3.936	ug/L
⌊>	Bi	209	411861.421	411861.42				ug/L

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Na	23	201292.512	0.75	0.0258	0.001	3.598	mg/L
Mg	24	7783581.214	42.29	2.1238	0.086	4.059	mg/L
K	39	3629591.037	17.80	0.4492	0.005	1.060	mg/L
Ca	43	32569.820	0.18	1.8637	0.136	7.271	mg/L
Fe	54	8823320.462	47.72	15.5713	0.437	2.808	mg/L
Fe	57	3759826.319	20.40	15.7930	0.524	3.318	mg/L
> Sc-1	45	183892.934	183892.93				mg/L
Cl	35	17099.274	-6433.07				mg/L
Kr	83	88.335	25.00				mg/L
Br	81	9313.004	1864.23				mg/L
P	31	46339.989	38288.08				mg/L
S	34	118862.595	-5485.18				mg/L
Sr	88	140318.078	140201.40				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		105.341			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		100.495			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		103.073			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		97.267			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021626S WG361210-05

Sample Date/Time: Monday, April 11, 2011 15:46:55
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 18
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22358.327	0.02				ug/L
|	Be	9	2807.064	0.02	8.5566	0.793	9.267	ug/L
|	Al	27	48636240.856	268.57	8246.8289	768.102	9.314	ug/L
⌊>	Sc	45	180770.065	180770.07				ug/L
⌈	Ti	49	7620.346	0.02	13.5720	1.141	8.407	ug/L
|	V	51	175448.871	0.53	19.5154	1.802	9.236	ug/L
|	Cr	52	151852.537	0.44	19.0826	1.967	10.308	ug/L
|	Cr	53	17594.080	0.05	19.3942	2.688	13.858	ug/L
|	Mn	55	4536310.287	13.90	403.2447	48.956	12.141	ug/L
|	Co	59	128513.891	0.39	14.1157	1.605	11.369	ug/L
|	Ni	60	56025.162	0.17	28.8835	2.893	10.016	ug/L
|	Cu	65	43186.100	0.13	21.2971	2.058	9.665	ug/L
|	Zn	66	59282.279	0.18	47.6951	4.681	9.815	ug/L
|>	Ge	72	326259.613	326259.61				ug/L
|	As	75	14367.555	0.04	12.9773	1.356	10.446	ug/L
|	Se	77	772.697	0.00	7.7282	0.865	11.189	ug/L
|	Se	82	824.994	0.00	7.4467	0.817	10.972	ug/L
⌊	Rb	85	62269.514	0.19				mg/L
	Y	89	374850.485	148866.45				ug/L
	Rh	103	26.000	12.00				ug/L
⌈	Mo	98	561.272	0.00	0.2076	0.023	11.275	ug/L
|	Ag	107	40301.965	0.13	6.6981	0.696	10.386	ug/L
|	Cd	114	9811.461	0.03	7.9105	1.067	13.490	ug/L
|>	In	115	310737.764	310737.76				ug/L
|	Sn	118	106.667	-0.00	-0.0035	0.001	22.239	ug/L
⌊	Sb	123	652.760	0.00	0.1688	0.017	9.811	ug/L
⌈	Ba	135	164869.165	0.37	98.7773	9.194	9.307	ug/L
|	Ce	140	741961.391	1.66				ug/L
⌊>	Tb	159	447050.132	447050.13				ug/L
⌈	Ho	165	12118.652	0.03				ug/L
|	Tl	203	65368.740	0.16	7.6458	0.659	8.616	ug/L
|	Tl	205	161415.374	0.39	7.6118	0.483	6.343	ug/L
|	Pb	206	135442.475	0.33	19.5002	1.990	10.207	ug/L
|	Pb	207	114369.122	0.27	17.4977	1.909	10.912	ug/L
|	Pb	208	534442.807	1.28	18.4432	1.899	10.299	ug/L
|	U	238	393654.960	0.95	8.3956	0.928	11.057	ug/L
⌊>	Bi	209	415452.952	415452.95				ug/L

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⌈	Na	23	207402.270	0.80	0.0275	0.004	12.913	mg/L
|	Mg	24	8032388.470	44.34	2.2268	0.245	10.999	mg/L
|	K	39	3682629.054	18.41	0.4646	0.041	8.846	mg/L
|	Ca	43	33389.429	0.18	1.9427	0.162	8.353	mg/L
|	Fe	54	9125106.049	50.15	16.3613	1.783	10.899	mg/L
|	Fe	57	3779975.787	20.83	16.1260	1.882	11.670	mg/L
⌊>	Sc-1	45	180770.065	180770.07				mg/L
	Cl	35	23718.794	186.45				mg/L
	Kr	83	83.001	19.67				mg/L
	Br	81	8931.322	1482.55				mg/L
	P	31	48195.655	40143.75				mg/L
	S	34	116073.123	-8274.65				mg/L
	Sr	88	144784.414	144667.73				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		105.092			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.248			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.994			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.116			

Sample ID: L1104021626S WG361210-05
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021627SD WG361210-06

Sample Date/Time: Monday, April 11, 2011 15:54:02
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 19
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22675.683	0.03				ug/L
|	Be	9	2539.659	0.01	8.1087	0.852	10.502	ug/L
|	Al	27	44049719.125	254.78	7823.3713	872.025	11.146	ug/L
⌊>	Sc	45	172661.478	172661.48				ug/L
⌈	Ti	49	7019.833	0.02	12.6947	0.373	2.939	ug/L
|	V	51	157633.329	0.48	17.7814	1.548	8.707	ug/L
|	Cr	52	138446.467	0.40	17.5852	1.292	7.349	ug/L
|	Cr	53	15947.682	0.05	17.7853	1.365	7.676	ug/L
|	Mn	55	4277248.250	13.31	386.1604	31.393	8.129	ug/L
|	Co	59	121186.062	0.38	13.5188	1.129	8.352	ug/L
|	Ni	60	51125.331	0.16	26.7656	1.863	6.960	ug/L
|	Cu	65	36956.135	0.11	18.4990	1.380	7.462	ug/L
|	Zn	66	55122.279	0.17	44.9958	3.245	7.211	ug/L
|>	Ge	72	321260.483	321260.48				ug/L
|	As	75	12268.928	0.04	11.2773	0.478	4.240	ug/L
|	Se	77	705.358	0.00	7.0924	0.324	4.566	ug/L
|	Se	82	731.577	0.00	6.7050	0.229	3.413	ug/L
⌊	Rb	85	55497.095	0.17				mg/L
	Y	89	352061.438	126077.40				ug/L
	Rh	103	29.334	15.33				ug/L
⌈	Mo	98	522.443	0.00	0.1975	0.014	7.213	ug/L
|	Ag	107	35985.121	0.12	6.0952	0.346	5.671	ug/L
|	Cd	114	8838.081	0.03	7.2652	0.564	7.767	ug/L
|>	In	115	304671.095	304671.10				ug/L
|	Sn	118	110.801	-0.00	-0.0021	0.000	16.302	ug/L
⌊	Sb	123	601.798	0.00	0.1585	0.008	5.250	ug/L
⌈	Ba	135	145701.675	0.33	87.2689	5.565	6.377	ug/L
|	Ce	140	691763.164	1.55				ug/L
⌊>	Tb	159	447192.847	447192.85				ug/L
⌈	Ho	165	11230.810	0.03				ug/L
|	Tl	203	58110.137	0.14	6.8160	0.399	5.850	ug/L
|	Tl	205	141872.575	0.34	6.7103	0.363	5.415	ug/L
|	Pb	206	110109.991	0.26	15.8928	0.940	5.916	ug/L
|	Pb	207	94644.556	0.23	14.5130	0.962	6.627	ug/L
|	Pb	208	440482.477	1.06	15.2365	0.960	6.301	ug/L
|	U	238	354012.117	0.85	7.5731	0.504	6.653	ug/L
⌊>	Bi	209	414096.852	414096.85				ug/L

Sample ID: L1104021627SD WG361210-06
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⌈	Na	23	193641.252	0.77	0.0267	0.003	9.899	mg/L
|	Mg	24	7189169.190	41.60	2.0893	0.152	7.298	mg/L
|	K	39	3431881.706	17.94	0.4526	0.025	5.620	mg/L
|	Ca	43	29215.706	0.17	1.7800	0.112	6.270	mg/L
|	Fe	54	7946936.439	45.77	14.9329	0.790	5.291	mg/L
|	Fe	57	3462807.035	20.00	15.4844	1.336	8.626	mg/L
⌊>	Sc-1	45	172661.478	172661.48				mg/L
	Cl	35	22813.347	-719.00				mg/L
	Kr	83	91.668	28.33				mg/L
	Br	81	9013.395	1564.62				mg/L
	P	31	40480.337	32428.43				mg/L
	S	34	112615.970	-11731.80				mg/L
	Sr	88	127542.906	127426.23				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		103.482			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.311			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		103.027			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		97.795			

Sample ID: L1104021627SD WG361210-06
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1104021627SD WG361210-06
Report Date/Time: Monday, April 11, 2011 15:56:15
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021628

Sample Date/Time: Monday, April 11, 2011 16:01:10
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 20
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21940.727	0.03				ug/L
|	Be	9	224.003	0.00	0.6724	0.059	8.809	ug/L
|	Al	27	43866576.764	256.96	7890.1389	386.307	4.896	ug/L
⌊>	Sc	45	170779.440	170779.44				ug/L
⌈	Ti	49	6502.765	0.02	11.8454	0.191	1.609	ug/L
|	V	51	108398.085	0.33	12.2265	0.647	5.290	ug/L
|	Cr	52	91642.411	0.26	11.3405	0.554	4.882	ug/L
|	Cr	53	10476.544	0.03	11.4686	0.763	6.655	ug/L
|	Mn	55	4293279.238	13.46	390.5685	18.075	4.628	ug/L
|	Co	59	60065.313	0.19	6.7411	0.205	3.040	ug/L
|	Ni	60	38344.875	0.12	20.2165	0.812	4.015	ug/L
|	Cu	65	24712.471	0.08	12.4365	0.618	4.967	ug/L
|	Zn	66	49278.207	0.15	40.4524	2.111	5.220	ug/L
|>	Ge	72	318807.800	318807.80				ug/L
|	As	75	6165.595	0.02	5.7934	0.189	3.260	ug/L
|	Se	77	135.334	0.00	0.5748	0.098	17.090	ug/L
|	Se	82	24.971	0.00	0.2285	0.029	12.642	ug/L
⌊	Rb	85	59356.557	0.19				mg/L
	Y	89	366118.124	140134.09				ug/L
	Rh	103	16.667	2.67				ug/L
⌈	Mo	98	494.145	0.00	0.1876	0.011	6.120	ug/L
|	Ag	107	375.677	0.00	0.0374	0.002	4.056	ug/L
|	Cd	114	134.167	0.00	0.1240	0.004	3.545	ug/L
|>	In	115	304402.299	304402.30				ug/L
|	Sn	118	102.934	-0.00	-0.0039	0.001	15.599	ug/L
⌊	Sb	123	39.856	0.00	0.0081	0.002	25.091	ug/L
⌈	Ba	135	133796.962	0.30	81.3622	4.172	5.128	ug/L
|	Ce	140	689830.291	1.57				ug/L
⌊>	Tb	159	440601.270	440601.27				ug/L
⌈	Ho	165	11110.628	0.03				ug/L
|	Tl	203	1378.109	0.00	0.1477	0.016	10.964	ug/L
|	Tl	205	3440.941	0.01	0.1556	0.021	13.424	ug/L
|	Pb	206	67725.395	0.16	9.8440	0.430	4.365	ug/L
|	Pb	207	56590.238	0.14	8.7374	0.596	6.823	ug/L
|	Pb	208	265117.739	0.64	9.2344	0.611	6.611	ug/L
|	U	238	26846.284	0.07	0.5876	0.026	4.506	ug/L
⌊>	Bi	209	410703.607	410703.61				ug/L

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⌈	Na	23	199252.445	0.82	0.0282	0.001	3.262	mg/L
|	Mg	24	7370700.302	43.17	2.1680	0.094	4.351	mg/L
|	K	39	3675456.479	19.59	0.4946	0.005	1.091	mg/L
|	Ca	43	29670.259	0.17	1.8296	0.054	2.979	mg/L
|	Fe	54	8315208.908	48.49	15.8207	1.185	7.493	mg/L
|	Fe	57	3477766.001	20.34	15.7442	0.877	5.570	mg/L
⌊>	Sc-1	45	170779.440	170779.44				mg/L
	Cl	35	17274.244	-6258.10				mg/L
	Kr	83	80.001	16.67				mg/L
	Br	81	8814.550	1365.78				mg/L
	P	31	45267.655	37215.74				mg/L
	S	34	112864.385	-11483.39				mg/L
	Sr	88	129659.040	129542.36				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		102.692			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		97.225			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		101.508			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		96.994			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 11, 2011 16:08:17
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19886.434	0.02				ug/L
|	Be	9	15990.108	0.10	56.4432	0.930	1.647	ug/L
|	Al	27	275770.554	1.74	53.3808	1.988	3.724	ug/L
⌊>	Sc	45	157260.358	157260.36				ug/L
⌈	Ti	49	49098.504	0.15	90.3654	1.952	2.160	ug/L
|	V	51	407888.782	1.28	47.0897	0.729	1.549	ug/L
|	Cr	52	360129.923	1.11	48.2344	0.359	0.745	ug/L
|	Cr	53	41583.773	0.13	48.4760	0.470	0.971	ug/L
|	Mn	55	549177.239	1.73	50.1726	0.479	0.955	ug/L
|	Co	59	432202.977	1.36	48.8905	0.870	1.780	ug/L
|	Ni	60	91318.316	0.29	48.4615	0.208	0.430	ug/L
|	Cu	65	96561.981	0.30	49.1044	0.637	1.297	ug/L
|	Zn	66	59390.119	0.19	49.1775	0.496	1.009	ug/L
|>	Ge	72	317222.822	317222.82				ug/L
|	As	75	53262.955	0.17	49.0225	0.526	1.074	ug/L
|	Se	77	4647.747	0.01	52.9374	1.989	3.758	ug/L
|	Se	82	5518.444	0.02	51.2398	0.906	1.769	ug/L
⌊	Rb	85	2117.246	0.01				mg/L
	Y	89	217713.705	-8270.33				ug/L
	Rh	103	32.000	18.00				ug/L
⌈	Mo	98	289085.270	0.94	101.9538	0.647	0.635	ug/L
|	Ag	107	293925.282	0.95	49.2665	0.141	0.286	ug/L
|	Cd	114	61901.451	0.20	50.0817	0.733	1.463	ug/L
|>	In	115	309047.036	309047.04				ug/L
|	Sn	118	221712.953	0.72	50.7475	0.569	1.121	ug/L
⌊	Sb	123	191653.755	0.62	50.5676	0.532	1.052	ug/L
⌈	Ba	135	79874.910	0.19	49.6192	0.493	0.993	ug/L
|	Ce	140	56.672	0.00				ug/L
⌊>	Tb	159	431250.304	431250.30				ug/L
⌈	Ho	165	26.669	-0.00				ug/L
|	Tl	203	409947.712	1.03	50.2432	0.308	0.613	ug/L
|	Tl	205	1017551.683	2.56	50.2493	1.200	2.389	ug/L
|	Pb	206	332280.984	0.84	50.1390	1.138	2.270	ug/L
|	Pb	207	312395.841	0.79	50.1085	1.622	3.238	ug/L
|	Pb	208	1385988.425	3.49	50.1356	1.012	2.019	ug/L
|	U	238	2337568.667	5.89	52.1157	1.175	2.254	ug/L
⌊>	Bi	209	397289.457	397289.46				ug/L

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Na	23	23144908.595	146.84	4.9236	0.035	0.719	mg/L	
Mg	24	16063147.871	102.15	5.1327	0.107	2.093	mg/L	
K	39	30329743.422	190.98	4.8514	0.163	3.353	mg/L	
Ca	43	72892.050	0.46	4.9071	0.103	2.089	mg/L	
Fe	54	2608944.402	16.36	5.3402	0.051	0.958	mg/L	
Fe	57	1085369.922	6.87	5.3182	0.148	2.785	mg/L	
> Sc-1	45	157260.358	157260.36				mg/L	
Cl	35	14658.737	-8873.61				mg/L	
Kr	83	57.334	-6.00				mg/L	
Br	81	8004.537	555.76				mg/L	
P	31	8989.385	937.48				mg/L	
S	34	139082.828	14735.05				mg/L	
Sr	88	2103.765	1987.09				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	94.179				
Cr	52	96.469				
Cr	53					
Mn	55	100.345				
Co	59	97.781				
Ni	60	96.923				
Cu	65	98.209				
Zn	66	98.355				
> Ge	72		102.181			
As	75	98.045				
Se	77					
Se	82	102.480				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	98.533				
Cd	114	100.163				
> In	115		98.708			
Sn	118					
Sb	123	101.135				
Ba	135	99.238				
Ce	140					
> Tb	159		99.354			
Ho	165					
Tl	203	100.486				
Tl	205					
Pb	206					
Pb	207					
Pb	208	100.271				
U	238	104.231				
> Bi	209		93.826			

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 16:10:30

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 16:10:30
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 11, 2011 16:15:23
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19385.461	0.02				ug/L
|	Be	9	20.667	0.00	0.0166	0.015	88.948	ug/L
|	Al	27	2733.710	0.00	0.0642	0.057	88.510	ug/L
|>	Sc	45	157448.217	157448.22				ug/L
⌈	Ti	49	60.006	0.00	0.0387	0.049	127.163	ug/L
|	V	51	2593.590	-0.00	-0.0012	0.012	994.570	ug/L
|	Cr	52	8341.563	-0.00	-0.0249	0.036	143.621	ug/L
|	Cr	53	326.705	-0.00	-0.5303	0.039	7.370	ug/L
|	Mn	55	1966.880	0.00	0.1231	0.003	2.761	ug/L
|	Co	59	89.668	0.00	-0.0117	0.001	12.744	ug/L
|	Ni	60	73.668	0.00	-0.0079	0.001	13.580	ug/L
|	Cu	65	94.668	-0.00	-0.0410	0.004	9.676	ug/L
|	Zn	66	410.013	-0.00	-0.4761	0.027	5.716	ug/L
|>	Ge	72	318741.475	318741.48				ug/L
|	As	75	-156.424	0.00	0.0230	0.074	320.652	ug/L
|	Se	77	88.000	0.00	0.0291	0.080	273.129	ug/L
|	Se	82	9.499	0.00	0.0845	0.214	253.298	ug/L
⌊	Rb	85	29.667	0.00				mg/L
	Y	89	223444.397	-2539.64				ug/L
	Rh	103	14.667	0.67				ug/L
⌈	Mo	98	133.541	0.00	0.0573	0.008	14.568	ug/L
|	Ag	107	71.001	-0.00	-0.0148	0.000	2.398	ug/L
|	Cd	114	-3.516	-0.00	0.0110	0.007	64.441	ug/L
|>	In	115	312114.656	312114.66				ug/L
|	Sn	118	2422.027	0.01	0.5214	0.012	2.334	ug/L
⌊	Sb	123	50.779	0.00	0.0107	0.000	4.003	ug/L
⌈	Ba	135	29.334	0.00	0.0106	0.005	42.898	ug/L
|	Ce	140	23.336	-0.00				ug/L
|>	Tb	159	432791.157	432791.16				ug/L
⌈	Ho	165	23.336	-0.00				ug/L
|	Tl	203	63.668	0.00	-0.0080	0.001	15.718	ug/L
|	Tl	205	113.345	-0.00	-0.0033	0.002	68.325	ug/L
|	Pb	206	353.676	0.00	0.0012	0.005	367.130	ug/L
|	Pb	207	283.340	-0.00	-0.0093	0.003	37.169	ug/L
|	Pb	208	1347.716	0.00	-0.0065	0.001	21.075	ug/L
|	U	238	126.002	0.00	0.0115	0.001	6.647	ug/L
|>	Bi	209	397147.041	397147.04				ug/L

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⌈	Na	23	39408.162	-0.10	-0.0025	0.000	10.910	mg/L
|	Mg	24	1283.544	0.00	-0.0017	0.000	1.470	mg/L
|	K	39	327413.254	0.15	0.0005	0.002	395.431	mg/L
|	Ca	43	136.681	-0.00	-0.0068	0.002	23.776	mg/L
|	Fe	54	38610.428	0.01	0.0087	0.005	62.979	mg/L
|	Fe	57	6452.727	0.01	0.0063	0.002	33.432	mg/L
⌊>	Sc-1	45	157448.217	157448.22				mg/L
	Cl	35	12862.935	-10669.41				mg/L
	Kr	83	57.667	-5.67				mg/L
	Br	81	8380.182	931.41				mg/L
	P	31	8623.080	571.17				mg/L
	S	34	123427.122	-920.65				mg/L
	Sr	88	90.009	-26.67				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		102.670			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		99.688			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.709			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		93.792			

Sample ID: QC Std 7
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1104025301

Sample Date/Time: Monday, April 11, 2011 16:22:30
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 21
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21239.209	0.02				ug/L
|	Be	9	245.336	0.00	0.7354	0.171	23.199	ug/L
|	Al	27	33228394.416	193.37	5937.5645	1194.364	20.115	ug/L
⌊>	Sc	45	172475.918	172475.92				ug/L
⌈	Ti	49	5041.801	0.02	9.1391	1.595	17.452	ug/L
|	V	51	104165.700	0.32	11.7045	1.804	15.413	ug/L
|	Cr	52	91632.692	0.26	11.3042	1.887	16.689	ug/L
|	Cr	53	10423.248	0.03	11.3635	2.105	18.526	ug/L
|	Mn	55	7727069.397	24.16	701.0011	98.229	14.013	ug/L
|	Co	59	96104.057	0.30	10.7681	1.519	14.109	ug/L
|	Ni	60	37799.754	0.12	19.8711	2.945	14.823	ug/L
|	Cu	65	38076.969	0.12	19.1541	3.048	15.912	ug/L
|	Zn	66	58985.106	0.18	48.4383	6.469	13.354	ug/L
|>	Ge	72	319729.846	319729.85				ug/L
|	As	75	20246.974	0.06	18.5881	2.464	13.254	ug/L
|	Se	77	164.001	0.00	0.9002	0.231	25.680	ug/L
|	Se	82	76.744	0.00	0.7045	0.105	14.943	ug/L
⌊	Rb	85	74267.941	0.23				mg/L
	Y	89	327443.156	101459.12				ug/L
	Rh	103	35.000	21.00				ug/L
⌈	Mo	98	4333.978	0.01	1.5513	0.185	11.920	ug/L
|	Ag	107	350.676	0.00	0.0327	0.007	21.282	ug/L
|	Cd	114	168.807	0.00	0.1514	0.034	22.749	ug/L
|>	In	115	306578.252	306578.25				ug/L
|	Sn	118	171.468	-0.00	0.0118	0.006	51.194	ug/L
⌊	Sb	123	49.562	0.00	0.0106	0.002	14.533	ug/L
⌈	Ba	135	769444.098	1.78	477.4349	75.996	15.918	ug/L
|	Ce	140	462836.754	1.07				ug/L
⌊>	Tb	159	431590.429	431590.43				ug/L
⌈	Ho	165	8874.899	0.02				ug/L
|	Tl	203	3025.161	0.01	0.3515	0.051	14.443	ug/L
|	Tl	205	7783.862	0.02	0.3717	0.062	16.626	ug/L
|	Pb	206	85303.405	0.21	12.7060	1.785	14.050	ug/L
|	Pb	207	72045.283	0.18	11.4002	1.468	12.874	ug/L
|	Pb	208	337351.786	0.84	12.0418	1.604	13.318	ug/L
|	U	238	57070.434	0.14	1.2683	0.173	13.651	ug/L
⌊>	Bi	209	400985.102	400985.10				ug/L

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Na	23	1017345.778	5.57	0.1874	0.027	14.155	mg/L
Mg	24	13629759.197	79.28	3.9831	0.628	15.761	mg/L
K	39	4380222.911	23.54	0.5950	0.090	15.124	mg/L
Ca	43	188334.882	1.10	11.6290	2.357	20.268	mg/L
Fe	54	9765052.880	56.62	18.4739	3.607	19.523	mg/L
Fe	57	4105494.478	23.85	18.4656	3.112	16.851	mg/L
> Sc-1	45	172475.918	172475.92				mg/L
Cl	35	36205.477	12673.13				mg/L
Kr	83	68.001	4.67				mg/L
Br	81	8597.028	1148.25				mg/L
P	31	221870.776	213818.87				mg/L
S	34	211389.324	87041.55				mg/L
Sr	88	759586.433	759469.75				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		102.989			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		97.920			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		99.432			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		94.699			

Sample ID: L1104025301
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104025301PS WG361271-01

Sample Date/Time: Monday, April 11, 2011 16:29:38
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 22
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21590.027	0.03				ug/L
|	Be	9	19046.864	0.12	65.8906	5.238	7.950	ug/L
|	Al	27	30409594.602	189.44	5816.8912	352.582	6.061	ug/L
⌊>	Sc	45	160477.447	160477.45				ug/L
⌈	Ti	49	4361.388	0.01	8.1095	0.297	3.668	ug/L
|	V	51	542645.701	1.73	63.8900	3.493	5.467	ug/L
|	Cr	52	479263.680	1.51	65.7641	4.558	6.931	ug/L
|	Cr	53	56438.626	0.18	67.3290	5.803	8.618	ug/L
|	Mn	55	7502600.712	24.08	698.5770	42.439	6.075	ug/L
|	Co	59	576914.142	1.85	66.4525	4.057	6.105	ug/L
|	Ni	60	137488.246	0.44	74.3076	4.996	6.723	ug/L
|	Cu	65	142983.776	0.46	74.0706	4.679	6.317	ug/L
|	Zn	66	120723.648	0.39	102.6559	5.216	5.081	ug/L
| >	Ge	72	311526.825	311526.83				ug/L
|	As	75	82391.840	0.27	77.1087	3.952	5.125	ug/L
|	Se	77	5487.506	0.02	63.8379	1.784	2.795	ug/L
|	Se	82	6726.368	0.02	63.5889	2.759	4.338	ug/L
⌊	Rb	85	66925.839	0.21				mg/L
	Y	89	315939.614	89955.58				ug/L
	Rh	103	72.668	58.67				ug/L
⌈	Mo	98	3926.206	0.01	1.4505	0.102	7.001	ug/L
|	Ag	107	342350.640	1.15	59.6750	3.536	5.926	ug/L
|	Cd	114	74542.619	0.25	62.7174	2.370	3.778	ug/L
| >	In	115	297150.396	297150.40				ug/L
|	Sn	118	186.535	0.00	0.0166	0.002	10.231	ug/L
⌊	Sb	123	220060.021	0.74	60.3799	3.276	5.426	ug/L
⌈	Ba	135	799829.119	1.85	495.5435	37.269	7.521	ug/L
|	Ce	140	422061.722	0.98				ug/L
⌊>	Tb	159	432572.237	432572.24				ug/L
⌈	Ho	165	8391.029	0.02				ug/L
|	Tl	203	473898.972	1.19	57.8365	3.582	6.194	ug/L
|	Tl	205	1171920.780	2.94	57.6182	3.484	6.047	ug/L
|	Pb	206	470845.987	1.18	70.7467	4.756	6.722	ug/L
|	Pb	207	415081.489	1.04	66.2898	4.001	6.035	ug/L
|	Pb	208	1918910.708	4.81	69.1167	3.918	5.669	ug/L
|	U	238	2679150.700	6.71	59.4589	4.036	6.788	ug/L
⌊>	Bi	209	398981.790	398981.79				ug/L

Sample ID: L1104025301PS WG361271-01
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⌈	Na	23	922244.669	5.40	0.1817	0.013	7.364	mg/L
|	Mg	24	12438073.270	77.50	3.8938	0.216	5.536	mg/L
|	K	39	4054139.135	23.33	0.5898	0.034	5.739	mg/L
|	Ca	43	167005.989	1.04	11.0382	0.666	6.029	mg/L
|	Fe	54	8661002.754	53.74	17.5329	1.464	8.352	mg/L
|	Fe	57	3679454.119	22.89	17.7228	1.559	8.799	mg/L
⌊>	Sc-1	45	160477.447	160477.45				mg/L
	Cl	35	34136.182	10603.84				mg/L
	Kr	83	78.668	15.33				mg/L
	Br	81	8245.398	796.62				mg/L
	P	31	200108.915	192057.00				mg/L
	S	34	192118.444	67770.67				mg/L
	Sr	88	679824.091	679707.41				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		100.346			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		94.909			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.658			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		94.226			

Sample ID: L1104025301PS WG361271-01
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Zn 66 Upper, S, EEE	Zn	66	
Ba 135 Upper, S, EEE	Ba	135	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104025301SDL WG361271-02

Sample Date/Time: Monday, April 11, 2011 16:36:45
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 23
Method File: C:\elandata\Method\6020a.mth
Sample Description: 25

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20036.800	0.03				ug/L
|	Be	9	39.333	0.00	0.0885	0.047	52.656	ug/L
|	Al	27	5637972.880	37.42	1149.1019	99.686	8.675	ug/L
⌊>	Sc	45	151290.588	151290.59				ug/L
⌈	Ti	49	910.132	0.00	1.5791	0.080	5.089	ug/L
|	V	51	19279.176	0.05	1.9041	0.059	3.075	ug/L
|	Cr	52	21243.092	0.04	1.7050	0.059	3.457	ug/L
|	Cr	53	1877.031	0.00	1.2786	0.147	11.494	ug/L
|	Mn	55	1268665.395	3.93	114.1917	1.819	1.593	ug/L
|	Co	59	16151.535	0.05	1.7778	0.048	2.694	ug/L
|	Ni	60	6309.386	0.02	3.2530	0.032	0.990	ug/L
|	Cu	65	6475.494	0.02	3.1590	0.048	1.510	ug/L
|	Zn	66	14070.701	0.04	10.8435	0.243	2.245	ug/L
| >	Ge	72	322206.818	322206.82				ug/L
|	As	75	3349.204	0.01	3.1909	0.102	3.184	ug/L
|	Se	77	91.334	0.00	0.0562	0.169	299.830	ug/L
|	Se	82	4.052	0.00	0.0347	0.121	349.854	ug/L
⌊	Rb	85	12773.614	0.04				mg/L
	Y	89	234989.838	9005.80				ug/L
	Rh	103	13.667	-0.33				ug/L
⌈	Mo	98	729.353	0.00	0.2688	0.014	5.089	ug/L
|	Ag	107	112.668	-0.00	-0.0076	0.003	44.344	ug/L
|	Cd	114	26.223	0.00	0.0351	0.014	40.538	ug/L
| >	In	115	307967.140	307967.14				ug/L
|	Sn	118	88.000	-0.00	-0.0076	0.002	22.884	ug/L
⌊	Sb	123	305.117	0.00	0.0782	0.003	3.417	ug/L
⌈	Ba	135	129880.372	0.30	81.6659	1.338	1.638	ug/L
|	Ce	140	77543.911	0.18				ug/L
⌊>	Tb	159	426123.306	426123.31				ug/L
⌈	Ho	165	1516.934	0.00				ug/L
|	Tl	203	540.020	0.00	0.0504	0.003	5.398	ug/L
|	Tl	205	1313.551	0.00	0.0559	0.005	8.150	ug/L
|	Pb	206	14337.748	0.04	2.1126	0.009	0.436	ug/L
|	Pb	207	12190.214	0.03	1.9019	0.029	1.544	ug/L
|	Pb	208	56834.790	0.14	2.0022	0.013	0.644	ug/L
|	U	238	9607.709	0.02	0.2228	0.002	0.893	ug/L
⌊>	Bi	209	397335.772	397335.77				ug/L

Approved: April 12, 2011

Na	23	179019.779	0.84	0.0289	0.003	11.419	mg/L	
Mg	24	2303173.232	15.28	0.7661	0.057	7.458	mg/L	
K	39	1128431.254	5.55	0.1379	0.014	9.827	mg/L	
Ca	43	30987.705	0.20	2.1674	0.151	6.971	mg/L	
Fe	54	1677561.700	10.91	3.5638	0.351	9.847	mg/L	
Fe	57	670941.514	4.42	3.4214	0.267	7.798	mg/L	
> Sc-1	45	151290.588	151290.59				mg/L	
Cl	35	17094.600	-6437.74				mg/L	
Kr	83	70.668	7.33				mg/L	
Br	81	8184.682	735.91				mg/L	
P	31	42399.716	34347.81				mg/L	
S	34	139782.926	15435.15				mg/L	
Sr	88	126761.020	126644.34				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		103.787			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		98.363			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		98.173			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		93.837			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104025303

Sample Date/Time: Monday, April 11, 2011 16:43:50
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 24
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20888.476	0.02				ug/L
|	Be	9	218.669	0.00	0.6690	0.103	15.408	ug/L
|	Al	27	33610604.560	200.54	6157.8255	26.382	0.428	ug/L
⌊>	Sc	45	167576.344	167576.34				ug/L
⌈	Ti	49	7570.292	0.02	13.9539	0.596	4.270	ug/L
|	V	51	93015.237	0.29	10.5698	0.263	2.493	ug/L
|	Cr	52	89894.806	0.26	11.2387	0.335	2.976	ug/L
|	Cr	53	10062.743	0.03	11.1037	0.565	5.085	ug/L
|	Mn	55	1696171.924	5.37	155.9705	5.359	3.436	ug/L
|	Co	59	61752.883	0.20	7.0080	0.225	3.213	ug/L
|	Ni	60	25858.330	0.08	13.7704	0.299	2.169	ug/L
|	Cu	65	28219.081	0.09	14.3704	0.446	3.106	ug/L
|	Zn	66	46324.257	0.14	38.4049	0.902	2.349	ug/L
|>	Ge	72	315347.902	315347.90				ug/L
|	As	75	2002.001	0.01	2.0132	0.035	1.730	ug/L
|	Se	77	115.334	0.00	0.3604	0.165	45.795	ug/L
|	Se	82	18.348	0.00	0.1696	0.105	62.100	ug/L
⌊	Rb	85	82681.997	0.26				mg/L
	Y	89	295038.926	69054.89				ug/L
	Rh	103	18.000	4.00				ug/L
⌈	Mo	98	210.579	0.00	0.0874	0.006	6.582	ug/L
|	Ag	107	157.669	0.00	0.0008	0.002	309.261	ug/L
|	Cd	114	27.729	0.00	0.0370	0.005	13.245	ug/L
|>	In	115	299162.065	299162.06				ug/L
|	Sn	118	105.734	-0.00	-0.0028	0.003	91.432	ug/L
⌊	Sb	123	181.152	0.00	0.0468	0.002	4.275	ug/L
⌈	Ba	135	85299.878	0.20	53.6243	1.202	2.241	ug/L
|	Ce	140	453077.045	1.06				ug/L
⌊>	Tb	159	426180.462	426180.46				ug/L
⌈	Ho	165	6849.697	0.02				ug/L
|	Tl	203	661.695	0.00	0.0653	0.001	1.727	ug/L
|	Tl	205	1643.633	0.00	0.0721	0.005	6.942	ug/L
|	Pb	206	46894.869	0.12	7.0230	0.149	2.123	ug/L
|	Pb	207	39294.450	0.10	6.2475	0.061	0.983	ug/L
|	Pb	208	185797.423	0.46	6.6654	0.108	1.620	ug/L
|	U	238	21102.791	0.05	0.4785	0.006	1.212	ug/L
⌊>	Bi	209	397635.230	397635.23				ug/L

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Na	23	358595.998	1.79	0.0608	0.001	2.244	mg/L
Mg	24	7150159.593	42.68	2.1434	0.052	2.426	mg/L
K	39	3680774.919	20.04	0.5062	0.020	4.018	mg/L
Ca	43	11821.511	0.07	0.7334	0.041	5.596	mg/L
Fe	54	7793732.810	46.27	15.0963	0.354	2.344	mg/L
Fe	57	3343103.074	19.91	15.4127	0.266	1.723	mg/L
> Sc-1	45	167576.344	167576.34				mg/L
Cl	35	15785.784	-7746.56				mg/L
Kr	83	75.001	11.67				mg/L
Br	81	7747.670	298.90				mg/L
P	31	53429.724	45377.81				mg/L
S	34	113101.739	-11246.04				mg/L
Sr	88	57671.644	57554.97				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		101.577			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		95.551			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		98.186			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		93.908			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104025305

Sample Date/Time: Monday, April 11, 2011 16:50:56
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 25
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21539.875	0.04				ug/L
|	Be	9	170.001	0.00	0.5534	0.120	21.666	ug/L
|	Al	27	33578753.715	215.98	6631.8127	301.574	4.547	ug/L
⌊>	Sc	45	155619.212	155619.21				ug/L
⌈	Ti	49	6893.066	0.02	13.0256	0.539	4.141	ug/L
|	V	51	100325.269	0.32	11.7221	0.271	2.308	ug/L
|	Cr	52	89093.205	0.26	11.4419	0.410	3.582	ug/L
|	Cr	53	9869.188	0.03	11.1735	0.106	0.949	ug/L
|	Mn	55	1459119.727	4.74	137.5980	4.412	3.207	ug/L
|	Co	59	42234.104	0.14	4.9082	0.091	1.858	ug/L
|	Ni	60	17573.277	0.06	9.5819	0.286	2.986	ug/L
|	Cu	65	22100.309	0.07	11.5251	0.535	4.645	ug/L
|	Zn	66	35247.072	0.11	29.7874	1.118	3.752	ug/L
| >	Ge	72	307570.827	307570.83				ug/L
|	As	75	1947.035	0.01	2.0083	0.058	2.896	ug/L
|	Se	77	108.001	0.00	0.3059	0.124	40.501	ug/L
|	Se	82	14.081	0.00	0.1323	0.151	113.860	ug/L
⌊	Rb	85	73703.527	0.24				mg/L
	Y	89	236828.951	10844.92				ug/L
	Rh	103	18.000	4.00				ug/L
⌈	Mo	98	480.148	0.00	0.1897	0.007	3.710	ug/L
|	Ag	107	183.337	0.00	0.0060	0.002	29.088	ug/L
|	Cd	114	49.614	0.00	0.0562	0.014	24.660	ug/L
| >	In	115	292184.379	292184.38				ug/L
|	Sn	118	115.867	-0.00	0.0002	0.001	359.711	ug/L
⌊	Sb	123	96.190	0.00	0.0243	0.003	11.863	ug/L
⌈	Ba	135	53440.996	0.13	34.3477	0.753	2.193	ug/L
|	Ce	140	269711.023	0.65				ug/L
⌊>	Tb	159	416815.372	416815.37				ug/L
⌈	Ho	165	2904.046	0.01				ug/L
|	Tl	203	632.360	0.00	0.0629	0.003	4.911	ug/L
|	Tl	205	1486.926	0.00	0.0656	0.005	8.220	ug/L
|	Pb	206	46980.030	0.12	7.1489	0.251	3.506	ug/L
|	Pb	207	39363.421	0.10	6.3599	0.145	2.274	ug/L
|	Pb	208	185501.863	0.47	6.7623	0.159	2.345	ug/L
|	U	238	17725.881	0.05	0.4097	0.008	1.875	ug/L
⌊>	Bi	209	391325.276	391325.28				ug/L

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Na	23	412724.968	2.31	0.0781	0.005	6.474	mg/L	
Mg	24	5159261.261	33.20	1.6670	0.115	6.915	mg/L	
K	39	3297871.667	19.29	0.4871	0.035	7.185	mg/L	
Ca	43	6599.514	0.04	0.4351	0.047	10.738	mg/L	
Fe	54	7803067.852	50.00	16.3127	1.194	7.319	mg/L	
Fe	57	3294454.197	21.17	16.3853	0.996	6.078	mg/L	
> Sc-1	45	155619.212	155619.21				mg/L	
Cl	35	27914.921	4382.58				mg/L	
Kr	83	67.334	4.00				mg/L	
Br	81	8703.120	1254.35				mg/L	
P	31	38990.558	30938.65				mg/L	
S	34	108734.176	-15613.60				mg/L	
Sr	88	35834.413	35717.73				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		99.072			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		93.322			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		96.028			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		92.418			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104025307

Sample Date/Time: Monday, April 11, 2011 16:58:02
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 26
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20320.665	0.03				ug/L
|	Be	9	188.668	0.00	0.6108	0.084	13.716	ug/L
|	Al	27	21204700.295	135.21	4151.8314	613.214	14.770	ug/L
⌊>	Sc	45	157498.993	157498.99				ug/L
⌈	Ti	49	2040.413	0.01	3.7096	0.211	5.675	ug/L
|	V	51	71033.015	0.22	8.0031	0.226	2.828	ug/L
|	Cr	52	62621.233	0.17	7.4793	0.293	3.922	ug/L
|	Cr	53	6476.091	0.02	6.8218	0.748	10.967	ug/L
|	Mn	55	1365674.317	4.33	125.6287	4.576	3.642	ug/L
|	Co	59	24380.943	0.08	2.7546	0.071	2.592	ug/L
|	Ni	60	20621.474	0.07	10.9749	0.474	4.316	ug/L
|	Cu	65	35195.541	0.11	17.9518	0.435	2.424	ug/L
|	Zn	66	22882.726	0.07	18.5641	0.524	2.824	ug/L
| >	Ge	72	315266.356	315266.36				ug/L
|	As	75	2552.289	0.01	2.5218	0.080	3.178	ug/L
|	Se	77	80.667	0.00	-0.0453	0.126	277.921	ug/L
|	Se	82	6.331	0.00	0.0569	0.101	177.518	ug/L
⌊	Rb	85	88003.188	0.28				mg/L
	Y	89	265162.481	39178.45				ug/L
	Rh	103	29.334	15.33				ug/L
⌈	Mo	98	1328.494	0.00	0.4934	0.013	2.670	ug/L
|	Ag	107	150.669	0.00	-0.0006	0.002	447.479	ug/L
|	Cd	114	49.678	0.00	0.0552	0.009	16.529	ug/L
| >	In	115	299836.592	299836.59				ug/L
|	Sn	118	100.134	-0.00	-0.0042	0.001	34.567	ug/L
⌊	Sb	123	78.614	0.00	0.0188	0.002	8.348	ug/L
⌈	Ba	135	142411.562	0.33	89.0298	3.108	3.490	ug/L
|	Ce	140	212649.342	0.50				ug/L
⌊>	Tb	159	428559.309	428559.31				ug/L
⌈	Ho	165	4531.482	0.01				ug/L
|	Tl	203	576.356	0.00	0.0546	0.007	12.001	ug/L
|	Tl	205	1280.210	0.00	0.0542	0.002	4.392	ug/L
|	Pb	206	35654.192	0.09	5.3181	0.109	2.045	ug/L
|	Pb	207	29725.109	0.07	4.7049	0.085	1.802	ug/L
|	Pb	208	141195.113	0.35	5.0434	0.128	2.545	ug/L
|	U	238	15385.324	0.04	0.3507	0.008	2.391	ug/L
⌊>	Bi	209	398211.681	398211.68				ug/L

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⌈	Na	23	1392578.031	8.52	0.2863	0.025	8.882	mg/L
|	Mg	24	2530164.173	16.10	0.8072	0.061	7.596	mg/L
|	K	39	5340274.442	32.07	0.8119	0.083	10.180	mg/L
|	Ca	43	22166.791	0.14	1.4829	0.136	9.177	mg/L
|	Fe	54	5227982.738	33.05	10.7856	0.999	9.261	mg/L
|	Fe	57	2234721.118	14.19	10.9850	0.891	8.115	mg/L
⌊>	Sc-1	45	157498.993	157498.99				mg/L
	Cl	35	23147.444	-384.90				mg/L
	Kr	83	77.001	13.67				mg/L
	Br	81	8677.765	1228.99				mg/L
	P	31	67501.299	59449.39				mg/L
	S	34	109480.392	-14867.38				mg/L
	Sr	88	261863.880	261747.20				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		101.551			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		95.767			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		98.734			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		94.044			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104026601

Sample Date/Time: Monday, April 11, 2011 17:05:08
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 27
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19919.916	0.03				ug/L
|	Be	9	39.333	0.00	0.0873	0.020	23.471	ug/L
|	Al	27	6501056.138	42.72	1311.9294	101.893	7.767	ug/L
⌊>	Sc	45	152454.853	152454.85				ug/L
⌈	Ti	49	4488.125	0.01	8.2058	0.492	6.000	ug/L
|	V	51	28441.656	0.08	3.0076	0.100	3.321	ug/L
|	Cr	52	35080.124	0.08	3.6542	0.101	2.774	ug/L
|	Cr	53	3384.246	0.01	3.1081	0.262	8.435	ug/L
|	Mn	55	540931.462	1.70	49.4817	0.368	0.743	ug/L
|	Co	59	10610.068	0.03	1.1805	0.031	2.643	ug/L
|	Ni	60	6202.318	0.02	3.2519	0.015	0.461	ug/L
|	Cu	65	21789.264	0.07	11.0253	0.057	0.521	ug/L
|	Zn	66	81386.434	0.25	67.7828	1.566	2.310	ug/L
|>	Ge	72	316825.781	316825.78				ug/L
|	As	75	806.605	0.00	0.9069	0.027	2.941	ug/L
|	Se	77	102.667	0.00	0.2058	0.128	62.074	ug/L
|	Se	82	33.806	0.00	0.3120	0.065	20.817	ug/L
⌊	Rb	85	19326.856	0.06				mg/L
	Y	89	239813.474	13829.44				ug/L
	Rh	103	22.000	8.00				ug/L
⌈	Mo	98	403.733	0.00	0.1567	0.009	5.566	ug/L
|	Ag	107	379.344	0.00	0.0388	0.003	7.273	ug/L
|	Cd	114	119.088	0.00	0.1127	0.015	12.964	ug/L
|>	In	115	301060.546	301060.55				ug/L
|	Sn	118	335.739	0.00	0.0511	0.003	6.138	ug/L
⌊	Sb	123	102.906	0.00	0.0253	0.003	10.700	ug/L
⌈	Ba	135	30840.128	0.07	19.6684	0.226	1.152	ug/L
|	Ce	140	77013.087	0.18				ug/L
⌊>	Tb	159	419991.098	419991.10				ug/L
⌈	Ho	165	1593.621	0.00				ug/L
|	Tl	203	270.340	0.00	0.0172	0.003	19.933	ug/L
|	Tl	205	683.425	0.00	0.0247	0.001	5.276	ug/L
|	Pb	206	76949.052	0.19	11.5162	0.020	0.174	ug/L
|	Pb	207	64600.646	0.16	10.2704	0.142	1.385	ug/L
|	Pb	208	302591.415	0.75	10.8520	0.107	0.986	ug/L
|	U	238	5224.750	0.01	0.1246	0.002	1.291	ug/L
⌊>	Bi	209	399051.676	399051.68				ug/L

Sample ID: L1104026601
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Na	23	313156.420	1.71	0.0579	0.000	0.646	mg/L	
Mg	24	4027168.436	26.43	1.3268	0.042	3.151	mg/L	
K	39	1640354.319	8.84	0.2214	0.013	5.848	mg/L	
Ca	43	96914.084	0.63	6.7382	0.142	2.113	mg/L	
Fe	54	1554128.679	9.98	3.2595	0.205	6.288	mg/L	
Fe	57	626693.149	4.08	3.1591	0.092	2.921	mg/L	
> Sc-1	45	152454.853	152454.85				mg/L	
Cl	35	28848.896	5316.55				mg/L	
Kr	83	60.667	-2.67				mg/L	
Br	81	10833.868	3385.09				mg/L	
P	31	54076.521	46024.61				mg/L	
S	34	166295.355	41947.58				mg/L	
Sr	88	129982.315	129865.64				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		102.053			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		96.157			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		96.760			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		94.242			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104026602

Sample Date/Time: Monday, April 11, 2011 17:12:15
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 28
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20521.037	0.03				ug/L
|	Be	9	40.000	0.00	0.0916	0.012	13.590	ug/L
|	Al	27	6104164.745	40.64	1248.0481	68.370	5.478	ug/L
⌊>	Sc	45	150135.380	150135.38				ug/L
⌈	Ti	49	5028.435	0.02	9.1550	0.366	3.997	ug/L
|	V	51	24363.107	0.07	2.5185	0.084	3.333	ug/L
|	Cr	52	29448.608	0.07	2.8602	0.081	2.844	ug/L
|	Cr	53	2710.639	0.00	2.2902	0.177	7.744	ug/L
|	Mn	55	355382.182	1.11	32.3233	0.744	2.302	ug/L
|	Co	59	9186.649	0.03	1.0138	0.043	4.235	ug/L
|	Ni	60	5622.305	0.02	2.9283	0.139	4.731	ug/L
|	Cu	65	20532.618	0.06	10.3315	0.404	3.908	ug/L
|	Zn	66	77039.526	0.24	63.7891	1.547	2.424	ug/L
|>	Ge	72	318430.762	318430.76				ug/L
|	As	75	571.501	0.00	0.6884	0.039	5.730	ug/L
|	Se	77	88.000	0.00	0.0304	0.041	133.561	ug/L
|	Se	82	25.760	0.00	0.2358	0.158	66.841	ug/L
⌊	Rb	85	19230.353	0.06				mg/L
	Y	89	235797.738	9813.70				ug/L
	Rh	103	24.334	10.33				ug/L
⌈	Mo	98	327.515	0.00	0.1276	0.007	5.699	ug/L
|	Ag	107	243.672	0.00	0.0148	0.004	28.599	ug/L
|	Cd	114	142.453	0.00	0.1304	0.021	15.749	ug/L
|>	In	115	305047.515	305047.52				ug/L
|	Sn	118	426.276	0.00	0.0711	0.006	7.857	ug/L
⌊	Sb	123	84.740	0.00	0.0200	0.002	9.084	ug/L
⌈	Ba	135	23581.695	0.06	14.8013	0.727	4.910	ug/L
|	Ce	140	69769.702	0.16				ug/L
⌊>	Tb	159	426893.683	426893.68				ug/L
⌈	Ho	165	1340.224	0.00				ug/L
|	Tl	203	295.007	0.00	0.0200	0.004	20.973	ug/L
|	Tl	205	686.760	0.00	0.0246	0.010	39.260	ug/L
|	Pb	206	69375.462	0.17	10.3260	0.552	5.343	ug/L
|	Pb	207	59623.054	0.15	9.4273	0.538	5.702	ug/L
|	Pb	208	278384.760	0.69	9.9290	0.492	4.957	ug/L
|	U	238	4236.941	0.01	0.1022	0.005	4.607	ug/L
⌊>	Bi	209	401189.785	401189.78				ug/L

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Na	23	328991.549	1.84	0.0626	0.004	6.011	mg/L	
Mg	24	3658668.644	24.37	1.2229	0.073	5.965	mg/L	
K	39	1716763.759	9.50	0.2383	0.008	3.478	mg/L	
Ca	43	80178.281	0.53	5.6555	0.099	1.756	mg/L	
Fe	54	1286879.339	8.34	2.7245	0.063	2.302	mg/L	
Fe	57	514487.708	3.39	2.6273	0.066	2.502	mg/L	
> Sc-1	45	150135.380	150135.38				mg/L	
Cl	35	25880.113	2347.77				mg/L	
Kr	83	66.001	2.67				mg/L	
Br	81	11853.689	4404.92				mg/L	
P	31	43615.029	35563.12				mg/L	
S	34	159764.178	35416.40				mg/L	
Sr	88	112028.851	111912.17				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		102.570			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		97.431			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		98.350			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		94.747			

Sample ID: L1104026602
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104026603

Sample Date/Time: Monday, April 11, 2011 17:19:22
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 29
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19736.158	0.03				ug/L
|	Be	9	38.000	0.00	0.0830	0.055	66.012	ug/L
|	Al	27	6120587.837	39.90	1225.2252	140.091	11.434	ug/L
⌊>	Sc	45	154166.518	154166.52				ug/L
⌈	Ti	49	4194.638	0.01	7.6271	0.663	8.688	ug/L
|	V	51	23214.563	0.06	2.3874	0.079	3.296	ug/L
|	Cr	52	29153.082	0.06	2.8224	0.077	2.739	ug/L
|	Cr	53	2760.663	0.01	2.3495	0.461	19.609	ug/L
|	Mn	55	331219.169	1.04	30.1386	1.183	3.924	ug/L
|	Co	59	9234.693	0.03	1.0199	0.036	3.498	ug/L
|	Ni	60	5588.285	0.02	2.9121	0.077	2.659	ug/L
|	Cu	65	20175.894	0.06	10.1559	0.357	3.518	ug/L
|	Zn	66	84053.040	0.26	69.7040	3.366	4.829	ug/L
|>	Ge	72	318195.259	318195.26				ug/L
|	As	75	578.840	0.00	0.6957	0.037	5.346	ug/L
|	Se	77	102.001	0.00	0.1940	0.152	78.605	ug/L
|	Se	82	21.406	0.00	0.1962	0.081	41.209	ug/L
⌊	Rb	85	19888.309	0.06				mg/L
	Y	89	238095.717	12111.68				ug/L
	Rh	103	19.667	5.67				ug/L
⌈	Mo	98	393.034	0.00	0.1509	0.014	9.520	ug/L
|	Ag	107	226.672	0.00	0.0119	0.005	38.638	ug/L
|	Cd	114	136.501	0.00	0.1255	0.035	28.073	ug/L
|>	In	115	305219.799	305219.80				ug/L
|	Sn	118	364.940	0.00	0.0568	0.001	1.556	ug/L
⌊	Sb	123	102.654	0.00	0.0248	0.004	16.045	ug/L
⌈	Ba	135	24240.940	0.06	15.2477	0.510	3.345	ug/L
|	Ce	140	68390.386	0.16				ug/L
⌊>	Tb	159	425799.000	425799.00				ug/L
⌈	Ho	165	1410.241	0.00				ug/L
|	Tl	203	268.673	0.00	0.0165	0.002	11.607	ug/L
|	Tl	205	770.107	0.00	0.0284	0.005	16.125	ug/L
|	Pb	206	67271.802	0.17	9.9083	0.447	4.512	ug/L
|	Pb	207	56694.598	0.14	8.8685	0.287	3.235	ug/L
|	Pb	208	265426.738	0.65	9.3671	0.350	3.741	ug/L
|	U	238	4321.313	0.01	0.1031	0.006	5.949	ug/L
⌊>	Bi	209	405208.134	405208.13				ug/L

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Na	23	340919.569	1.87	0.0636	0.008	12.926	mg/L	
Mg	24	3596059.563	23.45	1.1767	0.138	11.744	mg/L	
K	39	1720873.473	9.29	0.2328	0.032	13.895	mg/L	
Ca	43	61521.815	0.40	4.2440	0.494	11.647	mg/L	
Fe	54	1343722.504	8.54	2.7901	0.397	14.218	mg/L	
Fe	57	536341.336	3.46	2.6820	0.323	12.054	mg/L	
> Sc-1	45	154166.518	154166.52				mg/L	
Cl	35	28943.833	5411.49				mg/L	
Kr	83	68.334	5.00				mg/L	
Br	81	12730.766	5281.99				mg/L	
P	31	38856.172	30804.26				mg/L	
S	34	162280.556	37932.78				mg/L	
Sr	88	85012.574	84895.89				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		102.494			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		97.486			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		98.098			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		95.696			

Sample ID: L1104026603
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104026604 WG361210-02

Sample Date/Time: Monday, April 11, 2011 17:26:30
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 30
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18700.864	0.02				ug/L
|	Be	9	38.000	0.00	0.0855	0.013	14.920	ug/L
|	Al	27	5746215.987	38.60	1185.4622	8.920	0.752	ug/L
⌊>	Sc	45	148781.981	148781.98				ug/L
⌈	Ti	49	4147.942	0.01	7.5655	0.100	1.321	ug/L
|	V	51	21892.818	0.06	2.2415	0.038	1.707	ug/L
|	Cr	52	27608.338	0.06	2.6217	0.034	1.279	ug/L
|	Cr	53	2687.297	0.00	2.2736	0.135	5.932	ug/L
|	Mn	55	299686.345	0.94	27.3438	0.182	0.665	ug/L
|	Co	59	9266.384	0.03	1.0264	0.010	0.937	ug/L
|	Ni	60	5383.503	0.02	2.8118	0.018	0.637	ug/L
|	Cu	65	19867.916	0.06	10.0287	0.054	0.535	ug/L
|	Zn	66	80382.585	0.25	66.8241	0.167	0.249	ug/L
|>	Ge	72	317349.740	317349.74				ug/L
|	As	75	589.956	0.00	0.7070	0.020	2.882	ug/L
|	Se	77	107.334	0.00	0.2581	0.227	87.863	ug/L
|	Se	82	30.780	0.00	0.2837	0.142	49.981	ug/L
⌊	Rb	85	17842.416	0.06				mg/L
	Y	89	235365.550	9381.52				ug/L
	Rh	103	20.000	6.00				ug/L
⌈	Mo	98	341.333	0.00	0.1332	0.003	2.556	ug/L
|	Ag	107	236.338	0.00	0.0138	0.001	5.520	ug/L
|	Cd	114	131.973	0.00	0.1225	0.016	13.388	ug/L
|>	In	115	303382.943	303382.94				ug/L
|	Sn	118	397.741	0.00	0.0650	0.000	0.704	ug/L
⌊	Sb	123	78.989	0.00	0.0186	0.002	9.103	ug/L
⌈	Ba	135	23161.357	0.05	14.3946	0.157	1.092	ug/L
|	Ce	140	68373.165	0.16				ug/L
⌊>	Tb	159	430924.015	430924.01				ug/L
⌈	Ho	165	1536.939	0.00				ug/L
|	Tl	203	265.340	0.00	0.0169	0.003	17.079	ug/L
|	Tl	205	606.746	0.00	0.0212	0.002	10.971	ug/L
|	Pb	206	65097.518	0.16	9.8227	0.149	1.515	ug/L
|	Pb	207	54831.799	0.14	8.7867	0.050	0.573	ug/L
|	Pb	208	255315.800	0.64	9.2300	0.110	1.189	ug/L
|	U	238	4743.506	0.01	0.1149	0.001	0.811	ug/L
⌊>	Bi	209	395528.264	395528.26				ug/L

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⌈	Na	23	333926.986	1.90	0.0643	0.001	0.992	mg/L
|	Mg	24	3251379.400	21.85	1.0962	0.035	3.213	mg/L
|	K	39	1549575.349	8.48	0.2123	0.001	0.545	mg/L
|	Ca	43	67316.034	0.45	4.7898	0.179	3.735	mg/L
|	Fe	54	1316016.792	8.61	2.8138	0.024	0.854	mg/L
|	Fe	57	539620.495	3.59	2.7820	0.022	0.774	mg/L
⌊>	Sc-1	45	148781.981	148781.98				mg/L
	Cl	35	29758.903	6226.56				mg/L
	Kr	83	63.668	0.33				mg/L
	Br	81	11963.154	4514.38				mg/L
	P	31	34601.116	26549.21				mg/L
	S	34	165193.856	40846.08				mg/L
	Sr	88	100633.938	100517.26				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		102.222			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.899			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		99.279			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		93.410			

Sample ID: L1104026604 WG361210-02
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 11, 2011 17:33:37
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20103.527	0.03				ug/L
|	Be	9	15731.033	0.11	58.7938	1.135	1.931	ug/L
|	Al	27	271589.021	1.81	55.6798	0.564	1.013	ug/L
⌊>	Sc	45	148545.535	148545.53				ug/L
⌈	Ti	49	50502.270	0.16	93.2280	1.799	1.930	ug/L
|	V	51	410479.001	1.29	47.5373	1.723	3.624	ug/L
|	Cr	52	356083.974	1.10	47.8294	1.221	2.552	ug/L
|	Cr	53	41346.102	0.13	48.3409	0.669	1.383	ug/L
|	Mn	55	547251.509	1.73	50.1482	0.997	1.988	ug/L
|	Co	59	437303.779	1.38	49.6189	0.269	0.542	ug/L
|	Ni	60	91705.565	0.29	48.8132	0.825	1.690	ug/L
|	Cu	65	96381.896	0.30	49.1576	0.117	0.238	ug/L
|	Zn	66	59242.903	0.19	49.2024	0.165	0.336	ug/L
| >	Ge	72	316283.861	316283.86				ug/L
|	As	75	53448.642	0.17	49.3355	0.271	0.549	ug/L
|	Se	77	4619.734	0.01	52.7750	1.045	1.980	ug/L
|	Se	82	5483.398	0.02	51.0632	1.657	3.245	ug/L
⌊	Rb	85	2064.900	0.01				mg/L
	Y	89	218734.874	-7249.16				ug/L
	Rh	103	37.667	23.67				ug/L
⌈	Mo	98	284926.100	0.92	100.3774	1.008	1.004	ug/L
|	Ag	107	290962.604	0.94	48.7163	0.489	1.003	ug/L
|	Cd	114	62041.153	0.20	50.1417	0.940	1.876	ug/L
| >	In	115	309392.739	309392.74				ug/L
|	Sn	118	221047.476	0.71	50.5377	0.204	0.404	ug/L
⌊	Sb	123	190885.694	0.62	50.3104	0.708	1.407	ug/L
⌈	Ba	135	79177.686	0.18	49.5743	0.568	1.145	ug/L
|	Ce	140	46.671	0.00				ug/L
⌊>	Tb	159	427926.518	427926.52				ug/L
⌈	Ho	165	23.336	-0.00				ug/L
|	Tl	203	407105.434	1.03	50.0319	0.737	1.472	ug/L
|	Tl	205	998373.404	2.52	49.4274	1.317	2.664	ug/L
|	Pb	206	327123.563	0.82	49.4846	0.891	1.800	ug/L
|	Pb	207	308304.260	0.78	49.5755	0.806	1.625	ug/L
|	Pb	208	1382126.934	3.49	50.1222	0.567	1.131	ug/L
|	U	238	2330140.234	5.88	52.0728	0.077	0.148	ug/L
⌊>	Bi	209	396238.300	396238.30				ug/L

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Na	23	23456315.140	157.59	5.2843	0.095	1.794	mg/L	
Mg	24	15391090.899	103.61	5.2060	0.075	1.435	mg/L	
K	39	30752876.522	205.15	5.2114	0.137	2.623	mg/L	
Ca	43	74960.944	0.50	5.3482	0.308	5.755	mg/L	
Fe	54	2608696.955	17.33	5.6569	0.154	2.724	mg/L	
Fe	57	1110377.313	7.44	5.7623	0.104	1.804	mg/L	
> Sc-1	45	148545.535	148545.53				mg/L	
Cl	35	14418.387	-9113.96				mg/L	
Kr	83	60.667	-2.67				mg/L	
Br	81	8373.506	924.73				mg/L	
P	31	9673.346	1621.44				mg/L	
S	34	143966.402	19618.63				mg/L	
Sr	88	2087.094	1970.41				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	95.075				
Cr	52	95.659				
Cr	53					
Mn	55	100.296				
Co	59	99.238				
Ni	60	97.626				
Cu	65	98.315				
Zn	66	98.405				
> Ge	72		101.879			
As	75	98.671				
Se	77					
Se	82	102.126				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	97.433				
Cd	114	100.283				
> In	115		98.819			
Sn	118					
Sb	123	100.621				
Ba	135	99.149				
Ce	140					
> Tb	159		98.588			
Ho	165					
Tl	203	100.064				
Tl	205					
Pb	206					
Pb	207					
Pb	208	100.244				
U	238	104.146				
> Bi	209		93.578			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 11, 2011 17:40:43
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19936.549	0.03				ug/L
|	Be	9	10.667	-0.00	-0.0160	0.025	157.648	ug/L
|	Al	27	2350.279	-0.00	0.0215	0.069	321.802	ug/L
⌊>	Sc	45	147430.409	147430.41				ug/L
⌈	Ti	49	50.005	0.00	0.0204	0.019	93.906	ug/L
|	V	51	2717.949	0.00	0.0131	0.006	45.585	ug/L
|	Cr	52	8518.713	-0.00	-0.0009	0.014	1636.205	ug/L
|	Cr	53	266.697	-0.00	-0.6014	0.116	19.295	ug/L
|	Mn	55	1889.198	0.00	0.1160	0.007	6.464	ug/L
|	Co	59	83.668	0.00	-0.0124	0.001	4.733	ug/L
|	Ni	60	64.334	0.00	-0.0129	0.006	44.810	ug/L
|	Cu	65	96.001	-0.00	-0.0403	0.004	11.097	ug/L
|	Zn	66	387.011	-0.00	-0.4955	0.013	2.671	ug/L
|>	Ge	72	318737.708	318737.71				ug/L
|	As	75	-232.408	-0.00	-0.0462	0.057	122.315	ug/L
|	Se	77	74.000	-0.00	-0.1330	0.185	139.170	ug/L
|	Se	82	-6.267	-0.00	-0.0608	0.134	220.602	ug/L
⌊	Rb	85	22.000	-0.00				mg/L
	Y	89	219913.848	-6070.19				ug/L
	Rh	103	14.667	0.67				ug/L
⌈	Mo	98	111.390	0.00	0.0505	0.005	10.172	ug/L
|	Ag	107	45.667	-0.00	-0.0188	0.001	6.205	ug/L
|	Cd	114	-5.241	-0.00	0.0095	0.009	89.974	ug/L
|>	In	115	304703.287	304703.29				ug/L
|	Sn	118	2493.244	0.01	0.5513	0.005	0.825	ug/L
⌊	Sb	123	60.320	0.00	0.0135	0.001	10.703	ug/L
⌈	Ba	135	27.000	-0.00	0.0093	0.002	23.186	ug/L
|	Ce	140	30.003	-0.00				ug/L
⌊>	Tb	159	429878.107	429878.11				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	36.000	-0.00	-0.0113	0.001	4.889	ug/L
|	Tl	205	76.675	-0.00	-0.0051	0.001	25.122	ug/L
|	Pb	206	338.676	0.00	-0.0006	0.001	170.890	ug/L
|	Pb	207	304.674	0.00	-0.0055	0.003	47.356	ug/L
|	Pb	208	1364.383	0.00	-0.0054	0.002	40.126	ug/L
|	U	238	88.335	0.00	0.0107	0.000	0.980	ug/L
⌊>	Bi	209	393718.283	393718.28				ug/L

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Na	23	37025.511	-0.10	-0.0025	0.000	16.705	mg/L	
Mg	24	1120.175	0.00	-0.0017	0.000	1.497	mg/L	
K	39	333834.605	0.33	0.0052	0.002	35.437	mg/L	
Ca	43	200.022	0.00	-0.0016	0.002	123.064	mg/L	
Fe	54	40014.430	0.04	0.0172	0.004	24.157	mg/L	
Fe	57	6159.179	0.01	0.0069	0.002	29.282	mg/L	
> Sc-1	45	147430.409	147430.41				mg/L	
Cl	35	12806.862	-10725.48				mg/L	
Kr	83	69.001	5.67				mg/L	
Br	81	8401.529	952.75				mg/L	
P	31	8620.384	568.47				mg/L	
S	34	126264.117	1916.34				mg/L	
Sr	88	103.344	-13.33				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		102.669			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		97.321			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		99.038			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		92.983			

Sample ID: QC Std 7
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104026605S WG361210-07

Sample Date/Time: Monday, April 11, 2011 17:47:49
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 31
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20170.331	0.03				ug/L
|	Be	9	1821.499	0.01	6.5275	0.315	4.824	ug/L
|	Al	27	6374523.679	41.46	1273.2623	45.151	3.546	ug/L
⌊>	Sc	45	153756.882	153756.88				ug/L
⌈	Ti	49	5318.616	0.02	9.6367	0.659	6.838	ug/L
|	V	51	64923.978	0.19	7.1727	0.084	1.171	ug/L
|	Cr	52	64843.253	0.18	7.6479	0.135	1.768	ug/L
|	Cr	53	6973.130	0.02	7.2894	0.303	4.162	ug/L
|	Mn	55	333944.480	1.04	30.2031	0.795	2.634	ug/L
|	Co	59	55058.755	0.17	6.1516	0.121	1.974	ug/L
|	Ni	60	14954.994	0.05	7.8234	0.162	2.071	ug/L
|	Cu	65	27660.843	0.09	13.8722	0.476	3.431	ug/L
|	Zn	66	77666.916	0.24	63.9607	0.930	1.453	ug/L
| >	Ge	72	320194.139	320194.14				ug/L
|	As	75	6469.513	0.02	6.0454	0.201	3.323	ug/L
|	Se	77	608.685	0.00	6.0094	0.195	3.241	ug/L
|	Se	82	644.443	0.00	5.9270	0.203	3.432	ug/L
⌊	Rb	85	20593.395	0.06				mg/L
	Y	89	234388.645	8404.61				ug/L
	Rh	103	24.667	10.67				ug/L
⌈	Mo	98	355.032	0.00	0.1370	0.001	1.041	ug/L
|	Ag	107	29100.927	0.09	4.8999	0.096	1.965	ug/L
|	Cd	114	7051.045	0.02	5.7705	0.162	2.815	ug/L
| >	In	115	306131.652	306131.65				ug/L
|	Sn	118	560.816	0.00	0.1018	0.004	4.214	ug/L
⌊	Sb	123	1606.297	0.01	0.4252	0.008	1.786	ug/L
⌈	Ba	135	29956.125	0.07	18.7351	0.365	1.949	ug/L
|	Ce	140	65054.101	0.15				ug/L
⌊>	Tb	159	428207.253	428207.25				ug/L
⌈	Ho	165	1363.563	0.00				ug/L
|	Tl	203	42724.569	0.11	5.1344	0.196	3.813	ug/L
|	Tl	205	104968.782	0.26	5.0870	0.155	3.047	ug/L
|	Pb	206	92970.549	0.23	13.7548	0.679	4.938	ug/L
|	Pb	207	79578.953	0.20	12.5072	0.407	3.255	ug/L
|	Pb	208	373530.671	0.92	13.2434	0.472	3.567	ug/L
|	U	238	248921.332	0.62	5.4632	0.158	2.889	ug/L
⌊>	Bi	209	404102.623	404102.62				ug/L

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Na	23	345137.301	1.90	0.0644	0.002	2.929	mg/L	
Mg	24	2999358.036	19.50	0.9784	0.003	0.262	mg/L	
K	39	1883464.523	10.32	0.2589	0.001	0.398	mg/L	
Ca	43	59666.886	0.39	4.1051	0.032	0.784	mg/L	
Fe	54	1197058.445	7.55	2.4669	0.083	3.351	mg/L	
Fe	57	483256.315	3.11	2.4076	0.025	1.056	mg/L	
> Sc-1	45	153756.882	153756.88				mg/L	
Cl	35	29276.128	5743.79				mg/L	
Kr	83	67.668	4.33				mg/L	
Br	81	11509.955	4061.18				mg/L	
P	31	33134.881	25082.97				mg/L	
S	34	162432.327	38084.55				mg/L	
Sr	88	89120.984	89004.31				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		103.138			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		97.777			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		98.653			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		95.435			

Sample ID: L1104026605S WG361210-07
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104026606SD WG361210-08

Sample Date/Time: Monday, April 11, 2011 17:54:58
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 32
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19836.323	0.03				ug/L
|	Be	9	2003.534	0.01	7.1590	0.099	1.380	ug/L
|	Al	27	6314430.091	40.88	1255.2161	89.088	7.097	ug/L
⌊>	Sc	45	154298.974	154298.97				ug/L
⌈	Ti	49	4604.868	0.01	8.4370	1.169	13.854	ug/L
|	V	51	69855.843	0.21	7.8418	0.431	5.497	ug/L
|	Cr	52	70205.910	0.20	8.4976	0.565	6.652	ug/L
|	Cr	53	7263.376	0.02	7.7383	0.706	9.122	ug/L
|	Mn	55	387276.380	1.22	35.4817	1.872	5.276	ug/L
|	Co	59	61498.321	0.19	6.9609	0.424	6.094	ug/L
|	Ni	60	16949.881	0.05	8.9865	0.439	4.880	ug/L
|	Cu	65	32201.181	0.10	16.3695	0.816	4.985	ug/L
|	Zn	66	94982.594	0.30	79.4056	3.594	4.526	ug/L
| >	Ge	72	316149.924	316149.92				ug/L
|	As	75	7165.579	0.02	6.7602	0.324	4.791	ug/L
|	Se	77	678.023	0.00	6.9055	0.487	7.053	ug/L
|	Se	82	711.463	0.00	6.6260	0.235	3.554	ug/L
⌊	Rb	85	20356.939	0.06				mg/L
	Y	89	239508.305	13524.27				ug/L
	Rh	103	23.000	9.00				ug/L
⌈	Mo	98	394.071	0.00	0.1516	0.012	8.065	ug/L
|	Ag	107	31150.821	0.10	5.2708	0.247	4.682	ug/L
|	Cd	114	7917.003	0.03	6.5071	0.344	5.281	ug/L
| >	In	115	304781.153	304781.15				ug/L
|	Sn	118	421.076	0.00	0.0700	0.003	4.324	ug/L
⌊	Sb	123	4869.890	0.02	1.3003	0.065	5.002	ug/L
⌈	Ba	135	33754.652	0.08	21.1656	1.292	6.102	ug/L
|	Ce	140	73443.035	0.17				ug/L
⌊>	Tb	159	427299.378	427299.38				ug/L
⌈	Ho	165	1513.599	0.00				ug/L
|	Tl	203	50670.776	0.13	6.1122	0.209	3.421	ug/L
|	Tl	205	124652.325	0.31	6.0622	0.145	2.399	ug/L
|	Pb	206	112090.145	0.28	16.6469	0.334	2.005	ug/L
|	Pb	207	95942.202	0.24	15.1394	0.338	2.231	ug/L
|	Pb	208	446750.014	1.11	15.9020	0.339	2.134	ug/L
|	U	238	275375.749	0.68	6.0618	0.160	2.636	ug/L
⌊>	Bi	209	402615.452	402615.45				ug/L

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Na	23	367249.440	2.03	0.0689	0.003	3.887	mg/L	
Mg	24	3660627.929	23.69	1.1890	0.081	6.775	mg/L	
K	39	1702288.377	9.10	0.2281	0.005	2.119	mg/L	
Ca	43	72549.816	0.47	4.9790	0.196	3.946	mg/L	
Fe	54	1402107.053	8.85	2.8920	0.095	3.292	mg/L	
Fe	57	555275.160	3.56	2.7575	0.118	4.287	mg/L	
> Sc-1	45	154298.974	154298.97				mg/L	
Cl	35	26665.506	3133.16				mg/L	
Kr	83	66.001	2.67				mg/L	
Br	81	12241.494	4792.72				mg/L	
P	31	37367.734	29315.82				mg/L	
S	34	166603.436	42255.66				mg/L	
Sr	88	108594.730	108478.05				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		101.836			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		97.346			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		98.444			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		95.084			

Sample ID: L1104026606SD WG361210-08
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1104026606SD WG361210-08
Report Date/Time: Monday, April 11, 2011 17:57:11
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Method 6020 - Summary Report

Sample ID: L1104026607

Sample Date/Time: Monday, April 11, 2011 18:02:06
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 33
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20821.675	0.03				ug/L
|	Be	9	42.667	0.00	0.0998	0.048	48.406	ug/L
|	Al	27	7389022.870	48.37	1485.3695	37.865	2.549	ug/L
⌊>	Sc	45	152724.824	152724.82				ug/L
⌈	Ti	49	5905.669	0.02	10.7225	0.547	5.102	ug/L
|	V	51	25185.957	0.07	2.6023	0.066	2.540	ug/L
|	Cr	52	29005.675	0.06	2.7839	0.174	6.233	ug/L
|	Cr	53	2623.941	0.00	2.1762	0.199	9.127	ug/L
|	Mn	55	463179.997	1.45	41.9766	1.680	4.003	ug/L
|	Co	59	9442.888	0.03	1.0385	0.043	4.139	ug/L
|	Ni	60	5527.252	0.02	2.8664	0.171	5.978	ug/L
|	Cu	65	17284.451	0.05	8.6470	0.395	4.565	ug/L
|	Zn	66	71662.740	0.22	59.0369	1.957	3.315	ug/L
| >	Ge	72	319750.280	319750.28				ug/L
|	As	75	548.709	0.00	0.6655	0.010	1.539	ug/L
|	Se	77	93.334	0.00	0.0872	0.062	70.910	ug/L
|	Se	82	31.461	0.00	0.2873	0.087	30.285	ug/L
⌊	Rb	85	24362.246	0.08				mg/L
	Y	89	233692.515	7708.48				ug/L
	Rh	103	23.667	9.67				ug/L
⌈	Mo	98	280.659	0.00	0.1126	0.007	6.521	ug/L
|	Ag	107	201.337	0.00	0.0082	0.003	41.268	ug/L
|	Cd	114	98.365	0.00	0.0958	0.005	5.544	ug/L
| >	In	115	299900.206	299900.21				ug/L
|	Sn	118	349.606	0.00	0.0547	0.003	5.865	ug/L
⌊	Sb	123	78.320	0.00	0.0187	0.002	9.460	ug/L
⌈	Ba	135	24910.585	0.06	15.8884	0.618	3.891	ug/L
|	Ce	140	68457.026	0.16				ug/L
⌊>	Tb	159	420042.812	420042.81				ug/L
⌈	Ho	165	1446.916	0.00				ug/L
|	Tl	203	478.683	0.00	0.0436	0.005	10.485	ug/L
|	Tl	205	1126.843	0.00	0.0474	0.005	11.025	ug/L
|	Pb	206	54086.885	0.14	8.2076	0.415	5.055	ug/L
|	Pb	207	45502.545	0.12	7.3325	0.421	5.736	ug/L
|	Pb	208	214301.825	0.54	7.7910	0.375	4.817	ug/L
|	U	238	4336.985	0.01	0.1064	0.006	5.363	ug/L
⌊>	Bi	209	393011.766	393011.77				ug/L

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⌈	Na	23	359036.168	2.00	0.0680	0.007	10.297	mg/L
|	Mg	24	3277774.719	21.47	1.0772	0.065	6.040	mg/L
|	K	39	1982850.890	11.05	0.2777	0.012	4.147	mg/L
|	Ca	43	73426.066	0.48	5.0905	0.047	0.929	mg/L
|	Fe	54	1347791.635	8.60	2.8090	0.143	5.078	mg/L
|	Fe	57	567575.701	3.68	2.8520	0.125	4.369	mg/L
⌊>	Sc-1	45	152724.824	152724.82				mg/L
	Cl	35	23067.911	-464.43				mg/L
	Kr	83	62.001	-1.33				mg/L
	Br	81	11825.667	4376.89				mg/L
	P	31	41822.774	33770.86				mg/L
	S	34	160489.225	36141.45				mg/L
	Sr	88	129928.925	129812.25				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		102.995			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		95.787			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		96.772			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		92.816			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104026608

Sample Date/Time: Monday, April 11, 2011 18:09:15
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 34
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20354.161	0.03				ug/L
|	Be	9	38.667	0.00	0.0833	0.006	6.627	ug/L
|	Al	27	5929233.930	38.55	1183.9183	97.870	8.267	ug/L
⌊>	Sc	45	153656.075	153656.07				ug/L
⌈	Ti	49	4121.269	0.01	7.5702	0.952	12.572	ug/L
|	V	51	21371.705	0.06	2.1980	0.056	2.545	ug/L
|	Cr	52	26068.862	0.06	2.4353	0.038	1.540	ug/L
|	Cr	53	2293.826	0.00	1.8250	0.081	4.442	ug/L
|	Mn	55	342014.134	1.08	31.4296	0.621	1.976	ug/L
|	Co	59	8288.184	0.03	0.9221	0.019	2.008	ug/L
|	Ni	60	5078.340	0.02	2.6680	0.045	1.700	ug/L
|	Cu	65	16808.285	0.05	8.5287	0.101	1.190	ug/L
|	Zn	66	72347.168	0.23	60.4794	0.586	0.969	ug/L
|>	Ge	72	315195.967	315195.97				ug/L
|	As	75	477.864	0.00	0.6074	0.020	3.306	ug/L
|	Se	77	86.667	0.00	0.0262	0.197	752.823	ug/L
|	Se	82	27.429	0.00	0.2542	0.051	20.157	ug/L
⌊	Rb	85	19727.308	0.06				mg/L
	Y	89	229711.410	3727.38				ug/L
	Rh	103	18.334	4.33				ug/L
⌈	Mo	98	303.213	0.00	0.1199	0.009	7.520	ug/L
|	Ag	107	179.670	0.00	0.0042	0.002	56.339	ug/L
|	Cd	114	98.393	0.00	0.0953	0.021	21.963	ug/L
|>	In	115	302330.664	302330.66				ug/L
|	Sn	118	462.277	0.00	0.0804	0.001	1.232	ug/L
⌊	Sb	123	66.448	0.00	0.0153	0.002	12.865	ug/L
⌈	Ba	135	27223.948	0.06	17.2903	0.352	2.037	ug/L
|	Ce	140	60186.735	0.14				ug/L
⌊>	Tb	159	421757.567	421757.57				ug/L
⌈	Ho	165	1313.551	0.00				ug/L
|	Tl	203	358.010	0.00	0.0280	0.003	10.990	ug/L
|	Tl	205	856.789	0.00	0.0333	0.004	10.764	ug/L
|	Pb	206	51160.423	0.13	7.6543	0.223	2.913	ug/L
|	Pb	207	43542.042	0.11	6.9174	0.159	2.303	ug/L
|	Pb	208	202590.756	0.51	7.2609	0.104	1.435	ug/L
|	U	238	4501.391	0.01	0.1087	0.003	2.317	ug/L
⌊>	Bi	209	398317.031	398317.03				ug/L

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⌈	Na	23	401740.951	2.27	0.0768	0.004	5.293	mg/L
|	Mg	24	2894128.989	18.84	0.9453	0.034	3.559	mg/L
|	K	39	1848221.660	10.10	0.2535	0.009	3.608	mg/L
|	Ca	43	70706.380	0.46	4.8717	0.056	1.140	mg/L
|	Fe	54	1209593.594	7.65	2.4991	0.116	4.623	mg/L
|	Fe	57	484411.583	3.12	2.4169	0.085	3.499	mg/L
⌊>	Sc-1	45	153656.075	153656.07				mg/L
	Cl	35	24245.363	713.02				mg/L
	Kr	83	65.668	2.33				mg/L
	Br	81	11702.851	4254.08				mg/L
	P	31	36782.878	28730.97				mg/L
	S	34	164196.500	39848.73				mg/L
	Sr	88	122396.930	122280.25				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		101.528			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.563			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.167			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		94.069			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1104026608
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104026609

Sample Date/Time: Monday, April 11, 2011 18:16:22
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 35
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19034.798	0.03				ug/L
|	Be	9	43.333	0.00	0.1080	0.043	39.397	ug/L
|	Al	27	6223854.250	42.20	1295.7418	18.925	1.461	ug/L
⌊>	Sc	45	147430.107	147430.11				ug/L
⌈	Ti	49	5432.025	0.02	9.9256	0.923	9.296	ug/L
|	V	51	21344.749	0.06	2.1759	0.114	5.254	ug/L
|	Cr	52	25609.026	0.05	2.3450	0.124	5.279	ug/L
|	Cr	53	2253.815	0.00	1.7586	0.362	20.599	ug/L
|	Mn	55	260755.461	0.82	23.7664	0.759	3.195	ug/L
|	Co	59	7707.049	0.02	0.8494	0.039	4.536	ug/L
|	Ni	60	5061.332	0.02	2.6384	0.097	3.674	ug/L
|	Cu	65	13270.603	0.04	6.6637	0.200	2.997	ug/L
|	Zn	66	58041.552	0.18	47.9854	0.850	1.771	ug/L
|>	Ge	72	317619.185	317619.19				ug/L
|	As	75	451.496	0.00	0.5797	0.020	3.473	ug/L
|	Se	77	88.667	0.00	0.0414	0.221	534.599	ug/L
|	Se	82	30.856	0.00	0.2839	0.021	7.459	ug/L
⌊	Rb	85	19362.593	0.06				mg/L
	Y	89	230833.398	4849.36				ug/L
	Rh	103	21.000	7.00				ug/L
⌈	Mo	98	251.398	0.00	0.1011	0.003	2.771	ug/L
|	Ag	107	146.336	0.00	-0.0015	0.001	36.004	ug/L
|	Cd	114	78.854	0.00	0.0789	0.010	12.858	ug/L
|>	In	115	302771.854	302771.85				ug/L
|	Sn	118	250.536	0.00	0.0307	0.003	8.211	ug/L
⌊	Sb	123	45.613	0.00	0.0097	0.002	16.886	ug/L
⌈	Ba	135	28335.723	0.07	17.8305	0.316	1.772	ug/L
|	Ce	140	58768.125	0.14				ug/L
⌊>	Tb	159	425595.160	425595.16				ug/L
⌈	Ho	165	1210.194	0.00				ug/L
|	Tl	203	268.673	0.00	0.0169	0.001	3.177	ug/L
|	Tl	205	603.412	0.00	0.0207	0.004	18.796	ug/L
|	Pb	206	41763.120	0.10	6.2148	0.095	1.530	ug/L
|	Pb	207	35114.900	0.09	5.5469	0.081	1.469	ug/L
|	Pb	208	165712.628	0.41	5.9066	0.116	1.957	ug/L
|	U	238	3571.340	0.01	0.0878	0.002	1.896	ug/L
⌊>	Bi	209	399798.706	399798.71				ug/L

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Na	23	310562.062	1.76	0.0597	0.003	5.213	mg/L	
Mg	24	2727897.916	18.50	0.9281	0.043	4.587	mg/L	
K	39	1874471.277	10.79	0.2709	0.005	1.881	mg/L	
Ca	43	64681.935	0.44	4.6431	0.022	0.477	mg/L	
Fe	54	1123018.195	7.39	2.4148	0.069	2.838	mg/L	
Fe	57	453973.621	3.04	2.3569	0.049	2.086	mg/L	
> Sc-1	45	147430.107	147430.11				mg/L	
Cl	35	20696.733	-2835.61				mg/L	
Kr	83	55.001	-8.33				mg/L	
Br	81	9954.291	2505.52				mg/L	
P	31	29698.125	21646.21				mg/L	
S	34	158417.467	34069.69				mg/L	
Sr	88	106804.908	106688.23				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		102.309			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		96.704			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		98.051			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		94.419			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104026610

Sample Date/Time: Monday, April 11, 2011 18:23:28
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 36
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18834.463	0.02				ug/L
|	Be	9	32.000	0.00	0.0610	0.016	25.732	ug/L
|	Al	27	5221050.291	34.55	1060.9909	9.981	0.941	ug/L
⌊>	Sc	45	150999.207	150999.21				ug/L
⌈	Ti	49	3587.670	0.01	6.5286	0.348	5.327	ug/L
|	V	51	20222.023	0.06	2.0453	0.095	4.669	ug/L
|	Cr	52	26009.731	0.06	2.3993	0.151	6.298	ug/L
|	Cr	53	2293.827	0.00	1.8033	0.178	9.847	ug/L
|	Mn	55	300891.347	0.94	27.4312	1.536	5.600	ug/L
|	Co	59	8203.113	0.03	0.9052	0.022	2.447	ug/L
|	Ni	60	4945.607	0.02	2.5770	0.137	5.321	ug/L
|	Cu	65	17874.855	0.06	9.0076	0.713	7.910	ug/L
|	Zn	66	74074.314	0.23	61.4607	2.888	4.699	ug/L
|>	Ge	72	317729.120	317729.12				ug/L
|	As	75	513.590	0.00	0.6366	0.060	9.463	ug/L
|	Se	77	94.000	0.00	0.1027	0.110	107.278	ug/L
|	Se	82	21.061	0.00	0.1930	0.120	62.339	ug/L
⌊	Rb	85	16565.549	0.05				mg/L
	Y	89	233426.342	7442.31				ug/L
	Rh	103	22.334	8.33				ug/L
⌈	Mo	98	306.583	0.00	0.1214	0.008	6.383	ug/L
|	Ag	107	309.341	0.00	0.0265	0.002	8.671	ug/L
|	Cd	114	121.035	0.00	0.1140	0.020	17.236	ug/L
|>	In	115	301763.977	301763.98				ug/L
|	Sn	118	349.339	0.00	0.0541	0.008	14.025	ug/L
⌊	Sb	123	98.279	0.00	0.0239	0.001	3.278	ug/L
⌈	Ba	135	20521.613	0.05	12.9632	0.708	5.462	ug/L
|	Ce	140	57698.620	0.14				ug/L
⌊>	Tb	159	423953.106	423953.11				ug/L
⌈	Ho	165	1210.195	0.00				ug/L
|	Tl	203	265.673	0.00	0.0162	0.002	13.872	ug/L
|	Tl	205	576.741	0.00	0.0190	0.003	16.151	ug/L
|	Pb	206	58813.259	0.14	8.6586	0.466	5.381	ug/L
|	Pb	207	49533.401	0.12	7.7444	0.456	5.885	ug/L
|	Pb	208	234053.312	0.57	8.2560	0.439	5.317	ug/L
|	U	238	3626.364	0.01	0.0880	0.008	8.786	ug/L
⌊>	Bi	209	405179.910	405179.91				ug/L

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⌈	Na	23	311052.265	1.71	0.0581	0.002	2.821	mg/L
|	Mg	24	3242067.290	21.46	1.0768	0.013	1.199	mg/L
|	K	39	1454660.291	7.70	0.1924	0.004	1.932	mg/L
|	Ca	43	56642.763	0.37	3.9651	0.119	2.996	mg/L
|	Fe	54	1184857.629	7.61	2.4866	0.060	2.423	mg/L
|	Fe	57	471459.580	3.09	2.3919	0.057	2.379	mg/L
⌊>	Sc-1	45	150999.207	150999.21				mg/L
	Cl	35	22953.647	-578.70				mg/L
	Kr	83	69.668	6.33				mg/L
	Br	81	12312.245	4863.47				mg/L
	P	31	35460.349	27408.44				mg/L
	S	34	164967.721	40619.95				mg/L
	Sr	88	74662.044	74545.37				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		102.344			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		96.382			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		97.673			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		95.690			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, April 11, 2011 18:30:35
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19535.815	0.04				ug/L
|	Be	9	14.000	-0.00	0.0012	0.023	1938.380	ug/L
|	Al	27	21666537.552	159.64	4902.0567	286.961	5.854	ug/L
⌊>	Sc	45	135765.612	135765.61				ug/L
⌈	Ti	49	44630.568	0.15	88.0541	2.958	3.360	ug/L
|	V	51	2250.307	-0.00	-0.0210	0.012	55.606	ug/L
|	Cr	52	8155.741	0.00	0.0357	0.041	114.464	ug/L
|	Cr	53	793.444	-0.00	0.0937	0.061	65.001	ug/L
|	Mn	55	2860.771	0.01	0.2246	0.009	4.147	ug/L
|	Co	59	1594.143	0.01	0.1716	0.005	2.888	ug/L
|	Ni	60	760.704	0.00	0.3866	0.061	15.809	ug/L
|	Cu	65	679.030	0.00	0.2820	0.020	7.020	ug/L
|	Zn	66	760.703	0.00	-0.1332	0.009	6.552	ug/L
|>	Ge	72	295925.707	295925.71				ug/L
|	As	75	-211.770	-0.00	-0.0420	0.030	70.172	ug/L
|	Se	77	132.668	0.00	0.6620	0.156	23.580	ug/L
|	Se	82	-4.545	-0.00	-0.0477	0.011	23.182	ug/L
⌊	Rb	85	1832.853	0.01				mg/L
	Y	89	197895.479	-28088.56				ug/L
	Rh	103	20.000	6.00				ug/L
⌈	Mo	98	261150.420	0.93	101.6573	1.718	1.690	ug/L
|	Ag	107	84.001	-0.00	-0.0110	0.001	8.299	ug/L
|	Cd	114	40.698	0.00	0.0501	0.045	90.839	ug/L
|>	In	115	280026.997	280027.00				ug/L
|	Sn	118	114.801	-0.00	0.0012	0.002	159.520	ug/L
⌊	Sb	123	148.532	0.00	0.0406	0.002	5.683	ug/L
⌈	Ba	135	74.334	0.00	0.0419	0.010	24.859	ug/L
|	Ce	140	183.353	0.00				ug/L
⌊>	Tb	159	402539.399	402539.40				ug/L
⌈	Ho	165	20.002	-0.00				ug/L
|	Tl	203	77.001	0.00	-0.0058	0.003	50.735	ug/L
|	Tl	205	180.020	0.00	0.0004	0.003	581.777	ug/L
|	Pb	206	396.012	0.00	0.0109	0.005	42.431	ug/L
|	Pb	207	360.343	0.00	0.0062	0.003	44.058	ug/L
|	Pb	208	1650.404	0.00	0.0077	0.002	26.189	ug/L
|	U	238	18.000	-0.00	0.0091	0.000	1.204	ug/L
⌊>	Bi	209	376631.662	376631.66				ug/L

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Na	23	53462377.779	393.49	13.1929	0.219	1.660	mg/L	
Mg	24	14406252.695	106.12	5.3322	0.082	1.532	mg/L	
K	39	27463055.704	200.41	5.0910	0.174	3.418	mg/L	
Ca	43	193129.948	1.42	15.0996	0.548	3.628	mg/L	
Fe	54	6068873.137	44.49	14.5176	0.654	4.503	mg/L	
Fe	57	2545570.996	18.73	14.4979	0.877	6.047	mg/L	
> Sc-1	45	135765.612	135765.61				mg/L	
Cl	35	1401402.454	1377870.11				mg/L	
Kr	83	62.667	-0.67				mg/L	
Br	81	8119.963	671.19				mg/L	
P	31	1368465.192	1360413.28				mg/L	
S	34	253082.829	128735.05				mg/L	
Sr	88	8624.580	8507.90				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		95.321			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		89.439			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		92.739			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		88.947			

Sample ID: QC Std 4
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 4
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, April 11, 2011 18:37:43
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18483.734	0.05				ug/L
|	Be	9	28608.866	0.24	133.1243	1.202	0.903	ug/L
|	Al	27	18409788.615	154.25	4736.5825	211.111	4.457	ug/L
⌊>	Sc	45	119358.174	119358.17				ug/L
⌈	Ti	49	39726.150	0.16	90.7534	3.295	3.630	ug/L
|	V	51	623124.645	2.43	89.5816	0.888	0.991	ug/L
|	Cr	52	561085.041	2.17	94.3855	0.602	0.638	ug/L
|	Cr	53	101014.544	0.39	148.0628	4.635	3.131	ug/L
|	Mn	55	890212.628	3.48	101.0328	1.310	1.297	ug/L
|	Co	59	713502.498	2.79	100.2325	1.578	1.574	ug/L
|	Ni	60	154395.828	0.60	101.7842	2.332	2.291	ug/L
|	Cu	65	157922.509	0.62	99.7931	1.103	1.106	ug/L
|	Zn	66	94652.252	0.37	98.1042	1.862	1.898	ug/L
|>	Ge	72	255523.057	255523.06				ug/L
|	As	75	82763.681	0.32	94.4099	1.862	1.972	ug/L
|	Se	77	9290.981	0.04	132.8307	0.968	0.729	ug/L
|	Se	82	8203.682	0.03	94.5701	0.709	0.750	ug/L
⌊	Rb	85	1454.120	0.01				mg/L
	Y	89	159941.504	-66042.53				ug/L
	Rh	103	56.667	42.67				ug/L
⌈	Mo	98	207084.322	0.85	93.0206	1.672	1.797	ug/L
|	Ag	107	442030.878	1.82	94.3787	0.431	0.456	ug/L
|	Cd	114	99391.166	0.41	102.3904	0.584	0.571	ug/L
|>	In	115	242677.510	242677.51				ug/L
|	Sn	118	296.538	0.00	0.0587	0.006	9.383	ug/L
⌊	Sb	123	305685.995	1.26	102.7204	1.363	1.327	ug/L
⌈	Ba	135	126311.024	0.33	88.0058	1.541	1.751	ug/L
|	Ce	140	243.361	0.00				ug/L
⌊>	Tb	159	384589.850	384589.85				ug/L
⌈	Ho	165	20.002	-0.00				ug/L
|	Tl	203	739113.351	2.02	98.2719	2.287	2.327	ug/L
|	Tl	205	1818702.692	4.97	97.4099	3.394	3.484	ug/L
|	Pb	206	619402.735	1.69	101.4050	1.428	1.408	ug/L
|	Pb	207	548929.475	1.50	95.5264	1.237	1.295	ug/L
|	Pb	208	2532059.223	6.91	99.3802	0.841	0.846	ug/L
|	U	238	4285841.402	11.70	103.6058	1.082	1.044	ug/L
⌊>	Bi	209	366284.774	366284.77				ug/L

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Na	23	44340973.769	371.22	12.4465	0.340	2.732	mg/L	
Mg	24	12199238.558	102.22	5.1363	0.131	2.556	mg/L	
K	39	23672032.949	196.42	4.9895	0.070	1.412	mg/L	
Ca	43	164634.453	1.38	14.6323	0.200	1.366	mg/L	
Fe	54	5230066.675	43.59	14.2235	0.237	1.663	mg/L	
Fe	57	2269700.595	18.99	14.6988	0.543	3.692	mg/L	
> Sc-1	45	119358.174	119358.17				mg/L	
Cl	35	49877137.523	49853605.18				mg/L	
Kr	83	54.667	-8.67				mg/L	
Br	81	9417.767	1968.99				mg/L	
P	31	1112539.795	1104487.88				mg/L	
S	34	212045.175	87697.40				mg/L	
Sr	88	6706.254	6589.57				mg/L	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	6					
	Be	9					
	Al	27					
>	Sc	45					
	Ti	49					
	V	51	89.582				
	Cr	52	94.385				
	Cr	53					
	Mn	55	101.033				
	Co	59	100.233				
	Ni	60	101.784				
	Cu	65	99.793				
	Zn	66	98.104				
>	Ge	72		82.307			
	As	75	94.410				
	Se	77					
	Se	82	94.570				
	Rb	85					
	Y	89					
	Rh	103					
	Mo	98					
	Ag	107	94.379				
	Cd	114	102.390				
>	In	115		77.510			
	Sn	118					
	Sb	123	102.720				
	Ba	135	88.006				
	Ce	140					
>	Tb	159		88.604			
	Ho	165					
	Tl	203	98.272				
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208	99.380				
	U	238	103.606				
>	Bi	209		86.504			

Sample ID: QC Std 5
Report Date/Time: Monday, April 11, 2011 18:39:57
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
In 115 Int Std for QC S	In	115	Rerun for AFCEE QC

Sample ID: QC Std 5
Report Date/Time: Monday, April 11, 2011 18:39:57

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 11, 2011 18:44:51
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19318.776	0.03				ug/L
|	Be	9	15380.490	0.11	58.8571	2.056	3.493	ug/L
|	Al	27	251303.461	1.71	52.7090	0.870	1.651	ug/L
⌊>	Sc	45	145129.565	145129.57				ug/L
⌈	Ti	49	44811.325	0.15	86.9285	1.509	1.736	ug/L
|	V	51	380067.867	1.25	46.2408	0.631	1.365	ug/L
|	Cr	52	335095.437	1.09	47.2821	0.254	0.536	ug/L
|	Cr	53	42126.220	0.14	51.8152	2.332	4.500	ug/L
|	Mn	55	521129.298	1.73	50.1801	0.444	0.885	ug/L
|	Co	59	411983.444	1.37	49.1227	0.750	1.527	ug/L
|	Ni	60	87749.535	0.29	49.0823	0.183	0.373	ug/L
|	Cu	65	92097.432	0.31	49.3645	0.723	1.464	ug/L
|	Zn	66	57019.696	0.19	49.7736	0.655	1.316	ug/L
|>	Ge	72	300976.254	300976.25				ug/L
|	As	75	49997.314	0.17	48.5028	0.457	0.941	ug/L
|	Se	77	4312.264	0.01	51.7523	2.425	4.686	ug/L
|	Se	82	5112.249	0.02	50.0337	1.056	2.110	ug/L
⌊	Rb	85	1960.212	0.01				mg/L
	Y	89	203279.015	-22705.02				ug/L
	Rh	103	40.334	26.33				ug/L
⌈	Mo	98	262440.467	0.90	98.4043	1.862	1.893	ug/L
|	Ag	107	269980.658	0.93	48.1091	0.806	1.676	ug/L
|	Cd	114	58709.404	0.20	50.5024	1.139	2.256	ug/L
|>	In	115	290738.059	290738.06				ug/L
|	Sn	118	208525.809	0.72	50.7415	0.967	1.906	ug/L
⌊	Sb	123	181904.294	0.63	51.0212	0.764	1.498	ug/L
⌈	Ba	135	75422.130	0.18	48.4459	0.834	1.721	ug/L
|	Ce	140	43.338	-0.00				ug/L
⌊>	Tb	159	417117.318	417117.32				ug/L
⌈	Ho	165	26.669	-0.00				ug/L
|	Tl	203	398395.306	1.03	50.1702	0.540	1.076	ug/L
|	Tl	205	988220.828	2.56	50.1319	0.525	1.048	ug/L
|	Pb	206	325185.249	0.84	50.4071	0.836	1.658	ug/L
|	Pb	207	305690.535	0.79	50.3714	0.719	1.427	ug/L
|	Pb	208	1363090.431	3.52	50.6552	0.411	0.812	ug/L
|	U	238	2337321.198	6.05	53.5306	0.357	0.668	ug/L
⌊>	Bi	209	386643.408	386643.41				ug/L

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Na	23	22186440.089	152.56	5.1157	0.062	1.211	mg/L	
Mg	24	14609556.093	100.72	5.0605	0.150	2.961	mg/L	
K	39	27906486.702	190.49	4.8389	0.170	3.515	mg/L	
Ca	43	68977.392	0.47	5.0326	0.042	0.827	mg/L	
Fe	54	2409840.937	16.38	5.3484	0.206	3.844	mg/L	
Fe	57	1025053.196	7.03	5.4434	0.075	1.383	mg/L	
> Sc-1	45	145129.565	145129.57				mg/L	
Cl	35	42210.420	18678.08				mg/L	
Kr	83	54.001	-9.33				mg/L	
Br	81	7935.825	487.05				mg/L	
P	31	8015.262	-36.65				mg/L	
S	34	130569.966	6222.19				mg/L	
Sr	88	1990.398	1873.72				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	92.482				
Cr	52	94.564				
Cr	53					
Mn	55	100.360				
Co	59	98.245				
Ni	60	98.165				
Cu	65	98.729				
Zn	66	99.547				
> Ge	72		96.948			
As	75	97.006				
Se	77					
Se	82	100.067				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	96.218				
Cd	114	101.005				
> In	115		92.861			
Sn	118					
Sb	123	102.042				
Ba	135	96.892				
Ce	140					
> Tb	159		96.098			
Ho	165					
Tl	203	100.340				
Tl	205					
Pb	206					
Pb	207					
Pb	208	101.310				
U	238	107.061				
> Bi	209		91.312			

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 18:47:04

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 18:47:04
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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 11, 2011 18:51:57
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

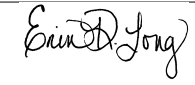
Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18851.104	0.03				ug/L
|	Be	9	14.000	-0.00	-0.0023	0.023	993.016	ug/L
|	Al	27	2567.004	0.00	0.0702	0.075	106.643	ug/L
|>	Sc	45	145588.233	145588.23				ug/L
⌈	Ti	49	93.343	0.00	0.1095	0.067	61.028	ug/L
|	V	51	2361.082	-0.00	-0.0120	0.008	65.809	ug/L
|	Cr	52	7921.549	-0.00	-0.0181	0.011	61.175	ug/L
|	Cr	53	2057.085	0.00	1.6583	0.254	15.328	ug/L
|	Mn	55	1853.190	0.00	0.1227	0.003	2.753	ug/L
|	Co	59	83.001	0.00	-0.0119	0.000	3.285	ug/L
|	Ni	60	69.001	0.00	-0.0082	0.001	9.156	ug/L
|	Cu	65	82.668	-0.00	-0.0446	0.002	4.042	ug/L
|	Zn	66	375.011	-0.00	-0.4869	0.014	2.828	ug/L
|>	Ge	72	300877.413	300877.41				ug/L
|	As	75	-174.029	0.00	-0.0023	0.051	2240.579	ug/L
|	Se	77	94.667	0.00	0.1717	0.177	103.342	ug/L
|	Se	82	-4.568	-0.00	-0.0474	0.131	275.572	ug/L
⌊	Rb	85	23.667	0.00				mg/L
	Y	89	204966.351	-21017.68				ug/L
	Rh	103	11.000	-3.00				ug/L
⌈	Mo	98	122.061	0.00	0.0564	0.007	12.666	ug/L
|	Ag	107	43.001	-0.00	-0.0189	0.000	2.494	ug/L
|	Cd	114	-2.294	-0.00	0.0118	0.004	32.288	ug/L
|>	In	115	290428.018	290428.02				ug/L
|	Sn	118	2414.158	0.01	0.5605	0.010	1.854	ug/L
⌊	Sb	123	175.532	0.00	0.0467	0.003	6.517	ug/L
⌈	Ba	135	25.000	-0.00	0.0086	0.005	59.974	ug/L
|	Ce	140	3.334	-0.00				ug/L
|>	Tb	159	415105.603	415105.60				ug/L
⌈	Ho	165	33.337	0.00				ug/L
|	Tl	203	67.334	0.00	-0.0073	0.000	3.001	ug/L
|	Tl	205	153.350	0.00	-0.0012	0.003	257.964	ug/L
|	Pb	206	351.343	0.00	0.0022	0.003	118.126	ug/L
|	Pb	207	283.340	-0.00	-0.0082	0.004	50.206	ug/L
|	Pb	208	1350.049	0.00	-0.0052	0.001	19.880	ug/L
|	U	238	122.669	0.00	0.0115	0.000	1.537	ug/L
|>	Bi	209	387820.129	387820.13				ug/L

Sample ID: QC Std 7
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⌈	Na	23	37025.481	-0.09	-0.0024	0.001	30.075	mg/L
|	Mg	24	1153.516	0.00	-0.0017	0.000	3.154	mg/L
|	K	39	313908.724	0.23	0.0025	0.004	147.016	mg/L
|	Ca	43	183.353	0.00	-0.0028	0.003	105.747	mg/L
|	Fe	54	37367.413	0.02	0.0124	0.004	32.223	mg/L
|	Fe	57	5718.873	0.01	0.0050	0.002	44.710	mg/L
⌊>	Sc-1	45	145588.233	145588.23				mg/L
	Cl	35	24427.141	894.80				mg/L
	Kr	83	65.334	2.00				mg/L
	Br	81	8244.736	795.96				mg/L
	P	31	7075.838	-976.07				mg/L
	S	34	120411.138	-3936.64				mg/L
	Sr	88	96.677	-20.00				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		96.916			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		92.761			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		95.634			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		91.590			

Sample ID: QC Std 7
Report Date/Time: Monday, April 11, 2011 18:54:09

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Monday, April 11, 2011 18:54:09

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, April 11, 2011 18:59:05
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 9
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	18300.352	0.02				ug/L
|	Be	9	14.667	-0.00	-0.0009	0.025	2783.876	ug/L
|	Al	27	2100.224	-0.00	-0.0332	0.062	185.456	ug/L
|>	Sc	45	147852.061	147852.06				ug/L
⌈	Ti	49	100.011	0.00	0.1145	0.020	17.162	ug/L
|	V	51	5677.389	0.01	0.3642	0.007	1.812	ug/L
|	Cr	52	14228.257	0.02	0.8052	0.011	1.324	ug/L
|	Cr	53	2187.126	0.00	1.7062	0.306	17.956	ug/L
|	Mn	55	5717.025	0.01	0.4715	0.003	0.677	ug/L
|	Co	59	3538.995	0.01	0.3822	0.002	0.490	ug/L
|	Ni	60	3008.149	0.01	1.5652	0.004	0.261	ug/L
|	Cu	65	1683.825	0.00	0.7766	0.044	5.695	ug/L
|	Zn	66	7650.336	0.02	5.6776	0.115	2.033	ug/L
|>	Ge	72	314451.271	314451.27				ug/L
|	As	75	273.605	0.00	0.4198	0.069	16.528	ug/L
|	Se	77	120.667	0.00	0.4258	0.215	50.446	ug/L
|	Se	82	57.850	0.00	0.5406	0.163	30.082	ug/L
⌊	Rb	85	20.667	-0.00				mg/L
	Y	89	214041.597	-11942.44				ug/L
	Rh	103	14.333	0.33				ug/L
⌈	Mo	98	62.905	0.00	0.0334	0.001	1.893	ug/L
|	Ag	107	2367.637	0.01	0.3816	0.002	0.471	ug/L
|	Cd	114	235.394	0.00	0.2096	0.006	3.088	ug/L
|>	In	115	300608.995	300608.99				ug/L
|	Sn	118	143.334	-0.00	0.0059	0.002	29.843	ug/L
⌊	Sb	123	1609.008	0.01	0.4339	0.015	3.472	ug/L
⌈	Ba	135	1213.086	0.00	0.7499	0.010	1.343	ug/L
|	Ce	140	23.336	-0.00				ug/L
|>	Tb	159	429182.260	429182.26				ug/L
⌈	Ho	165	13.335	-0.00				ug/L
|	Tl	203	715.033	0.00	0.0719	0.001	0.921	ug/L
|	Tl	205	1777.003	0.00	0.0789	0.010	12.627	ug/L
|	Pb	206	2972.138	0.01	0.3970	0.009	2.364	ug/L
|	Pb	207	2790.751	0.01	0.3934	0.012	2.976	ug/L
|	Pb	208	12467.871	0.03	0.3964	0.006	1.510	ug/L
|	U	238	18392.754	0.05	0.4189	0.010	2.482	ug/L
|>	Bi	209	396997.828	396997.83				ug/L

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Na	23	13043.140	-0.26	-0.0080	0.000	1.314	mg/L	
Mg	24	353.375	-0.00	-0.0020	0.000	0.637	mg/L	
K	39	317253.668	0.21	0.0021	0.003	120.946	mg/L	
Ca	43	216.691	0.00	-0.0005	0.004	953.089	mg/L	
Fe	54	36757.793	0.02	0.0096	0.003	27.810	mg/L	
Fe	57	6025.755	0.01	0.0061	0.003	43.173	mg/L	
> Sc-1	45	147852.061	147852.06				mg/L	
Cl	35	18718.195	-4814.15				mg/L	
Kr	83	55.667	-7.67				mg/L	
Br	81	8562.998	1114.22				mg/L	
P	31	7728.992	-322.92				mg/L	
S	34	115572.121	-8775.65				mg/L	
Sr	88	100.011	-16.67				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	91.061				
Cr	52	100.650				
Cr	53					
Mn	55	94.307				
Co	59	95.556				
Ni	60	97.823				
Cu	65	97.073				
Zn	66	90.841				
> Ge	72		101.288			
As	75	104.950				
Se	77					
Se	82	135.154				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	95.410				
Cd	114	104.782				
> In	115		96.013			
Sn	118					
Sb	123	108.482				
Ba	135	99.989				
Ce	140					
> Tb	159		98.877			
Ho	165					
Tl	203	89.912				
Tl	205					
Pb	206					
Pb	207					
Pb	208	99.106				
U	238	104.722				
> Bi	209		93.757			

Sample ID: QC Std 8
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 8	Se	82	LLCCV IS OUT OF LIMITS (+/-20%)

Sample ID: QC Std 8
Report Date/Time: Monday, April 11, 2011 19:01:19
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: PBW 25 WG361305-02

Sample Date/Time: Monday, April 11, 2011 19:06:13
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 37
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20120.222	0.03				ug/L
|	Be	9	21.333	0.00	0.0212	0.023	109.873	ug/L
|	Al	27	15979.518	0.09	2.7378	0.423	15.438	ug/L
⌊>	Sc	45	153368.238	153368.24				ug/L
⌈	Ti	49	123.346	0.00	0.1553	0.046	29.554	ug/L
|	V	51	2618.230	0.00	0.0025	0.023	919.082	ug/L
|	Cr	52	9515.955	0.00	0.1393	0.021	14.839	ug/L
|	Cr	53	1370.231	0.00	0.7082	0.127	17.990	ug/L
|	Mn	55	2000.220	0.00	0.1267	0.004	2.890	ug/L
|	Co	59	101.335	0.00	-0.0104	0.001	13.459	ug/L
|	Ni	60	300.674	0.00	0.1126	0.003	2.936	ug/L
|	Cu	65	242.005	0.00	0.0341	0.009	27.118	ug/L
|	Zn	66	3397.278	0.01	2.0353	0.047	2.292	ug/L
|>	Ge	72	317781.421	317781.42				ug/L
|	As	75	-251.393	-0.00	-0.0641	0.052	81.807	ug/L
|	Se	77	92.000	0.00	0.0787	0.144	182.863	ug/L
|	Se	82	-2.864	-0.00	-0.0290	0.109	374.946	ug/L
⌊	Rb	85	70.334	0.00				mg/L
	Y	89	223336.119	-2647.91				ug/L
	Rh	103	14.000	-0.00				ug/L
⌈	Mo	98	56.393	0.00	0.0305	0.006	19.060	ug/L
|	Ag	107	26.334	-0.00	-0.0222	0.000	1.085	ug/L
|	Cd	114	0.879	0.00	0.0145	0.003	19.274	ug/L
|>	In	115	309882.203	309882.20				ug/L
|	Sn	118	225.469	0.00	0.0237	0.001	4.442	ug/L
⌊	Sb	123	150.408	0.00	0.0370	0.005	14.744	ug/L
⌈	Ba	135	184.670	0.00	0.1035	0.006	6.001	ug/L
|	Ce	140	56.673	0.00				ug/L
⌊>	Tb	159	445532.114	445532.11				ug/L
⌈	Ho	165	23.336	-0.00				ug/L
|	Tl	203	44.667	-0.00	-0.0104	0.001	7.430	ug/L
|	Tl	205	136.681	0.00	-0.0023	0.002	87.168	ug/L
|	Pb	206	380.678	0.00	0.0039	0.003	73.619	ug/L
|	Pb	207	339.676	0.00	-0.0015	0.004	265.829	ug/L
|	Pb	208	1582.399	0.00	0.0007	0.001	103.861	ug/L
|	U	238	60.667	0.00	0.0100	0.000	2.185	ug/L
⌊>	Bi	209	406840.479	406840.48				ug/L

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Na	23	142797.943	0.58	0.0203	0.001	4.876	mg/L
Mg	24	77352.706	0.50	0.0233	0.002	7.212	mg/L
K	39	429603.116	0.87	0.0189	0.004	22.350	mg/L
Ca	43	1216.862	0.01	0.0683	0.005	7.799	mg/L
Fe	54	82400.027	0.31	0.1040	0.010	9.727	mg/L
Fe	57	7033.177	0.01	0.0101	0.000	4.532	mg/L
> Sc-1	45	153368.238	153368.24				mg/L
Cl	35	22616.225	-916.12				mg/L
Kr	83	61.001	-2.33				mg/L
Br	81	9242.270	1793.50				mg/L
P	31	16074.911	8023.00				mg/L
S	34	124649.066	301.29				mg/L
Sr	88	3794.433	3677.75				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		102.361			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		98.975			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		102.644			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		96.082			

Sample ID: PBW 25 WG361305-02
Report Date/Time: Monday, April 11, 2011 19:08:25
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: PBW 25 WG361305-02
Report Date/Time: Monday, April 11, 2011 19:08:25
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: LCSW 25 WG361305-03

Sample Date/Time: Monday, April 11, 2011 19:13:19
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 38
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23043.230	0.04				ug/L
|	Be	9	7019.797	0.04	24.6396	1.099	4.460	ug/L
|	Al	27	251372.356	1.57	48.3986	2.456	5.074	ug/L
⌊>	Sc	45	158090.885	158090.88				ug/L
⌈	Ti	49	226.692	0.00	0.3463	0.113	32.603	ug/L
|	V	51	200119.533	0.62	22.9508	0.396	1.726	ug/L
|	Cr	52	183719.454	0.55	24.0385	0.675	2.806	ug/L
|	Cr	53	21488.553	0.06	24.6112	0.913	3.709	ug/L
|	Mn	55	284841.387	0.89	25.9972	0.453	1.744	ug/L
|	Co	59	219688.291	0.69	24.8416	0.435	1.751	ug/L
|	Ni	60	46839.575	0.15	24.8337	0.243	0.980	ug/L
|	Cu	65	49029.729	0.15	24.8893	0.431	1.730	ug/L
|	Zn	66	29709.699	0.09	24.1904	0.216	0.892	ug/L
|>	Ge	72	317255.096	317255.10				ug/L
|	As	75	23643.846	0.08	21.8540	0.436	1.996	ug/L
|	Se	77	1872.175	0.01	20.7284	0.684	3.300	ug/L
|	Se	82	2163.722	0.01	20.0906	0.544	2.707	ug/L
⌊	Rb	85	264.006	0.00				mg/L
	Y	89	220203.257	-5780.78				ug/L
	Rh	103	21.334	7.33				ug/L
⌈	Mo	98	56.612	0.00	0.0306	0.001	2.570	ug/L
|	Ag	107	129403.552	0.42	21.7060	0.174	0.800	ug/L
|	Cd	114	28410.851	0.09	23.0267	0.253	1.099	ug/L
|>	In	115	308604.251	308604.25				ug/L
|	Sn	118	338.539	0.00	0.0498	0.002	5.004	ug/L
⌊	Sb	123	89198.137	0.29	23.5662	0.218	0.923	ug/L
⌈	Ba	135	39165.281	0.09	23.9558	0.215	0.898	ug/L
|	Ce	140	533.401	0.00				ug/L
⌊>	Tb	159	437916.206	437916.21				ug/L
⌈	Ho	165	33.337	0.00				ug/L
|	Tl	203	207213.000	0.51	24.9837	0.298	1.195	ug/L
|	Tl	205	504417.974	1.25	24.5027	0.572	2.333	ug/L
|	Pb	206	173596.953	0.43	25.7461	0.297	1.154	ug/L
|	Pb	207	155019.892	0.38	24.4346	0.123	0.505	ug/L
|	Pb	208	709486.558	1.75	25.2236	0.166	0.658	ug/L
|	U	238	1161876.855	2.88	25.4889	0.142	0.557	ug/L
⌊>	Bi	209	403701.892	403701.89				ug/L

Sample ID: LCSW 25 WG361305-03
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⌈	Na	23	98856.219	0.28	0.0101	0.000	3.566	mg/L
|	Mg	24	97630.885	0.61	0.0289	0.001	1.980	mg/L
|	K	39	363859.502	0.37	0.0061	0.002	31.534	mg/L
|	Ca	43	1010.154	0.01	0.0514	0.014	27.881	mg/L
|	Fe	54	98866.562	0.39	0.1327	0.007	5.613	mg/L
|	Fe	57	13033.126	0.05	0.0384	0.003	8.823	mg/L
⌊>	Sc-1	45	158090.885	158090.88				mg/L
	Cl	35	23563.063	30.72				mg/L
	Kr	83	63.001	-0.33				mg/L
	Br	81	8832.569	1383.79				mg/L
	P	31	16863.775	8811.86				mg/L
	S	34	118971.684	-5376.09				mg/L
	Sr	88	3894.481	3777.80				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		102.192			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		98.567			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		100.890			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		95.340			

Sample ID: LCSW 25 WG361305-03
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: LCSW 25 WG361305-03
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Method 6020 - Summary Report

Sample ID: L1104021629

Sample Date/Time: Monday, April 11, 2011 19:20:26
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 39
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20921.889	0.03				ug/L
|	Be	9	12.667	-0.00	-0.0106	0.008	80.100	ug/L
|	Al	27	9871.556	0.05	1.5032	0.147	9.800	ug/L
⌊>	Sc	45	153671.757	153671.76				ug/L
⌈	Ti	49	76.675	0.00	0.0679	0.042	61.207	ug/L
|	V	51	2833.971	0.00	0.0239	0.002	9.616	ug/L
|	Cr	52	10396.840	0.01	0.2442	0.015	5.938	ug/L
|	Cr	53	950.140	-0.00	0.1975	0.016	8.111	ug/L
|	Mn	55	2759.742	0.01	0.1932	0.005	2.658	ug/L
|	Co	59	104.335	0.00	-0.0102	0.000	3.760	ug/L
|	Ni	60	366.010	0.00	0.1451	0.006	4.249	ug/L
|	Cu	65	1129.408	0.00	0.4790	0.015	3.173	ug/L
|	Zn	66	2857.437	0.01	1.5554	0.036	2.295	ug/L
|>	Ge	72	321323.401	321323.40				ug/L
|	As	75	-208.860	-0.00	-0.0233	0.033	142.263	ug/L
|	Se	77	86.000	0.00	-0.0001	0.164	180790.266	ug/L
|	Se	82	-5.899	-0.00	-0.0573	0.105	183.486	ug/L
⌊	Rb	85	78.334	0.00				mg/L
	Y	89	222285.568	-3698.47				ug/L
	Rh	103	16.667	2.67				ug/L
⌈	Mo	98	46.019	0.00	0.0267	0.002	9.074	ug/L
|	Ag	107	32.667	-0.00	-0.0212	0.001	4.223	ug/L
|	Cd	114	2.107	0.00	0.0155	0.002	12.274	ug/L
|>	In	115	311974.536	311974.54				ug/L
|	Sn	118	189.335	0.00	0.0151	0.004	25.069	ug/L
⌊	Sb	123	216.701	0.00	0.0540	0.011	20.053	ug/L
⌈	Ba	135	68.001	0.00	0.0331	0.002	5.503	ug/L
|	Ce	140	56.673	0.00				ug/L
⌊>	Tb	159	447530.522	447530.52				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	41.000	-0.00	-0.0110	0.000	4.193	ug/L
|	Tl	205	83.342	-0.00	-0.0050	0.001	15.697	ug/L
|	Pb	206	480.016	0.00	0.0174	0.005	30.527	ug/L
|	Pb	207	423.013	0.00	0.0105	0.001	5.003	ug/L
|	Pb	208	1935.427	0.00	0.0121	0.002	17.622	ug/L
|	U	238	74.668	0.00	0.0103	0.000	3.644	ug/L
⌊>	Bi	209	413152.153	413152.15				ug/L

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Na	23	51065.191	-0.02	0.0002	0.000	110.028	mg/L	
Mg	24	7049.856	0.04	0.0002	0.000	17.057	mg/L	
K	39	348151.150	0.33	0.0051	0.000	7.328	mg/L	
Ca	43	436.720	0.00	0.0141	0.006	41.204	mg/L	
Fe	54	90021.794	0.35	0.1196	0.006	4.927	mg/L	
Fe	57	8604.571	0.02	0.0179	0.003	14.970	mg/L	
> Sc-1	45	153671.757	153671.76				mg/L	
Cl	35	18106.391	-5425.95				mg/L	
Kr	83	65.001	1.67				mg/L	
Br	81	9597.937	2149.16				mg/L	
P	31	17733.935	9682.02				mg/L	
S	34	123173.273	-1174.50				mg/L	
Sr	88	400.048	283.37				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		103.502			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		99.643			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		103.105			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		97.572			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104021630

Sample Date/Time: Monday, April 11, 2011 19:27:33
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 40
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21255.953	0.03				ug/L
|	Be	9	8.000	-0.00	-0.0283	0.006	22.687	ug/L
|	Al	27	41235.285	0.24	7.5643	0.937	12.389	ug/L
⌊>	Sc	45	157938.042	157938.04				ug/L
⌈	Ti	49	100.011	0.00	0.1121	0.080	71.376	ug/L
|	V	51	2856.659	0.00	0.0296	0.022	72.729	ug/L
|	Cr	52	12008.327	0.01	0.4774	0.044	9.303	ug/L
|	Cr	53	1176.854	0.00	0.4763	0.104	21.866	ug/L
|	Mn	55	2472.331	0.00	0.1693	0.009	5.303	ug/L
|	Co	59	107.335	0.00	-0.0097	0.002	15.719	ug/L
|	Ni	60	538.353	0.00	0.2381	0.015	6.092	ug/L
|	Cu	65	917.385	0.00	0.3766	0.006	1.497	ug/L
|	Zn	66	3504.983	0.01	2.1197	0.035	1.632	ug/L
|>	Ge	72	318439.509	318439.51				ug/L
|	As	75	-217.503	-0.00	-0.0327	0.039	118.757	ug/L
|	Se	77	86.667	0.00	0.0157	0.144	920.894	ug/L
|	Se	82	3.133	0.00	0.0266	0.102	384.873	ug/L
⌊	Rb	85	77.001	0.00				mg/L
	Y	89	220356.846	-5627.19				ug/L
	Rh	103	13.000	-1.00				ug/L
⌈	Mo	98	62.206	0.00	0.0327	0.004	10.944	ug/L
|	Ag	107	30.000	-0.00	-0.0215	0.001	2.366	ug/L
|	Cd	114	3.939	0.00	0.0170	0.005	26.923	ug/L
|>	In	115	307968.110	307968.11				ug/L
|	Sn	118	244.670	0.00	0.0284	0.002	7.121	ug/L
⌊	Sb	123	118.778	0.00	0.0288	0.001	4.693	ug/L
⌈	Ba	135	178.003	0.00	0.1004	0.002	2.265	ug/L
|	Ce	140	153.350	0.00				ug/L
⌊>	Tb	159	441838.566	441838.57				ug/L
⌈	Ho	165	20.002	-0.00				ug/L
|	Tl	203	34.000	-0.00	-0.0117	0.000	3.426	ug/L
|	Tl	205	66.674	-0.00	-0.0057	0.001	13.124	ug/L
|	Pb	206	1081.403	0.00	0.1088	0.002	2.120	ug/L
|	Pb	207	962.389	0.00	0.0975	0.008	8.325	ug/L
|	Pb	208	4363.084	0.01	0.1005	0.004	4.243	ug/L
|	U	238	55.334	0.00	0.0099	0.000	3.663	ug/L
⌊>	Bi	209	402888.770	402888.77				ug/L

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Na	23	93996.409	0.25	0.0090	0.001	10.744	mg/L	
Mg	24	32579.633	0.20	0.0083	0.001	8.472	mg/L	
K	39	365367.986	0.38	0.0064	0.002	27.912	mg/L	
Ca	43	686.759	0.00	0.0301	0.006	19.989	mg/L	
Fe	54	87178.137	0.32	0.1088	0.012	10.893	mg/L	
Fe	57	7817.169	0.02	0.0129	0.001	10.937	mg/L	
> Sc-1	45	157938.042	157938.04				mg/L	
Cl	35	31915.540	8383.20				mg/L	
Kr	83	61.334	-2.00				mg/L	
Br	81	9717.391	2268.62				mg/L	
P	31	17188.233	9136.32				mg/L	
S	34	116599.282	-7748.49				mg/L	
Sr	88	1326.888	1210.21				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		102.573			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		98.364			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		101.793			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		95.148			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104022002

Sample Date/Time: Monday, April 11, 2011 19:34:40
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 41
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20905.188	0.03				ug/L
|	Be	9	15.333	-0.00	-0.0017	0.015	903.501	ug/L
|	Al	27	2188003.775	14.03	430.9735	23.177	5.378	ug/L
⌊>	Sc	45	155821.568	155821.57				ug/L
⌈	Ti	49	2817.351	0.01	5.0765	0.733	14.437	ug/L
|	V	51	26135.625	0.07	2.7124	0.096	3.537	ug/L
|	Cr	52	14483.963	0.02	0.8079	0.043	5.335	ug/L
|	Cr	53	1193.525	0.00	0.4907	0.184	37.467	ug/L
|	Mn	55	636756.132	1.99	57.7394	1.365	2.365	ug/L
|	Co	59	9138.265	0.03	1.0045	0.015	1.520	ug/L
|	Ni	60	2326.294	0.01	1.1794	0.023	1.989	ug/L
|	Cu	65	7036.213	0.02	3.4682	0.110	3.169	ug/L
|	Zn	66	13643.777	0.04	10.5790	0.360	3.408	ug/L
|>	Ge	72	319664.828	319664.83				ug/L
|	As	75	3017.696	0.01	2.9131	0.106	3.633	ug/L
|	Se	77	93.334	0.00	0.0881	0.073	82.450	ug/L
|	Se	82	25.467	0.00	0.2329	0.144	61.635	ug/L
⌊	Rb	85	6383.768	0.02				mg/L
	Y	89	225769.230	-214.80				ug/L
	Rh	103	14.000	-0.00				ug/L
⌈	Mo	98	751.830	0.00	0.2799	0.004	1.300	ug/L
|	Ag	107	72.001	-0.00	-0.0143	0.000	2.003	ug/L
|	Cd	114	12.354	0.00	0.0240	0.004	15.292	ug/L
|>	In	115	304391.606	304391.61				ug/L
|	Sn	118	248.003	0.00	0.0299	0.003	10.746	ug/L
⌊	Sb	123	223.158	0.00	0.0572	0.001	1.982	ug/L
⌈	Ba	135	18546.035	0.04	11.4570	0.196	1.713	ug/L
|	Ce	140	18268.545	0.04				ug/L
⌊>	Tb	159	433487.377	433487.38				ug/L
⌈	Ho	165	393.380	0.00				ug/L
|	Tl	203	84.001	0.00	-0.0054	0.001	10.012	ug/L
|	Tl	205	176.686	0.00	-0.0001	0.002	1418.013	ug/L
|	Pb	206	1878.529	0.00	0.2342	0.001	0.540	ug/L
|	Pb	207	1612.146	0.00	0.2064	0.002	1.114	ug/L
|	Pb	208	7384.806	0.02	0.2146	0.005	2.113	ug/L
|	U	238	9728.494	0.02	0.2275	0.003	1.145	ug/L
⌊>	Bi	209	393553.641	393553.64				ug/L

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Na	23	80820208.529	518.59	17.3872	1.132	6.513	mg/L	
Mg	24	838795.199	5.38	0.2686	0.015	5.585	mg/L	
K	39	1780181.611	9.50	0.2381	0.013	5.608	mg/L	
Ca	43	25488.355	0.16	1.7215	0.071	4.137	mg/L	
Fe	54	222140.415	1.19	0.3938	0.021	5.411	mg/L	
Fe	57	74809.692	0.45	0.3463	0.015	4.443	mg/L	
> Sc-1	45	155821.568	155821.57				mg/L	
Cl	35	54284.951	30752.61				mg/L	
Kr	83	61.334	-2.00				mg/L	
Br	81	14949.176	7500.40				mg/L	
P	31	27322.616	19270.71				mg/L	
S	34	165264.080	40916.31				mg/L	
Sr	88	56542.035	56425.36				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		102.968			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		97.221			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		99.869			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		92.944			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104022004

Sample Date/Time: Monday, April 11, 2011 19:41:48
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 42
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19051.494	0.01				ug/L
|	Be	9	33.333	0.00	0.0582	0.002	2.597	ug/L
|	Al	27	2530524.780	15.64	480.3584	17.938	3.734	ug/L
⌊>	Sc	45	161749.531	161749.53				ug/L
⌈	Ti	49	3811.114	0.01	6.5673	0.858	13.066	ug/L
|	V	51	21770.752	0.06	2.0897	0.110	5.245	ug/L
|	Cr	52	26154.780	0.05	2.2271	0.150	6.750	ug/L
|	Cr	53	2283.823	0.00	1.6458	0.167	10.143	ug/L
|	Mn	55	357988.718	1.06	30.8902	1.196	3.872	ug/L
|	Co	59	63869.990	0.19	6.8094	0.177	2.605	ug/L
|	Ni	60	9289.740	0.03	4.6167	0.130	2.818	ug/L
|	Cu	65	43516.955	0.13	20.8631	0.747	3.581	ug/L
|	Zn	66	13564.334	0.04	9.9725	0.401	4.021	ug/L
| >	Ge	72	335737.739	335737.74				ug/L
|	As	75	9215.731	0.03	8.1537	0.108	1.319	ug/L
|	Se	77	133.334	0.00	0.4749	0.285	60.074	ug/L
|	Se	82	40.285	0.00	0.3511	0.063	18.043	ug/L
⌊	Rb	85	5646.651	0.02				mg/L
	Y	89	283460.309	57476.27				ug/L
	Rh	103	21.000	7.00				ug/L
⌈	Mo	98	5389.379	0.02	1.8333	0.057	3.101	ug/L
|	Ag	107	58.001	-0.00	-0.0172	0.002	13.118	ug/L
|	Cd	114	72.177	0.00	0.0698	0.002	2.216	ug/L
| >	In	115	322300.557	322300.56				ug/L
|	Sn	118	431.476	0.00	0.0669	0.002	3.290	ug/L
⌊	Sb	123	303.038	0.00	0.0741	0.005	6.689	ug/L
⌈	Ba	135	17582.624	0.04	10.4157	0.298	2.858	ug/L
|	Ce	140	59935.058	0.13				ug/L
⌊>	Tb	159	452088.930	452088.93				ug/L
⌈	Ho	165	3364.236	0.01				ug/L
|	Tl	203	74.001	0.00	-0.0068	0.001	13.714	ug/L
|	Tl	205	183.353	0.00	0.0001	0.003	2898.213	ug/L
|	Pb	206	2373.972	0.01	0.3048	0.006	2.048	ug/L
|	Pb	207	1986.551	0.00	0.2628	0.005	1.742	ug/L
|	Pb	208	9307.129	0.02	0.2804	0.009	3.325	ug/L
|	U	238	35610.051	0.09	0.7992	0.040	4.958	ug/L
⌊>	Bi	209	398930.568	398930.57				ug/L

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⌈	Na	23	187362087.188	1160.17	38.8971	2.328	5.984	mg/L
|	Mg	24	563886.894	3.48	0.1733	0.006	3.232	mg/L
|	K	39	1632348.212	8.18	0.2046	0.016	8.064	mg/L
|	Ca	43	14592.098	0.09	0.9432	0.037	3.879	mg/L
|	Fe	54	874655.810	5.18	1.6940	0.054	3.170	mg/L
|	Fe	57	346810.183	2.11	1.6363	0.099	6.035	mg/L
⌊>	Sc-1	45	161749.531	161749.53				mg/L
	Cl	35	41752.323	18219.98				mg/L
	Kr	83	82.335	19.00				mg/L
	Br	81	13994.453	6545.68				mg/L
	P	31	209313.573	201261.66				mg/L
	S	34	163348.228	39000.45				mg/L
	Sr	88	147738.162	147621.48				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		108.145			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		102.941			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		104.155			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		94.214			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104022006

Sample Date/Time: Monday, April 11, 2011 19:48:56
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 43
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20688.197	0.02				ug/L
|	Be	9	31.333	0.00	0.0514	0.052	101.661	ug/L
|	Al	27	1266272.262	7.76	238.4594	15.970	6.697	ug/L
⌊>	Sc	45	163071.838	163071.84				ug/L
⌈	Ti	49	1690.314	0.00	2.8505	0.476	16.685	ug/L
|	V	51	20402.746	0.05	1.9228	0.041	2.121	ug/L
|	Cr	52	27171.806	0.05	2.3330	0.070	3.003	ug/L
|	Cr	53	2250.479	0.00	1.5915	0.148	9.297	ug/L
|	Mn	55	334689.304	0.99	28.6627	0.361	1.258	ug/L
|	Co	59	70795.768	0.21	7.4952	0.127	1.695	ug/L
|	Ni	60	10129.896	0.03	5.0016	0.106	2.112	ug/L
|	Cu	65	48172.570	0.14	22.9354	0.429	1.871	ug/L
|	Zn	66	10676.471	0.03	7.6134	0.221	2.904	ug/L
|>	Ge	72	338165.108	338165.11				ug/L
|	As	75	10368.845	0.03	9.0900	0.396	4.358	ug/L
|	Se	77	129.334	0.00	0.4204	0.151	35.820	ug/L
|	Se	82	59.398	0.00	0.5147	0.165	32.113	ug/L
⌊	Rb	85	3030.156	0.01				mg/L
	Y	89	288332.925	62348.89				ug/L
	Rh	103	25.000	11.00				ug/L
⌈	Mo	98	5990.951	0.02	2.0171	0.077	3.802	ug/L
|	Ag	107	46.667	-0.00	-0.0191	0.001	6.585	ug/L
|	Cd	114	92.507	0.00	0.0850	0.014	16.350	ug/L
|>	In	115	325570.386	325570.39				ug/L
|	Sn	118	449.077	0.00	0.0699	0.010	13.607	ug/L
⌊	Sb	123	301.786	0.00	0.0730	0.004	5.595	ug/L
⌈	Ba	135	16347.515	0.04	9.6905	0.124	1.283	ug/L
|	Ce	140	52208.074	0.12				ug/L
⌊>	Tb	159	451711.020	451711.02				ug/L
⌈	Ho	165	3357.566	0.01				ug/L
|	Tl	203	64.668	0.00	-0.0077	0.000	2.557	ug/L
|	Tl	205	173.352	0.00	-0.0002	0.001	266.540	ug/L
|	Pb	206	1738.169	0.00	0.2147	0.013	6.115	ug/L
|	Pb	207	1510.796	0.00	0.1917	0.006	3.384	ug/L
|	Pb	208	6960.024	0.01	0.2009	0.006	2.873	ug/L
|	U	238	37903.411	0.10	0.8672	0.010	1.111	ug/L
⌊>	Bi	209	390900.099	390900.10				ug/L

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⌈	Na	23	214173680.226	1316.42	44.1356	3.163	7.167	mg/L
|	Mg	24	523102.361	3.21	0.1593	0.006	3.825	mg/L
|	K	39	1386280.995	6.60	0.1643	0.020	12.409	mg/L
|	Ca	43	15483.528	0.09	0.9951	0.071	7.110	mg/L
|	Fe	54	893940.077	5.26	1.7186	0.049	2.854	mg/L
|	Fe	57	341604.052	2.07	1.5992	0.082	5.100	mg/L
⌊>	Sc-1	45	163071.838	163071.84				mg/L
	Cl	35	39513.257	15980.91				mg/L
	Kr	83	69.334	6.00				mg/L
	Br	81	12898.314	5449.54				mg/L
	P	31	229405.308	221353.40				mg/L
	S	34	161924.741	37576.97				mg/L
	Sr	88	149745.022	149628.34				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		108.927			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		103.986			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		104.068			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		92.317			

Sample ID: L1104022006
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1104022006
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Method 6020 - Summary Report

Sample ID: L1104022008

Sample Date/Time: Monday, April 11, 2011 19:56:05
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 44
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	24814.087	0.03				ug/L
|	Be	9	18.667	-0.00	0.0005	0.025	4682.037	ug/L
|	Al	27	1568916.150	8.59	263.9526	4.510	1.708	ug/L
⌊>	Sc	45	182212.278	182212.28				ug/L
⌈	Ti	49	1767.001	0.00	2.7747	0.310	11.187	ug/L
|	V	51	7084.055	0.01	0.4202	0.026	6.259	ug/L
|	Cr	52	16009.966	0.02	0.7605	0.031	4.039	ug/L
|	Cr	53	1580.283	0.00	0.7277	0.030	4.073	ug/L
|	Mn	55	105105.549	0.29	8.3698	0.274	3.269	ug/L
|	Co	59	2215.268	0.01	0.1980	0.015	7.554	ug/L
|	Ni	60	2426.985	0.01	1.0827	0.013	1.246	ug/L
|	Cu	65	2126.248	0.01	0.8603	0.050	5.844	ug/L
|	Zn	66	53663.840	0.15	38.7603	0.269	0.694	ug/L
|>	Ge	72	362122.044	362122.04				ug/L
|	As	75	-34.742	0.00	0.1381	0.021	15.307	ug/L
|	Se	77	143.334	0.00	0.4728	0.171	36.266	ug/L
|	Se	82	29.427	0.00	0.2379	0.111	46.469	ug/L
⌊	Rb	85	7412.154	0.02				mg/L
	Y	89	255292.973	29308.94				ug/L
	Rh	103	19.334	5.33				ug/L
⌈	Mo	98	142.687	0.00	0.0548	0.005	9.860	ug/L
|	Ag	107	33.000	-0.00	-0.0217	0.001	6.894	ug/L
|	Cd	114	20.048	0.00	0.0281	0.008	27.843	ug/L
|>	In	115	351748.376	351748.38				ug/L
|	Sn	118	993.783	0.00	0.1721	0.005	2.659	ug/L
⌊	Sb	123	177.285	0.00	0.0385	0.001	3.707	ug/L
⌈	Ba	135	30230.932	0.06	16.2746	0.215	1.319	ug/L
|	Ce	140	17697.452	0.04				ug/L
⌊>	Tb	159	497511.407	497511.41				ug/L
⌈	Ho	165	780.109	0.00				ug/L
|	Tl	203	91.668	0.00	-0.0057	0.001	12.667	ug/L
|	Tl	205	156.684	0.00	-0.0020	0.001	27.543	ug/L
|	Pb	206	1830.186	0.00	0.1956	0.012	6.157	ug/L
|	Pb	207	1518.464	0.00	0.1637	0.005	2.995	ug/L
|	Pb	208	7158.747	0.01	0.1770	0.005	2.683	ug/L
|	U	238	910.384	0.00	0.0269	0.001	4.852	ug/L
⌊>	Bi	209	443181.895	443181.89				ug/L

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Na	23	105085670.183	576.77	19.3379	0.963	4.979	mg/L	
Mg	24	4528195.186	24.86	1.2479	0.065	5.207	mg/L	
K	39	4544094.281	23.01	0.5815	0.006	1.000	mg/L	
Ca	43	53943.870	0.29	3.1286	0.055	1.752	mg/L	
Fe	54	289793.473	1.36	0.4476	0.020	4.498	mg/L	
Fe	57	86955.098	0.44	0.3440	0.005	1.491	mg/L	
> Sc-1	45	182212.278	182212.28				mg/L	
Cl	35	269010.604	245478.26				mg/L	
Kr	83	66.001	2.67				mg/L	
Br	81	17966.130	10517.36				mg/L	
P	31	30207.237	22155.33				mg/L	
S	34	328059.479	203711.70				mg/L	
Sr	88	271903.866	271787.19				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		116.644			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		112.347			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		114.619			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		104.664			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1104022008
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Method 6020 - Summary Report

Sample ID: L1104022008PS WG361365-01

Sample Date/Time: Monday, April 11, 2011 20:03:14
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 45
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	25265.340	0.04				ug/L
|	Be	9	16086.263	0.09	50.5400	0.615	1.218	ug/L
|	Al	27	1717770.546	9.71	298.1362	2.984	1.001	ug/L
⌊>	Sc	45	176646.592	176646.59				ug/L
⌈	Ti	49	1760.331	0.01	2.9245	0.091	3.102	ug/L
|	V	51	453440.097	1.31	48.3648	0.885	1.829	ug/L
|	Cr	52	403540.421	1.15	49.9622	0.583	1.166	ug/L
|	Cr	53	47035.113	0.13	50.6826	0.670	1.322	ug/L
|	Mn	55	713839.607	2.08	60.2518	0.355	0.589	ug/L
|	Co	59	484637.294	1.41	50.6464	0.405	0.800	ug/L
|	Ni	60	105127.343	0.31	51.5331	0.728	1.414	ug/L
|	Cu	65	108190.881	0.31	50.8290	0.453	0.891	ug/L
|	Zn	66	98381.951	0.28	75.6923	0.807	1.066	ug/L
| >	Ge	72	343418.362	343418.36				ug/L
|	As	75	51741.501	0.15	44.0032	0.208	0.472	ug/L
|	Se	77	4022.810	0.01	42.1240	1.275	3.027	ug/L
|	Se	82	4700.321	0.01	40.2995	1.342	3.331	ug/L
⌊	Rb	85	6838.406	0.02				mg/L
	Y	89	242731.701	16747.67				ug/L
	Rh	103	47.001	33.00				ug/L
⌈	Mo	98	133.431	0.00	0.0546	0.005	8.625	ug/L
|	Ag	107	306415.809	0.92	47.9295	0.608	1.268	ug/L
|	Cd	114	61605.976	0.19	46.5320	1.744	3.748	ug/L
| >	In	115	331197.405	331197.41				ug/L
|	Sn	118	507.746	0.00	0.0807	0.002	2.735	ug/L
⌊	Sb	123	192230.350	0.58	47.3326	0.577	1.220	ug/L
⌈	Ba	135	113781.111	0.24	64.2646	1.199	1.866	ug/L
|	Ce	140	15653.812	0.03				ug/L
⌊>	Tb	159	474456.222	474456.22				ug/L
⌈	Ho	165	696.761	0.00				ug/L
|	Tl	203	446007.341	1.06	51.4594	0.615	1.196	ug/L
|	Tl	205	1089314.630	2.58	50.6279	0.653	1.290	ug/L
|	Pb	206	369710.353	0.88	52.5072	0.786	1.497	ug/L
|	Pb	207	329604.881	0.78	49.7595	0.736	1.479	ug/L
|	Pb	208	1522038.520	3.60	51.8232	0.580	1.120	ug/L
|	U	238	2527017.599	5.99	53.0262	0.058	0.109	ug/L
⌊>	Bi	209	421984.482	421984.48				ug/L

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Na	23	96339485.535	545.05	18.2743	0.419	2.291	mg/L	
Mg	24	4233950.116	23.96	1.2027	0.016	1.309	mg/L	
K	39	4136428.569	21.49	0.5428	0.022	3.990	mg/L	
Ca	43	49212.379	0.28	2.9430	0.035	1.184	mg/L	
Fe	54	266391.206	1.28	0.4204	0.012	2.747	mg/L	
Fe	57	80033.654	0.42	0.3253	0.004	1.182	mg/L	
> Sc-1	45	176646.592	176646.59				mg/L	
Cl	35	256687.066	233154.72				mg/L	
Kr	83	60.667	-2.67				mg/L	
Br	81	16809.456	9360.68				mg/L	
P	31	31160.526	23108.62				mg/L	
S	34	309861.408	185513.63				mg/L	
Sr	88	257122.531	257005.85				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		110.619			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		105.783			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		109.308			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		99.658			

Sample ID: L1104022008PS WG361365-01
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1104022008PS WG361365-01
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Method 6020 - Summary Report

Sample ID: L1104022008SDL WG361365-02

Sample Date/Time: Monday, April 11, 2011 20:10:23
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 46
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20471.009	0.03				ug/L
|	Be	9	13.333	-0.00	-0.0078	0.018	233.575	ug/L
|	Al	27	285898.444	1.86	57.0783	1.878	3.290	ug/L
⌊>	Sc	45	152554.848	152554.85				ug/L
⌈	Ti	49	276.698	0.00	0.4143	0.088	21.204	ug/L
|	V	51	3349.521	0.00	0.0698	0.012	17.612	ug/L
|	Cr	52	9764.863	0.00	0.1134	0.002	2.126	ug/L
|	Cr	53	686.759	-0.00	-0.1383	0.077	55.873	ug/L
|	Mn	55	19472.803	0.06	1.6425	0.025	1.507	ug/L
|	Co	59	455.682	0.00	0.0273	0.002	7.249	ug/L
|	Ni	60	645.694	0.00	0.2802	0.006	2.227	ug/L
|	Cu	65	379.011	0.00	0.0952	0.003	3.272	ug/L
|	Zn	66	11752.690	0.03	8.6164	0.346	4.016	ug/L
|>	Ge	72	332687.851	332687.85				ug/L
|	As	75	-176.651	0.00	0.0117	0.011	95.686	ug/L
|	Se	77	86.000	0.00	-0.0352	0.082	233.126	ug/L
|	Se	82	5.075	0.00	0.0425	0.068	160.002	ug/L
⌊	Rb	85	1371.441	0.00				mg/L
	Y	89	223894.429	-2089.60				ug/L
	Rh	103	15.000	1.00				ug/L
⌈	Mo	98	34.799	0.00	0.0226	0.000	1.288	ug/L
|	Ag	107	62.001	-0.00	-0.0164	0.002	11.591	ug/L
|	Cd	114	-2.323	-0.00	0.0120	0.002	14.134	ug/L
|>	In	115	315805.054	315805.05				ug/L
|	Sn	118	261.870	0.00	0.0309	0.002	7.120	ug/L
⌊	Sb	123	337.911	0.00	0.0846	0.007	8.399	ug/L
⌈	Ba	135	5568.940	0.01	3.3360	0.065	1.947	ug/L
|	Ce	140	3164.151	0.01				ug/L
⌊>	Tb	159	446378.592	446378.59				ug/L
⌈	Ho	165	173.352	0.00				ug/L
|	Tl	203	44.001	-0.00	-0.0106	0.000	2.923	ug/L
|	Tl	205	86.676	-0.00	-0.0048	0.001	14.586	ug/L
|	Pb	206	611.692	0.00	0.0361	0.004	11.243	ug/L
|	Pb	207	512.018	0.00	0.0238	0.002	6.802	ug/L
|	Pb	208	2402.471	0.00	0.0279	0.002	7.672	ug/L
|	U	238	241.672	0.00	0.0138	0.000	3.323	ug/L
⌊>	Bi	209	415511.890	415511.89				ug/L

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Na	23	18024568.188	117.80	3.9501	0.106	2.684	mg/L	
Mg	24	904219.355	5.92	0.2958	0.005	1.845	mg/L	
K	39	1161390.610	5.68	0.1411	0.001	1.026	mg/L	
Ca	43	9592.226	0.06	0.6517	0.016	2.412	mg/L	
Fe	54	84571.287	0.32	0.1094	0.003	2.363	mg/L	
Fe	57	20466.315	0.10	0.0784	0.003	3.880	mg/L	
> Sc-1	45	152554.848	152554.85				mg/L	
Cl	35	60622.533	37090.19				mg/L	
Kr	83	68.001	4.67				mg/L	
Br	81	10171.840	2723.07				mg/L	
P	31	12511.881	4459.97				mg/L	
S	34	160128.876	35781.10				mg/L	
Sr	88	49808.764	49692.09				mg/L	

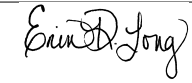
QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		107.163			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		100.867			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		102.839			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		98.130			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 11, 2011 20:17:31
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19285.288	0.02				ug/L
|	Be	9	15538.738	0.10	57.0112	2.637	4.626	ug/L
|	Al	27	262132.107	1.72	52.7762	4.404	8.344	ug/L
⌊>	Sc	45	151370.832	151370.83				ug/L
⌈	Ti	49	50133.709	0.15	89.0565	1.284	1.442	ug/L
|	V	51	407216.164	1.23	45.3662	0.174	0.382	ug/L
|	Cr	52	352696.363	1.05	45.5315	0.571	1.255	ug/L
|	Cr	53	40867.437	0.12	45.9368	0.951	2.070	ug/L
|	Mn	55	548156.127	1.66	48.3353	0.811	1.678	ug/L
|	Co	59	442359.879	1.35	48.3004	0.395	0.818	ug/L
|	Ni	60	92493.707	0.28	47.3763	0.069	0.146	ug/L
|	Cu	65	97448.996	0.30	47.8275	1.110	2.320	ug/L
|	Zn	66	60171.761	0.18	48.0739	0.291	0.605	ug/L
|>	Ge	72	328660.125	328660.13				ug/L
|	As	75	54609.237	0.17	48.5131	0.763	1.574	ug/L
|	Se	77	4524.357	0.01	49.6777	1.454	2.927	ug/L
|	Se	82	5635.783	0.02	50.5081	1.480	2.929	ug/L
⌊	Rb	85	2128.581	0.01				mg/L
	Y	89	221011.152	-4972.88				ug/L
	Rh	103	47.334	33.33				ug/L
⌈	Mo	98	284754.061	0.91	98.6796	2.063	2.090	ug/L
|	Ag	107	294567.030	0.94	48.5064	0.650	1.340	ug/L
|	Cd	114	63150.459	0.20	50.2037	1.196	2.382	ug/L
|>	In	115	314591.585	314591.59				ug/L
|	Sn	118	223440.118	0.71	50.2424	0.392	0.780	ug/L
⌊	Sb	123	192810.667	0.61	49.9853	1.006	2.013	ug/L
⌈	Ba	135	79308.088	0.18	48.3565	0.457	0.945	ug/L
|	Ce	140	70.007	0.00				ug/L
⌊>	Tb	159	439385.769	439385.77				ug/L
⌈	Ho	165	40.004	0.00				ug/L
|	Tl	203	400645.976	1.01	49.1767	0.577	1.173	ug/L
|	Tl	205	1007790.228	2.54	49.8273	0.936	1.878	ug/L
|	Pb	206	328787.901	0.83	49.6754	0.297	0.597	ug/L
|	Pb	207	308631.832	0.78	49.5665	0.259	0.523	ug/L
|	Pb	208	1379421.779	3.47	49.9650	0.345	0.690	ug/L
|	U	238	2320862.290	5.85	51.8098	0.433	0.835	ug/L
⌊>	Bi	209	396665.832	396665.83				ug/L

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Na	23	22925392.505	151.18	5.0692	0.194	3.822	mg/L	
Mg	24	15630608.059	103.27	5.1891	0.070	1.344	mg/L	
K	39	29711438.228	194.37	4.9375	0.098	1.977	mg/L	
Ca	43	71622.863	0.47	5.0139	0.274	5.466	mg/L	
Fe	54	2529411.010	16.49	5.3835	0.267	4.965	mg/L	
Fe	57	1119330.841	7.37	5.7035	0.319	5.597	mg/L	
> Sc-1	45	151370.832	151370.83				mg/L	
Cl	35	12328.929	-11203.41				mg/L	
Kr	83	65.001	1.67				mg/L	
Br	81	8664.423	1215.65				mg/L	
P	31	8544.334	492.42				mg/L	
S	34	124513.211	165.44				mg/L	
Sr	88	2220.469	2103.79				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	90.732				
Cr	52	91.063				
Cr	53					
Mn	55	96.671				
Co	59	96.601				
Ni	60	94.753				
Cu	65	95.655				
Zn	66	96.148				
> Ge	72		105.865			
As	75	97.026				
Se	77					
Se	82	101.016				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	97.013				
Cd	114	100.407				
> In	115		100.479			
Sn	118					
Sb	123	99.971				
Ba	135	96.713				
Ce	140					
> Tb	159		101.228			
Ho	165					
Tl	203	98.353				
Tl	205					
Pb	206					
Pb	207					
Pb	208	99.930				
U	238	103.620				
> Bi	209		93.679			

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Report Date/Time: Monday, April 11, 2011 20:19:44
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
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Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 11, 2011 20:24:37
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20203.770	0.03				ug/L
|	Be	9	18.667	0.00	0.0133	0.007	51.817	ug/L
|	Al	27	2867.078	0.00	0.1256	0.020	16.069	ug/L
⌊>	Sc	45	148125.204	148125.20				ug/L
⌈	Ti	49	56.672	0.00	0.0298	0.020	67.067	ug/L
|	V	51	2573.665	-0.00	-0.0109	0.007	68.538	ug/L
|	Cr	52	8407.617	-0.00	-0.0444	0.017	38.401	ug/L
|	Cr	53	410.050	-0.00	-0.4441	0.102	22.910	ug/L
|	Mn	55	1945.875	0.00	0.1168	0.005	3.877	ug/L
|	Co	59	81.334	0.00	-0.0129	0.002	12.111	ug/L
|	Ni	60	70.334	0.00	-0.0106	0.002	17.995	ug/L
|	Cu	65	91.001	-0.00	-0.0440	0.004	8.669	ug/L
|	Zn	66	402.012	-0.00	-0.4912	0.012	2.468	ug/L
|>	Ge	72	326830.357	326830.36				ug/L
|	As	75	-245.199	-0.00	-0.0522	0.026	49.738	ug/L
|	Se	77	88.667	0.00	0.0116	0.044	376.175	ug/L
|	Se	82	-4.191	-0.00	-0.0404	0.129	320.278	ug/L
⌊	Rb	85	24.000	0.00				mg/L
	Y	89	227450.215	1466.18				ug/L
	Rh	103	14.000	-0.00				ug/L
⌈	Mo	98	122.915	0.00	0.0530	0.005	9.743	ug/L
|	Ag	107	46.667	-0.00	-0.0189	0.001	2.706	ug/L
|	Cd	114	-6.945	-0.00	0.0083	0.006	66.931	ug/L
|>	In	115	316290.048	316290.05				ug/L
|	Sn	118	2636.614	0.01	0.5623	0.019	3.464	ug/L
⌊	Sb	123	99.200	0.00	0.0229	0.002	10.146	ug/L
⌈	Ba	135	26.667	-0.00	0.0086	0.005	58.722	ug/L
|	Ce	140	33.337	-0.00				ug/L
⌊>	Tb	159	443198.211	443198.21				ug/L
⌈	Ho	165	3.334	-0.00				ug/L
|	Tl	203	37.000	-0.00	-0.0113	0.000	3.989	ug/L
|	Tl	205	80.008	-0.00	-0.0050	0.001	9.974	ug/L
|	Pb	206	336.676	-0.00	-0.0021	0.003	121.880	ug/L
|	Pb	207	315.008	0.00	-0.0050	0.002	31.371	ug/L
|	Pb	208	1371.384	0.00	-0.0063	0.002	26.084	ug/L
|	U	238	138.669	0.00	0.0117	0.000	1.967	ug/L
⌊>	Bi	209	402851.634	402851.63				ug/L

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Na	23	38618.317	-0.09	-0.0021	0.001	33.133	mg/L	
Mg	24	956.809	0.00	-0.0018	0.000	2.748	mg/L	
K	39	307685.564	0.15	0.0005	0.003	649.594	mg/L	
Ca	43	123.346	-0.00	-0.0072	0.001	13.442	mg/L	
Fe	54	40332.231	0.04	0.0176	0.007	39.398	mg/L	
Fe	57	6212.558	0.01	0.0072	0.004	60.786	mg/L	
> Sc-1	45	148125.204	148125.20				mg/L	
Cl	35	11193.595	-12338.75				mg/L	
Kr	83	60.334	-3.00				mg/L	
Br	81	9008.057	1559.28				mg/L	
P	31	7696.303	-355.61				mg/L	
S	34	117497.822	-6849.95				mg/L	
Sr	88	106.678	-10.00				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		105.276			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		101.022			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		102.106			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		95.140			

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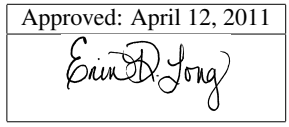
⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
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Method 6020 - Summary Report

Sample ID: L1104022010

Sample Date/Time: Monday, April 11, 2011 20:31:43
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 47
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21306.014	0.03				ug/L
|	Be	9	24.000	0.00	0.0308	0.045	147.242	ug/L
|	Al	27	1943505.140	12.58	386.2410	4.485	1.161	ug/L
⌊>	Sc	45	154349.385	154349.39				ug/L
⌈	Ti	49	2273.822	0.01	3.9422	0.559	14.191	ug/L
|	V	51	13075.275	0.03	1.1543	0.060	5.162	ug/L
|	Cr	52	13877.098	0.02	0.6598	0.060	9.146	ug/L
|	Cr	53	960.142	-0.00	0.1756	0.044	25.177	ug/L
|	Mn	55	403870.423	1.22	35.3348	1.899	5.374	ug/L
|	Co	59	12096.102	0.04	1.2896	0.040	3.068	ug/L
|	Ni	60	1770.841	0.01	0.8543	0.041	4.778	ug/L
|	Cu	65	3441.960	0.01	1.5907	0.050	3.136	ug/L
|	Zn	66	8963.107	0.02	6.4091	0.251	3.924	ug/L
|>	Ge	72	331184.944	331184.94				ug/L
|	As	75	3097.987	0.01	2.8883	0.086	2.965	ug/L
|	Se	77	86.667	0.00	-0.0234	0.083	356.271	ug/L
|	Se	82	3.730	0.00	0.0307	0.063	206.409	ug/L
⌊	Rb	85	4539.076	0.01				mg/L
	Y	89	230120.706	4136.67				ug/L
	Rh	103	16.000	2.00				ug/L
⌈	Mo	98	2251.961	0.01	0.7916	0.023	2.877	ug/L
|	Ag	107	80.668	-0.00	-0.0133	0.003	19.028	ug/L
|	Cd	114	8.596	0.00	0.0206	0.004	17.056	ug/L
|>	In	115	314286.153	314286.15				ug/L
|	Sn	118	408.808	0.00	0.0642	0.000	0.288	ug/L
⌊	Sb	123	218.783	0.00	0.0542	0.002	4.464	ug/L
⌈	Ba	135	9634.739	0.02	5.8768	0.272	4.624	ug/L
|	Ce	140	22156.746	0.05				ug/L
⌊>	Tb	159	438894.952	438894.95				ug/L
⌈	Ho	165	476.726	0.00				ug/L
|	Tl	203	57.001	0.00	-0.0089	0.001	6.151	ug/L
|	Tl	205	163.351	0.00	-0.0010	0.004	460.780	ug/L
|	Pb	206	1868.193	0.00	0.2275	0.003	1.441	ug/L
|	Pb	207	1582.474	0.00	0.1971	0.002	1.098	ug/L
|	Pb	208	7478.186	0.02	0.2132	0.003	1.240	ug/L
|	U	238	22093.960	0.06	0.4969	0.018	3.609	ug/L
⌊>	Bi	209	400609.334	400609.33				ug/L

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⌈	Na	23	104640256.723	678.02	22.7324	0.881	3.873	mg/L
|	Mg	24	957989.680	6.20	0.3100	0.011	3.589	mg/L
|	K	39	1437779.462	7.39	0.1845	0.008	4.242	mg/L
|	Ca	43	15396.729	0.10	1.0436	0.039	3.751	mg/L
|	Fe	54	216570.291	1.17	0.3862	0.010	2.676	mg/L
|	Fe	57	76950.132	0.46	0.3605	0.024	6.788	mg/L
⌊>	Sc-1	45	154349.385	154349.39				mg/L
	Cl	35	60318.790	36786.45				mg/L
	Kr	83	69.334	6.00				mg/L
	Br	81	14781.597	7332.82				mg/L
	P	31	52372.631	44320.72				mg/L
	S	34	170748.686	46400.91				mg/L
	Sr	88	47520.737	47404.06				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		106.678			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.382			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		101.115			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		94.610			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1104022012

Sample Date/Time: Monday, April 11, 2011 20:38:49
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 48
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20220.461	0.03				ug/L
|	Be	9	12.667	-0.00	-0.0108	0.004	39.307	ug/L
|	Al	27	177135.710	1.13	34.7643	4.398	12.652	ug/L
⌊>	Sc	45	154552.741	154552.74				ug/L
⌈	Ti	49	443.388	0.00	0.7202	0.172	23.880	ug/L
|	V	51	5011.129	0.01	0.2632	0.025	9.454	ug/L
|	Cr	52	11926.227	0.01	0.4217	0.033	7.802	ug/L
|	Cr	53	536.735	-0.00	-0.2990	0.024	8.059	ug/L
|	Mn	55	458651.041	1.40	40.6034	1.759	4.333	ug/L
|	Co	59	6995.516	0.02	0.7454	0.014	1.867	ug/L
|	Ni	60	710.032	0.00	0.3187	0.016	5.085	ug/L
|	Cu	65	1114.407	0.00	0.4613	0.043	9.230	ug/L
|	Zn	66	2039.228	0.00	0.8439	0.040	4.763	ug/L
|>	Ge	72	327361.156	327361.16				ug/L
|	As	75	112.396	0.00	0.2658	0.035	13.341	ug/L
|	Se	77	80.667	0.00	-0.0798	0.057	71.728	ug/L
|	Se	82	1.791	0.00	0.0133	0.083	625.446	ug/L
⌊	Rb	85	542.020	0.00				mg/L
	Y	89	220308.893	-5675.14				ug/L
	Rh	103	19.334	5.33				ug/L
⌈	Mo	98	2618.314	0.01	0.9152	0.031	3.356	ug/L
|	Ag	107	60.001	-0.00	-0.0167	0.001	3.234	ug/L
|	Cd	114	-1.921	-0.00	0.0123	0.004	36.288	ug/L
|>	In	115	315554.847	315554.85				ug/L
|	Sn	118	253.603	0.00	0.0291	0.001	2.892	ug/L
⌊	Sb	123	94.157	0.00	0.0217	0.000	1.160	ug/L
⌈	Ba	135	7953.576	0.02	4.8062	0.212	4.403	ug/L
|	Ce	140	3621.023	0.01				ug/L
⌊>	Tb	159	442936.769	442936.77				ug/L
⌈	Ho	165	106.678	0.00				ug/L
|	Tl	203	47.667	-0.00	-0.0100	0.000	4.127	ug/L
|	Tl	205	83.342	-0.00	-0.0048	0.001	15.632	ug/L
|	Pb	206	580.023	0.00	0.0352	0.001	4.226	ug/L
|	Pb	207	486.350	0.00	0.0231	0.004	17.910	ug/L
|	Pb	208	2249.455	0.00	0.0260	0.002	6.348	ug/L
|	U	238	4355.993	0.01	0.1056	0.004	4.199	ug/L
⌊>	Bi	209	398178.504	398178.50				ug/L

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⌈	Na	23	103707313.344	671.25	22.5052	1.101	4.892	mg/L
|	Mg	24	1938541.794	12.55	0.6288	0.019	3.051	mg/L
|	K	39	1724047.914	9.23	0.2313	0.007	2.876	mg/L
|	Ca	43	29336.009	0.19	2.0015	0.142	7.090	mg/L
|	Fe	54	137514.899	0.66	0.2190	0.016	7.172	mg/L
|	Fe	57	43836.915	0.25	0.1943	0.007	3.785	mg/L
⌊>	Sc-1	45	154552.741	154552.74				mg/L
	Cl	35	49154.543	25622.20				mg/L
	Kr	83	62.334	-1.00				mg/L
	Br	81	13746.110	6297.34				mg/L
	P	31	14573.970	6522.06				mg/L
	S	34	224773.001	100425.23				mg/L
	Sr	88	79677.458	79560.78				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		105.447			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.787			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		102.046			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		94.036			

Sample ID: L1104022012
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1104022012
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Method 6020 - Summary Report

Sample ID: L1104022016 WG361305-01

Sample Date/Time: Monday, April 11, 2011 20:45:55
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 49
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21990.948	0.03				ug/L
|	Be	9	12.000	-0.00	-0.0170	0.008	46.212	ug/L
|	Al	27	31265.525	0.17	5.1901	0.498	9.599	ug/L
|>	Sc	45	170120.554	170120.55				ug/L
⌈	Ti	49	163.351	0.00	0.2048	0.080	39.092	ug/L
|	V	51	3958.577	0.00	0.1227	0.014	11.179	ug/L
|	Cr	52	13481.559	0.01	0.5415	0.078	14.362	ug/L
|	Cr	53	773.441	-0.00	-0.0690	0.052	75.630	ug/L
|	Mn	55	9745478.535	28.33	822.0237	23.955	2.914	ug/L
|	Co	59	4257.949	0.01	0.4225	0.009	2.206	ug/L
|	Ni	60	2609.033	0.01	1.2314	0.044	3.555	ug/L
|	Cu	65	992.392	0.00	0.3773	0.013	3.362	ug/L
|	Zn	66	3334.589	0.01	1.7696	0.091	5.146	ug/L
|>	Ge	72	344112.682	344112.68				ug/L
|	As	75	-60.408	0.00	0.1155	0.032	27.994	ug/L
|	Se	77	99.334	0.00	0.0774	0.171	220.386	ug/L
|	Se	82	36.847	0.00	0.3136	0.061	19.558	ug/L
⌊	Rb	85	1478.791	0.00				mg/L
	Y	89	230713.987	4729.95				ug/L
	Rh	103	49.667	35.67				ug/L
⌈	Mo	98	2362.837	0.01	0.7826	0.021	2.634	ug/L
|	Ag	107	25.000	-0.00	-0.0227	0.000	0.642	ug/L
|	Cd	114	15.478	0.00	0.0254	0.005	20.861	ug/L
|>	In	115	333515.324	333515.32				ug/L
|	Sn	118	3729.230	0.01	0.7637	0.046	6.041	ug/L
⌊	Sb	123	147.033	0.00	0.0333	0.003	8.720	ug/L
⌈	Ba	135	115477.418	0.24	64.9841	0.435	0.670	ug/L
|	Ce	140	240.027	0.00				ug/L
|>	Tb	159	476116.098	476116.10				ug/L
⌈	Ho	165	33.337	0.00				ug/L
|	Tl	203	156.003	0.00	0.0022	0.004	170.489	ug/L
|	Tl	205	423.385	0.00	0.0107	0.005	42.758	ug/L
|	Pb	206	434.680	0.00	0.0094	0.002	24.799	ug/L
|	Pb	207	354.010	0.00	-0.0015	0.003	178.712	ug/L
|	Pb	208	1697.407	0.00	0.0024	0.002	75.842	ug/L
|	U	238	5751.711	0.01	0.1290	0.003	2.375	ug/L
|>	Bi	209	423129.247	423129.25				ug/L

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Na	23	58439777.477	343.79	11.5267	0.631	5.478	mg/L	
Mg	24	17156473.259	101.07	5.0784	0.345	6.785	mg/L	
K	39	6735364.571	37.69	0.9548	0.028	2.925	mg/L	
Ca	43	355846.021	2.09	22.2382	1.156	5.198	mg/L	
Fe	54	89934.528	0.30	0.1013	0.010	10.036	mg/L	
Fe	57	21979.667	0.10	0.0748	0.007	9.410	mg/L	
> Sc-1	45	170120.554	170120.55				mg/L	
Cl	35	226220.356	202688.01				mg/L	
Kr	83	56.001	-7.33				mg/L	
Br	81	35031.924	27583.15				mg/L	
P	31	20231.825	12179.92				mg/L	
S	34	300990.258	176642.48				mg/L	
Sr	88	1167936.673	1167819.99				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		110.843			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		106.523			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		109.690			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		99.929			

Sample ID: L1104022016 WG361305-01
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104022016S WG361305-04

Sample Date/Time: Monday, April 11, 2011 20:53:02
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 50
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20821.705	0.03				ug/L
|	Be	9	7419.419	0.05	27.0624	1.210	4.471	ug/L
|	Al	27	146549.486	0.95	29.1320	1.197	4.110	ug/L
|>	Sc	45	152132.395	152132.39				ug/L
⌈	Ti	49	166.685	0.00	0.2454	0.021	8.484	ug/L
|	V	51	199178.119	0.64	23.5836	0.253	1.074	ug/L
|	Cr	52	179457.789	0.56	24.2413	0.133	0.550	ug/L
|	Cr	53	20095.530	0.06	23.7170	0.835	3.520	ug/L
|	Mn	55	9230544.817	30.03	871.2900	5.377	0.617	ug/L
|	Co	59	218521.847	0.71	25.5018	0.397	1.557	ug/L
|	Ni	60	47248.164	0.15	25.8571	0.284	1.100	ug/L
|	Cu	65	46728.391	0.15	24.4797	0.068	0.277	ug/L
|	Zn	66	28273.531	0.09	23.7464	0.243	1.022	ug/L
|>	Ge	72	307367.669	307367.67				ug/L
|	As	75	23885.861	0.08	22.7777	0.240	1.053	ug/L
|	Se	77	1847.504	0.01	21.1354	0.218	1.029	ug/L
|	Se	82	2184.390	0.01	20.9312	0.184	0.879	ug/L
⌊	Rb	85	1361.773	0.00				mg/L
	Y	89	209261.011	-16723.02				ug/L
	Rh	103	52.667	38.67				ug/L
⌈	Mo	98	2000.690	0.01	0.7437	0.005	0.711	ug/L
|	Ag	107	120589.367	0.41	20.9844	0.294	1.400	ug/L
|	Cd	114	28091.053	0.09	23.6212	0.719	3.043	ug/L
|>	In	115	297463.597	297463.60				ug/L
|	Sn	118	254.670	0.00	0.0328	0.003	8.168	ug/L
⌊	Sb	123	88467.391	0.30	24.2485	0.176	0.726	ug/L
⌈	Ba	135	145785.846	0.33	89.0860	1.428	1.603	ug/L
|	Ce	140	190.021	0.00				ug/L
|>	Tb	159	438474.932	438474.93				ug/L
⌈	Ho	165	33.337	0.00				ug/L
|	Tl	203	200490.442	0.52	25.3266	0.350	1.381	ug/L
|	Tl	205	496544.791	1.29	25.2777	0.759	3.001	ug/L
|	Pb	206	170206.695	0.44	26.4584	0.885	3.346	ug/L
|	Pb	207	150109.747	0.39	24.7973	0.690	2.784	ug/L
|	Pb	208	688371.839	1.78	25.6466	0.623	2.430	ug/L
|	U	238	1167966.734	3.03	26.8540	0.866	3.224	ug/L
|>	Bi	209	385395.331	385395.33				ug/L

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Na	23	54641638.631	359.20	12.0434	0.681	5.651	mg/L	
Mg	24	16783108.275	110.40	5.5475	0.284	5.123	mg/L	
K	39	6306888.635	39.55	1.0021	0.040	4.005	mg/L	
Ca	43	323106.741	2.12	22.5413	0.539	2.393	mg/L	
Fe	54	82116.015	0.31	0.1048	0.014	13.772	mg/L	
Fe	57	20242.722	0.10	0.0774	0.012	14.981	mg/L	
> Sc-1	45	152132.395	152132.39				mg/L	
Cl	35	208531.444	184999.10				mg/L	
Kr	83	63.334	0.00				mg/L	
Br	81	38141.954	30693.18				mg/L	
P	31	17087.937	9036.03				mg/L	
S	34	275611.297	151263.52				mg/L	
Sr	88	1078115.375	1077998.70				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		99.007			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		95.009			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		101.018			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		91.017			

Sample ID: L1104022016S WG361305-04
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Sample ID: L1104022016S WG361305-04
Report Date/Time: Monday, April 11, 2011 20:55:14
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104022016SD WG361305-05

Sample Date/Time: Monday, April 11, 2011 21:00:09
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 51
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22608.891	0.04				ug/L
|	Be	9	7310.672	0.05	25.8332	1.200	4.643	ug/L
|	Al	27	160242.553	1.00	30.8607	1.234	3.997	ug/L
⌊>	Sc	45	157058.050	157058.05				ug/L
⌈	Ti	49	240.027	0.00	0.3827	0.118	30.830	ug/L
|	V	51	201293.698	0.64	23.7006	0.125	0.526	ug/L
|	Cr	52	183213.277	0.57	24.6270	0.176	0.716	ug/L
|	Cr	53	21258.034	0.07	24.9960	0.511	2.045	ug/L
|	Mn	55	9420220.556	30.47	884.2107	16.705	1.889	ug/L
|	Co	59	218472.339	0.71	25.3539	0.373	1.470	ug/L
|	Ni	60	46810.133	0.15	25.4730	0.630	2.471	ug/L
|	Cu	65	48130.028	0.16	25.0743	0.211	0.842	ug/L
|	Zn	66	30584.684	0.10	25.6026	0.417	1.627	ug/L
| >	Ge	72	309116.752	309116.75				ug/L
|	As	75	24101.467	0.08	22.8521	0.187	0.817	ug/L
|	Se	77	1881.510	0.01	21.4176	0.797	3.721	ug/L
|	Se	82	2220.444	0.01	21.1553	0.391	1.849	ug/L
⌊	Rb	85	1426.449	0.00				mg/L
	Y	89	206722.553	-19261.48				ug/L
	Rh	103	51.001	37.00				ug/L
⌈	Mo	98	2012.131	0.01	0.7469	0.020	2.648	ug/L
|	Ag	107	122836.162	0.41	21.3510	0.471	2.206	ug/L
|	Cd	114	28396.974	0.10	23.8496	0.689	2.887	ug/L
| >	In	115	297840.085	297840.09				ug/L
|	Sn	118	344.673	0.00	0.0541	0.005	10.022	ug/L
⌊	Sb	123	89594.764	0.30	24.5283	0.300	1.222	ug/L
⌈	Ba	135	147694.776	0.34	90.4957	1.735	1.917	ug/L
|	Ce	140	286.700	0.00				ug/L
⌊>	Tb	159	437281.380	437281.38				ug/L
⌈	Ho	165	46.671	0.00				ug/L
|	Tl	203	204458.853	0.52	25.4476	0.194	0.762	ug/L
|	Tl	205	499488.841	1.28	25.0462	0.471	1.880	ug/L
|	Pb	206	172577.500	0.44	26.4229	0.183	0.693	ug/L
|	Pb	207	154487.090	0.39	25.1424	0.523	2.080	ug/L
|	Pb	208	709828.457	1.81	26.0533	0.251	0.962	ug/L
|	U	238	1211453.352	3.10	27.4345	0.101	0.368	ug/L
⌊>	Bi	209	391081.468	391081.47				ug/L

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⌈	Na	23	55836214.558	355.34	11.9141	0.363	3.046	mg/L
|	Mg	24	16646442.601	106.02	5.3273	0.116	2.183	mg/L
|	K	39	6655490.391	40.49	1.0260	0.055	5.340	mg/L
|	Ca	43	344062.741	2.19	23.2690	0.768	3.299	mg/L
|	Fe	54	83546.995	0.30	0.1022	0.014	13.724	mg/L
|	Fe	57	22050.191	0.11	0.0831	0.014	17.284	mg/L
⌊>	Sc-1	45	157058.050	157058.05				mg/L
	Cl	35	220069.996	196537.65				mg/L
	Kr	83	58.001	-5.33				mg/L
	Br	81	34710.821	27262.05				mg/L
	P	31	18085.081	10033.17				mg/L
	S	34	288385.907	164038.13				mg/L
	Sr	88	1097699.969	1097583.29				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		99.570			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		95.129			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		100.743			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		92.360			

Sample ID: L1104022016SD WG361305-05
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

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Method 6020 - Summary Report

Sample ID: L1104022018

Sample Date/Time: Monday, April 11, 2011 21:07:16
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 52
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23477.750	0.04				ug/L
|	Be	9	25.333	0.00	0.0295	0.011	36.631	ug/L
|	Al	27	2652080.545	16.16	496.2233	21.307	4.294	ug/L
⌊>	Sc	45	164398.380	164398.38				ug/L
⌈	Ti	49	2433.881	0.01	4.2490	0.565	13.309	ug/L
|	V	51	12366.288	0.03	1.0922	0.019	1.713	ug/L
|	Cr	52	15437.740	0.02	0.8912	0.060	6.771	ug/L
|	Cr	53	776.775	-0.00	-0.0168	0.142	847.602	ug/L
|	Mn	55	168171.544	0.51	14.8743	0.547	3.677	ug/L
|	Co	59	4370.666	0.01	0.4582	0.013	2.942	ug/L
|	Ni	60	1608.146	0.00	0.7808	0.011	1.346	ug/L
|	Cu	65	4817.876	0.01	2.2947	0.113	4.942	ug/L
|	Zn	66	7611.639	0.02	5.4080	0.377	6.979	ug/L
| >	Ge	72	327279.788	327279.79				ug/L
|	As	75	834.470	0.00	0.9101	0.047	5.144	ug/L
|	Se	77	75.334	-0.00	-0.1342	0.187	139.603	ug/L
|	Se	82	15.168	0.00	0.1334	0.090	67.613	ug/L
⌊	Rb	85	7661.679	0.02				mg/L
	Y	89	228099.682	2115.65				ug/L
	Rh	103	12.333	-1.67				ug/L
⌈	Mo	98	7430.970	0.02	2.5737	0.031	1.224	ug/L
|	Ag	107	103.668	-0.00	-0.0094	0.006	58.597	ug/L
|	Cd	114	-4.605	-0.00	0.0103	0.003	34.034	ug/L
| >	In	115	316071.432	316071.43				ug/L
|	Sn	118	328.139	0.00	0.0455	0.004	7.759	ug/L
⌊	Sb	123	177.614	0.00	0.0432	0.002	3.535	ug/L
⌈	Ba	135	8611.798	0.02	5.1547	0.169	3.271	ug/L
|	Ce	140	17540.503	0.04				ug/L
⌊>	Tb	159	447236.368	447236.37				ug/L
⌈	Ho	165	370.044	0.00				ug/L
|	Tl	203	74.668	0.00	-0.0067	0.001	14.335	ug/L
|	Tl	205	166.685	0.00	-0.0007	0.001	160.840	ug/L
|	Pb	206	1754.172	0.00	0.2106	0.005	2.310	ug/L
|	Pb	207	1536.134	0.00	0.1896	0.006	3.165	ug/L
|	Pb	208	7141.753	0.01	0.2012	0.003	1.683	ug/L
|	U	238	5043.989	0.01	0.1203	0.004	3.048	ug/L
⌊>	Bi	209	400671.467	400671.47				ug/L

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⌈	Na	23	S	S	S	S	S	mg/L
|	Mg	24	572084.832	3.49	0.1735	0.012	6.857	mg/L
|	K	39	2166946.968	11.27	0.2832	0.013	4.539	mg/L
|	Ca	43	2727.312	0.02	0.1604	0.005	2.834	mg/L
|	Fe	54	214885.436	1.08	0.3564	0.027	7.447	mg/L
|	Fe	57	70854.481	0.40	0.3089	0.013	4.092	mg/L
⌊>	Sc-1	45	164398.380	164398.38				mg/L
	Cl	35	34498.814	10966.47				mg/L
	Kr	83	57.334	-6.00				mg/L
	Br	81	12760.147	5311.37				mg/L
	P	31	20422.309	12370.40				mg/L
	S	34	314365.934	190018.16				mg/L
	Sr	88	16324.961	16208.28				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		105.421			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.952			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		103.037			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		94.625			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1104022018
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Method 6020 - Summary Report

Sample ID: L1104022020

Sample Date/Time: Monday, April 11, 2011 21:14:24
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 53
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23176.977	0.04				ug/L
|	Be	9	24.667	0.00	0.0260	0.003	12.518	ug/L
|	Al	27	4023533.156	24.23	743.9958	55.405	7.447	ug/L
⌊>	Sc	45	166392.128	166392.13				ug/L
⌈	Ti	49	4658.220	0.01	8.2474	0.564	6.843	ug/L
|	V	51	39460.458	0.11	4.1439	0.155	3.731	ug/L
|	Cr	52	17752.925	0.03	1.1971	0.049	4.117	ug/L
|	Cr	53	1533.605	0.00	0.8495	0.109	12.825	ug/L
|	Mn	55	1211388.859	3.70	107.3613	3.409	3.175	ug/L
|	Co	59	12829.020	0.04	1.3857	0.026	1.881	ug/L
|	Ni	60	3235.556	0.01	1.6194	0.036	2.213	ug/L
|	Cu	65	8372.587	0.03	4.0461	0.022	0.553	ug/L
|	Zn	66	11346.886	0.03	8.4415	0.350	4.141	ug/L
|>	Ge	72	327222.806	327222.81				ug/L
|	As	75	3659.386	0.01	3.4202	0.071	2.062	ug/L
|	Se	77	96.667	0.00	0.1001	0.184	184.073	ug/L
|	Se	82	22.482	0.00	0.2000	0.157	78.399	ug/L
⌊	Rb	85	11089.924	0.03				mg/L
	Y	89	236227.963	10243.93				ug/L
	Rh	103	18.667	4.67				ug/L
⌈	Mo	98	909.146	0.00	0.3262	0.009	2.684	ug/L
|	Ag	107	88.668	-0.00	-0.0119	0.002	19.760	ug/L
|	Cd	114	17.001	0.00	0.0273	0.005	17.538	ug/L
|>	In	115	313946.028	313946.03				ug/L
|	Sn	118	484.678	0.00	0.0814	0.002	2.596	ug/L
⌊	Sb	123	269.782	0.00	0.0675	0.007	9.941	ug/L
⌈	Ba	135	15731.523	0.03	9.3219	0.109	1.164	ug/L
|	Ce	140	49557.673	0.11				ug/L
⌊>	Tb	159	451808.253	451808.25				ug/L
⌈	Ho	165	1096.838	0.00				ug/L
|	Tl	203	101.002	0.00	-0.0038	0.001	20.834	ug/L
|	Tl	205	263.363	0.00	0.0037	0.001	33.555	ug/L
|	Pb	206	3139.858	0.01	0.4085	0.004	0.883	ug/L
|	Pb	207	2736.735	0.01	0.3721	0.010	2.698	ug/L
|	Pb	208	12765.701	0.03	0.3938	0.011	2.778	ug/L
|	U	238	16055.707	0.04	0.3563	0.005	1.485	ug/L
⌊>	Bi	209	408897.841	408897.84				ug/L

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⌈	Na	23	122546133.072	737.15	24.7146	0.973	3.936	mg/L
|	Mg	24	386120.081	2.32	0.1148	0.007	6.428	mg/L
|	K	39	1850449.123	9.23	0.2313	0.029	12.615	mg/L
|	Ca	43	6376.005	0.04	0.3912	0.010	2.596	mg/L
|	Fe	54	387037.083	2.09	0.6877	0.017	2.428	mg/L
|	Fe	57	144808.677	0.84	0.6495	0.038	5.841	mg/L
⌊>	Sc-1	45	166392.128	166392.13				mg/L
	Cl	35	57850.239	34317.90				mg/L
	Kr	83	59.667	-3.67				mg/L
	Br	81	14632.039	7183.27				mg/L
	P	31	44424.533	36372.62				mg/L
	S	34	193913.790	69566.02				mg/L
	Sr	88	21204.603	21087.92				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		105.402			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.273			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		104.090			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		96.568			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104022022

Sample Date/Time: Monday, April 11, 2011 21:21:32
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 54
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	26468.339	0.03				ug/L
|	Be	9	22.667	0.00	0.0084	0.019	228.918	ug/L
|	Al	27	3818866.591	19.79	607.6295	61.247	10.080	ug/L
⌊>	Sc	45	194147.413	194147.41				ug/L
⌈	Ti	49	3617.689	0.01	5.8969	0.752	12.746	ug/L
|	V	51	11451.672	0.02	0.8901	0.036	3.994	ug/L
|	Cr	52	18662.260	0.03	1.1284	0.061	5.427	ug/L
|	Cr	53	1326.888	0.00	0.4955	0.170	34.383	ug/L
|	Mn	55	3378283.654	9.53	276.6024	1.670	0.604	ug/L
|	Co	59	47059.965	0.13	4.7471	0.052	1.102	ug/L
|	Ni	60	2628.038	0.01	1.2030	0.013	1.049	ug/L
|	Cu	65	10994.819	0.03	4.9266	0.080	1.618	ug/L
|	Zn	66	27397.424	0.08	19.8350	0.359	1.812	ug/L
|>	Ge	72	354280.387	354280.39				ug/L
|	As	75	3353.814	0.01	2.9213	0.083	2.839	ug/L
|	Se	77	114.001	0.00	0.1975	0.005	2.615	ug/L
|	Se	82	31.537	0.00	0.2600	0.046	17.506	ug/L
⌊	Rb	85	5423.191	0.02				mg/L
	Y	89	259400.501	33416.47				ug/L
	Rh	103	61.001	47.00				ug/L
⌈	Mo	98	2480.538	0.01	0.8029	0.033	4.105	ug/L
|	Ag	107	54.001	-0.00	-0.0184	0.000	2.485	ug/L
|	Cd	114	5.385	0.00	0.0177	0.002	12.218	ug/L
|>	In	115	341231.541	341231.54				ug/L
|	Sn	118	572.150	0.00	0.0908	0.001	1.292	ug/L
⌊	Sb	123	262.829	0.00	0.0602	0.002	3.822	ug/L
⌈	Ba	135	199330.983	0.41	108.8464	0.505	0.464	ug/L
|	Ce	140	71418.024	0.15				ug/L
⌊>	Tb	159	490645.090	490645.09				ug/L
⌈	Ho	165	2017.072	0.00				ug/L
|	Tl	203	60.001	0.00	-0.0091	0.001	7.590	ug/L
|	Tl	205	123.346	-0.00	-0.0034	0.001	27.137	ug/L
|	Pb	206	4951.942	0.01	0.6262	0.006	0.999	ug/L
|	Pb	207	4149.236	0.01	0.5493	0.019	3.468	ug/L
|	Pb	208	19533.389	0.04	0.5862	0.008	1.309	ug/L
|	U	238	11635.548	0.03	0.2439	0.002	0.727	ug/L
⌊>	Bi	209	437940.962	437940.96				ug/L

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Na	23	135353365.371	702.43	23.5505	2.615	11.103	mg/L	
Mg	24	12846881.510	66.70	3.3509	0.379	11.297	mg/L	
K	39	3716271.844	17.30	0.4365	0.033	7.511	mg/L	
Ca	43	207846.254	1.08	11.4280	1.047	9.163	mg/L	
Fe	54	638854.841	3.07	1.0069	0.071	7.028	mg/L	
Fe	57	234457.600	1.19	0.9181	0.122	13.277	mg/L	
> Sc-1	45	194147.413	194147.41				mg/L	
Cl	35	89844.541	66312.20				mg/L	
Kr	83	53.334	-10.00				mg/L	
Br	81	16480.240	9031.47				mg/L	
P	31	120312.148	112260.24				mg/L	
S	34	227203.079	102855.31				mg/L	
Sr	88	1552543.461	1552426.78				mg/L	

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
	Li	6					
	Be	9					
	Al	27					
>	Sc	45					
	Ti	49					
	V	51					
	Cr	52					
	Cr	53					
	Mn	55					
	Co	59					
	Ni	60					
	Cu	65					
	Zn	66					
>	Ge	72		114.118			
	As	75					
	Se	77					
	Se	82					
	Rb	85					
	Y	89					
	Rh	103					
	Mo	98					
	Ag	107					
	Cd	114					
>	In	115		108.988			
	Sn	118					
	Sb	123					
	Ba	135					
	Ce	140					
>	Tb	159		113.038			
	Ho	165					
	Tl	203					
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
	U	238					
>	Bi	209		103.427			

Sample ID: L1104022022
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Ba 135 Upper, S, EEE	Ba	135	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104022024

Sample Date/Time: Monday, April 11, 2011 21:28:41
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 55
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	24997.934	0.03				ug/L
|	Be	9	92.667	0.00	0.2226	0.035	15.720	ug/L
|	Al	27	23505923.871	126.92	3897.2883	93.318	2.394	ug/L
⌊>	Sc	45	185338.438	185338.44				ug/L
⌈	Ti	49	35452.946	0.10	60.2248	0.315	0.523	ug/L
|	V	51	49394.882	0.14	4.9984	0.122	2.450	ug/L
|	Cr	52	35341.364	0.08	3.3128	0.065	1.965	ug/L
|	Cr	53	3851.127	0.01	3.3074	0.124	3.756	ug/L
|	Mn	55	1104960.936	3.21	93.2709	2.163	2.319	ug/L
|	Co	59	11605.851	0.03	1.1911	0.038	3.195	ug/L
|	Ni	60	9742.843	0.03	4.7324	0.132	2.789	ug/L
|	Cu	65	11615.526	0.03	5.3754	0.114	2.118	ug/L
|	Zn	66	46626.935	0.13	35.4292	0.789	2.228	ug/L
|>	Ge	72	343546.809	343546.81				ug/L
|	As	75	1902.837	0.01	1.7779	0.050	2.839	ug/L
|	Se	77	114.667	0.00	0.2419	0.092	38.029	ug/L
|	Se	82	21.044	0.00	0.1778	0.064	35.993	ug/L
⌊	Rb	85	62474.507	0.18				mg/L
	Y	89	248935.364	22951.33				ug/L
	Rh	103	25.667	11.67				ug/L
⌈	Mo	98	374.773	0.00	0.1336	0.005	3.483	ug/L
|	Ag	107	93.001	-0.00	-0.0121	0.002	15.625	ug/L
|	Cd	114	36.888	0.00	0.0415	0.010	24.457	ug/L
|>	In	115	332114.036	332114.04				ug/L
|	Sn	118	1205.539	0.00	0.2291	0.003	1.164	ug/L
⌊	Sb	123	423.330	0.00	0.1013	0.002	2.077	ug/L
⌈	Ba	135	106528.845	0.23	60.4017	1.007	1.668	ug/L
|	Ce	140	173957.188	0.37				ug/L
⌊>	Tb	159	472558.567	472558.57				ug/L
⌈	Ho	165	2237.142	0.01				ug/L
|	Tl	203	581.356	0.00	0.0500	0.003	5.280	ug/L
|	Tl	205	1336.890	0.00	0.0520	0.002	4.580	ug/L
|	Pb	206	13906.469	0.03	1.8853	0.028	1.464	ug/L
|	Pb	207	11794.404	0.03	1.6919	0.021	1.264	ug/L
|	Pb	208	55237.057	0.12	1.7898	0.015	0.816	ug/L
|	U	238	4521.067	0.01	0.1016	0.002	2.086	ug/L
⌊>	Bi	209	430609.616	430609.62				ug/L

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Na	23	80728318.073	435.52	14.6020	0.273	1.867	mg/L	
Mg	24	7123059.812	38.47	1.9319	0.091	4.736	mg/L	
K	39	8884258.120	46.02	1.1666	0.027	2.278	mg/L	
Ca	43	110970.429	0.60	6.3486	0.146	2.296	mg/L	
Fe	54	2256223.567	11.95	3.9028	0.094	2.416	mg/L	
Fe	57	902217.491	4.84	3.7454	0.086	2.293	mg/L	
> Sc-1	45	185338.438	185338.44				mg/L	
Cl	35	200520.816	176988.47				mg/L	
Kr	83	71.668	8.33				mg/L	
Br	81	20440.205	12991.43				mg/L	
P	31	49204.825	41152.92				mg/L	
S	34	296192.925	171845.15				mg/L	
Sr	88	435531.632	435414.95				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		110.660			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		106.076			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		108.871			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		101.695			

Sample ID: L1104022024
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1104022024
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Method 6020 - Summary Report

Sample ID: L1104022026

Sample Date/Time: Monday, April 11, 2011 21:35:50
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 56
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	25649.762	0.03				ug/L
|	Be	9	16.000	-0.00	-0.0086	0.027	313.168	ug/L
|	Al	27	863887.163	4.61	141.7019	7.983	5.633	ug/L
⌊>	Sc	45	186951.212	186951.21				ug/L
⌈	Ti	49	1133.512	0.00	1.7726	0.237	13.396	ug/L
|	V	51	11950.865	0.03	0.9268	0.035	3.726	ug/L
|	Cr	52	18365.032	0.02	1.0639	0.034	3.154	ug/L
|	Cr	53	1450.250	0.00	0.6073	0.084	13.833	ug/L
|	Mn	55	783986.170	2.18	63.3639	1.621	2.558	ug/L
|	Co	59	20008.866	0.06	1.9810	0.057	2.870	ug/L
|	Ni	60	3373.603	0.01	1.5375	0.014	0.917	ug/L
|	Cu	65	5291.453	0.01	2.2948	0.032	1.402	ug/L
|	Zn	66	21070.052	0.06	14.8661	0.201	1.351	ug/L
| >	Ge	72	358785.893	358785.89				ug/L
|	As	75	898.132	0.00	0.8953	0.073	8.208	ug/L
|	Se	77	95.334	0.00	-0.0092	0.047	516.101	ug/L
|	Se	82	14.450	0.00	0.1165	0.058	49.481	ug/L
⌊	Rb	85	2194.596	0.01				mg/L
	Y	89	242663.024	16678.99				ug/L
	Rh	103	16.334	2.33				ug/L
⌈	Mo	98	2117.378	0.01	0.6839	0.019	2.786	ug/L
|	Ag	107	64.334	-0.00	-0.0169	0.001	3.153	ug/L
|	Cd	114	11.769	0.00	0.0224	0.001	3.142	ug/L
| >	In	115	342850.521	342850.52				ug/L
|	Sn	118	783.497	0.00	0.1339	0.003	2.053	ug/L
⌊	Sb	123	230.825	0.00	0.0523	0.004	6.710	ug/L
⌈	Ba	135	9035.839	0.02	4.8448	0.053	1.084	ug/L
|	Ce	140	15022.781	0.03				ug/L
⌊>	Tb	159	498922.644	498922.64				ug/L
⌈	Ho	165	523.400	0.00				ug/L
|	Tl	203	71.334	0.00	-0.0079	0.001	16.887	ug/L
|	Tl	205	133.348	-0.00	-0.0030	0.001	26.064	ug/L
|	Pb	206	1311.766	0.00	0.1266	0.005	3.969	ug/L
|	Pb	207	1137.409	0.00	0.1099	0.004	3.742	ug/L
|	Pb	208	5178.575	0.01	0.1139	0.004	3.298	ug/L
|	U	238	15939.860	0.04	0.3291	0.003	0.941	ug/L
⌊>	Bi	209	440428.895	440428.89				ug/L

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Na	23	182693541.522	980.11	32.8602	3.060	9.313	mg/L	
Mg	24	3055252.711	16.36	0.8206	0.035	4.317	mg/L	
K	39	3751817.561	18.17	0.4586	0.026	5.730	mg/L	
Ca	43	144126.011	0.77	8.1797	0.217	2.647	mg/L	
Fe	54	259639.892	1.16	0.3822	0.021	5.444	mg/L	
Fe	57	83135.899	0.41	0.3192	0.012	3.614	mg/L	
> Sc-1	45	186951.212	186951.21				mg/L	
Cl	35	94310.639	70778.30				mg/L	
Kr	83	63.334	-0.00				mg/L	
Br	81	13822.219	6373.45				mg/L	
P	31	33396.409	25344.50				mg/L	
S	34	267124.980	142777.21				mg/L	
Sr	88	102627.658	102510.98				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		115.569			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		109.505			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		114.945			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		104.014			

Sample ID: L1104022026
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 11, 2011 21:42:58
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23077.060	0.05				ug/L
|	Be	9	16571.062	0.11	61.2758	2.550	4.161	ug/L
|	Al	27	278663.107	1.84	56.5385	1.992	3.524	ug/L
⌊>	Sc	45	150169.469	150169.47				ug/L
⌈	Ti	49	49517.413	0.15	86.5436	2.894	3.343	ug/L
|	V	51	410922.960	1.22	45.0511	0.321	0.713	ug/L
|	Cr	52	358636.921	1.05	45.5669	0.265	0.581	ug/L
|	Cr	53	41389.616	0.12	45.7930	1.025	2.239	ug/L
|	Mn	55	554796.183	1.66	48.1471	0.887	1.841	ug/L
|	Co	59	449509.047	1.35	48.3045	0.496	1.026	ug/L
|	Ni	60	95926.932	0.29	48.3580	0.111	0.229	ug/L
|	Cu	65	99799.190	0.30	48.2158	0.886	1.838	ug/L
|	Zn	66	62224.957	0.18	48.9459	0.340	0.696	ug/L
| >	Ge	72	333939.820	333939.82				ug/L
|	As	75	54759.593	0.16	47.8840	0.534	1.114	ug/L
|	Se	77	4665.755	0.01	50.4325	0.348	0.689	ug/L
|	Se	82	5640.197	0.02	49.7545	0.864	1.736	ug/L
⌊	Rb	85	2101.909	0.01				mg/L
	Y	89	219590.254	-6393.78				ug/L
	Rh	103	33.334	19.33				ug/L
⌈	Mo	98	278762.498	0.86	94.2499	1.913	2.030	ug/L
|	Ag	107	296042.355	0.92	47.5639	0.487	1.024	ug/L
|	Cd	114	64159.915	0.20	49.7588	0.163	0.327	ug/L
| >	In	115	322415.832	322415.83				ug/L
|	Sn	118	224375.719	0.70	49.2270	0.318	0.646	ug/L
⌊	Sb	123	194025.439	0.60	49.0733	0.690	1.406	ug/L
⌈	Ba	135	82211.405	0.18	48.6330	0.694	1.428	ug/L
|	Ce	140	43.338	-0.00				ug/L
⌊>	Tb	159	452889.833	452889.83				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	421245.228	1.01	49.2737	0.843	1.712	ug/L
|	Tl	205	1024190.283	2.46	48.2578	0.105	0.218	ug/L
|	Pb	206	337924.669	0.81	48.6544	0.539	1.108	ug/L
|	Pb	207	320701.236	0.77	49.0849	0.623	1.269	ug/L
|	Pb	208	1422715.070	3.41	49.1083	0.365	0.744	ug/L
|	U	238	2490114.218	5.98	52.9772	0.932	1.759	ug/L
⌊>	Bi	209	416250.202	416250.20				ug/L

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Na	23	24476043.950	162.69	5.4552	0.192	3.524	mg/L	
Mg	24	16271668.692	108.39	5.4459	0.226	4.156	mg/L	
K	39	29836348.369	196.87	5.0011	0.235	4.704	mg/L	
Ca	43	73288.231	0.49	5.1682	0.058	1.119	mg/L	
Fe	54	2640570.400	17.35	5.6644	0.062	1.087	mg/L	
Fe	57	1120927.763	7.44	5.7565	0.283	4.923	mg/L	
> Sc-1	45	150169.469	150169.47				mg/L	
Cl	35	12539.190	-10993.15				mg/L	
Kr	83	55.334	-8.00				mg/L	
Br	81	8647.739	1198.97				mg/L	
P	31	8710.494	658.58				mg/L	
S	34	148964.787	24617.01				mg/L	
Sr	88	2117.103	2000.42				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	90.102				
Cr	52	91.134				
Cr	53					
Mn	55	96.294				
Co	59	96.609				
Ni	60	96.716				
Cu	65	96.432				
Zn	66	97.892				
> Ge	72		107.566			
As	75	95.768				
Se	77					
Se	82	99.509				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	95.128				
Cd	114	99.518				
> In	115		102.978			
Sn	118					
Sb	123	98.147				
Ba	135	97.266				
Ce	140					
> Tb	159		104.339			
Ho	165					
Tl	203	98.547				
Tl	205					
Pb	206					
Pb	207					
Pb	208	98.217				
U	238	105.954				
> Bi	209		98.304			

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 21:45:11

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 11, 2011 21:50:04
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21790.427	0.05				ug/L
|	Be	9	14.000	-0.00	-0.0018	0.019	1055.124	ug/L
|	Al	27	2983.783	0.00	0.1623	0.041	25.526	ug/L
⌊>	Sc	45	144861.719	144861.72				ug/L
⌈	Ti	49	33.337	-0.00	-0.0129	0.020	158.156	ug/L
|	V	51	2629.731	-0.00	-0.0103	0.008	74.152	ug/L
|	Cr	52	8353.238	-0.00	-0.0729	0.014	19.287	ug/L
|	Cr	53	260.029	-0.00	-0.6226	0.024	3.912	ug/L
|	Mn	55	1985.884	0.00	0.1170	0.004	3.323	ug/L
|	Co	59	87.335	0.00	-0.0124	0.000	3.054	ug/L
|	Ni	60	66.001	0.00	-0.0135	0.006	47.025	ug/L
|	Cu	65	93.335	-0.00	-0.0437	0.006	13.301	ug/L
|	Zn	66	388.678	-0.00	-0.5082	0.008	1.594	ug/L
| >	Ge	72	333229.867	333229.87				ug/L
|	As	75	-183.965	0.00	0.0053	0.042	778.886	ug/L
|	Se	77	75.334	-0.00	-0.1550	0.073	46.970	ug/L
|	Se	82	3.484	0.00	0.0282	0.071	251.259	ug/L
⌊	Rb	85	29.334	0.00				mg/L
	Y	89	217542.508	-8441.53				ug/L
	Rh	103	11.000	-3.00				ug/L
⌈	Mo	98	110.390	0.00	0.0483	0.002	4.131	ug/L
|	Ag	107	59.334	-0.00	-0.0169	0.000	2.663	ug/L
|	Cd	114	-0.236	-0.00	0.0136	0.002	14.878	ug/L
| >	In	115	319137.264	319137.26				ug/L
|	Sn	118	2681.160	0.01	0.5668	0.017	3.027	ug/L
⌊	Sb	123	58.029	0.00	0.0122	0.001	10.543	ug/L
⌈	Ba	135	27.000	-0.00	0.0083	0.003	40.648	ug/L
|	Ce	140	40.004	-0.00				ug/L
⌊>	Tb	159	456853.812	456853.81				ug/L
⌈	Ho	165	20.002	-0.00				ug/L
|	Tl	203	39.000	-0.00	-0.0112	0.000	1.396	ug/L
|	Tl	205	60.006	-0.00	-0.0061	0.000	0.429	ug/L
|	Pb	206	372.677	0.00	0.0016	0.001	67.067	ug/L
|	Pb	207	309.008	0.00	-0.0074	0.004	48.682	ug/L
|	Pb	208	1433.721	0.00	-0.0057	0.001	17.229	ug/L
|	U	238	135.336	0.00	0.0116	0.000	1.486	ug/L
⌊>	Bi	209	415924.997	415925.00				ug/L

Sample ID: QC Std 7
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⌈	Na	23	40569.520	-0.07	-0.0015	0.001	51.704	mg/L
|	Mg	24	1026.824	0.00	-0.0018	0.000	3.010	mg/L
|	K	39	312529.886	0.23	0.0026	0.004	166.777	mg/L
|	Ca	43	240.027	0.00	0.0018	0.005	301.993	mg/L
|	Fe	54	39580.644	0.04	0.0180	0.006	36.133	mg/L
|	Fe	57	6132.495	0.01	0.0075	0.003	46.553	mg/L
⌊>	Sc-1	45	144861.719	144861.72				mg/L
	Cl	35	11247.657	-12284.69				mg/L
	Kr	83	59.334	-4.00				mg/L
	Br	81	8456.245	1007.47				mg/L
	P	31	8313.462	261.55				mg/L
	S	34	130792.700	6444.93				mg/L
	Sr	88	100.011	-16.67				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		107.337			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		101.931			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		105.252			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		98.227			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

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Method 6020 - Summary Report

Sample ID: L1104022028

Sample Date/Time: Monday, April 11, 2011 21:57:11
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 57
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21974.146	0.03				ug/L
|	Be	9	21.333	0.00	0.0166	0.032	189.755	ug/L
|	Al	27	1433816.246	8.86	271.9962	21.480	7.897	ug/L
⌊>	Sc	45	161781.964	161781.96				ug/L
⌈	Ti	49	1526.937	0.00	2.5921	0.231	8.906	ug/L
|	V	51	13979.982	0.03	1.2379	0.070	5.672	ug/L
|	Cr	52	14667.229	0.02	0.7424	0.035	4.649	ug/L
|	Cr	53	990.148	-0.00	0.1973	0.128	64.865	ug/L
|	Mn	55	787203.670	2.35	68.1577	0.860	1.262	ug/L
|	Co	59	23082.843	0.07	2.4531	0.022	0.908	ug/L
|	Ni	60	2896.115	0.01	1.4105	0.026	1.830	ug/L
|	Cu	65	6379.098	0.02	2.9896	0.019	0.644	ug/L
|	Zn	66	20677.232	0.06	15.6714	0.239	1.528	ug/L
|>	Ge	72	334853.154	334853.15				ug/L
|	As	75	1021.475	0.00	1.0534	0.060	5.700	ug/L
|	Se	77	97.334	0.00	0.0836	0.133	158.758	ug/L
|	Se	82	30.827	0.00	0.2688	0.004	1.356	ug/L
⌊	Rb	85	4229.603	0.01				mg/L
	Y	89	225762.629	-221.40				ug/L
	Rh	103	17.000	3.00				ug/L
⌈	Mo	98	2140.972	0.01	0.7409	0.024	3.182	ug/L
|	Ag	107	152.669	0.00	-0.0018	0.006	327.515	ug/L
|	Cd	114	18.234	0.00	0.0281	0.004	13.733	ug/L
|>	In	115	319548.942	319548.94				ug/L
|	Sn	118	1019.252	0.00	0.1979	0.004	2.123	ug/L
⌊	Sb	123	225.534	0.00	0.0549	0.007	11.976	ug/L
⌈	Ba	135	10563.684	0.02	6.1472	0.132	2.153	ug/L
|	Ce	140	17854.384	0.04				ug/L
⌊>	Tb	159	459945.796	459945.80				ug/L
⌈	Ho	165	496.729	0.00				ug/L
|	Tl	203	87.001	0.00	-0.0055	0.000	2.064	ug/L
|	Tl	205	236.693	0.00	0.0024	0.000	12.364	ug/L
|	Pb	206	1448.786	0.00	0.1598	0.015	9.432	ug/L
|	Pb	207	1254.758	0.00	0.1403	0.003	1.975	ug/L
|	Pb	208	5748.372	0.01	0.1464	0.006	4.361	ug/L
|	U	238	15631.034	0.04	0.3461	0.007	2.106	ug/L
⌊>	Bi	209	410110.142	410110.14				ug/L

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Na	23	175263177.153	1083.30	36.3198	0.682	1.877	mg/L	
Mg	24	3029980.128	18.73	0.9395	0.018	1.950	mg/L	
K	39	3690387.145	20.89	0.5277	0.020	3.816	mg/L	
Ca	43	135363.529	0.84	8.8728	0.159	1.790	mg/L	
Fe	54	312266.524	1.70	0.5587	0.035	6.317	mg/L	
Fe	57	103186.574	0.60	0.4684	0.011	2.436	mg/L	
> Sc-1	45	161781.964	161781.96				mg/L	
Cl	35	103894.403	80362.06				mg/L	
Kr	83	58.334	-5.00				mg/L	
Br	81	24270.103	16821.33				mg/L	
P	31	28893.721	20841.81				mg/L	
S	34	255371.275	131023.50				mg/L	
Sr	88	104217.469	104100.79				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		107.860			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		102.063			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		105.965			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		96.854			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1104022028
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Method 6020 - Summary Report

Sample ID: L1104022030

Sample Date/Time: Monday, April 11, 2011 22:04:21
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 58
Method File: C:\elandata\Method\6020a.mth
Sample Description: 5

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22842.760	0.04				ug/L
|	Be	9	33.333	0.00	0.0612	0.020	33.302	ug/L
|	Al	27	3203622.723	20.29	623.1149	47.471	7.618	ug/L
⌊>	Sc	45	158091.498	158091.50				ug/L
⌈	Ti	49	4087.914	0.01	7.0603	0.567	8.026	ug/L
|	V	51	34408.924	0.09	3.4839	0.157	4.507	ug/L
|	Cr	52	16700.444	0.02	1.0050	0.065	6.481	ug/L
|	Cr	53	1223.531	0.00	0.4585	0.181	39.491	ug/L
|	Mn	55	1039682.813	3.10	89.9709	1.841	2.046	ug/L
|	Co	59	9575.347	0.03	1.0041	0.022	2.208	ug/L
|	Ni	60	2405.980	0.01	1.1630	0.024	2.063	ug/L
|	Cu	65	5572.276	0.02	2.5985	0.096	3.713	ug/L
|	Zn	66	9849.949	0.03	7.0308	0.150	2.132	ug/L
|>	Ge	72	335057.595	335057.59				ug/L
|	As	75	2808.017	0.01	2.6044	0.086	3.314	ug/L
|	Se	77	98.667	0.00	0.0970	0.043	43.939	ug/L
|	Se	82	23.125	0.00	0.2010	0.029	14.470	ug/L
⌊	Rb	85	8874.358	0.03				mg/L
	Y	89	228149.634	2165.60				ug/L
	Rh	103	19.334	5.33				ug/L
⌈	Mo	98	556.340	0.00	0.2040	0.005	2.247	ug/L
|	Ag	107	83.001	-0.00	-0.0129	0.001	8.024	ug/L
|	Cd	114	4.717	0.00	0.0176	0.002	10.905	ug/L
|>	In	115	313543.817	313543.82				ug/L
|	Sn	118	423.742	0.00	0.0678	0.004	5.428	ug/L
⌊	Sb	123	247.660	0.00	0.0618	0.005	8.109	ug/L
⌈	Ba	135	15215.053	0.03	9.0787	0.222	2.450	ug/L
|	Ce	140	39572.204	0.09				ug/L
⌊>	Tb	159	448748.056	448748.06				ug/L
⌈	Ho	165	800.113	0.00				ug/L
|	Tl	203	82.334	0.00	-0.0058	0.001	9.361	ug/L
|	Tl	205	200.022	0.00	0.0008	0.003	389.057	ug/L
|	Pb	206	2989.477	0.01	0.3927	0.009	2.202	ug/L
|	Pb	207	2553.018	0.01	0.3491	0.008	2.285	ug/L
|	Pb	208	12060.686	0.03	0.3751	0.007	1.905	ug/L
|	U	238	17922.578	0.04	0.4023	0.010	2.452	ug/L
⌊>	Bi	209	403033.726	403033.73				ug/L

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⌈	Na	23	111787292.187	708.27	23.7465	1.695	7.137	mg/L
|	Mg	24	303985.709	1.92	0.0948	0.008	8.475	mg/L
|	K	39	1547912.467	7.88	0.1970	0.018	8.892	mg/L
|	Ca	43	4734.929	0.03	0.3028	0.028	9.084	mg/L
|	Fe	54	331163.347	1.87	0.6136	0.059	9.671	mg/L
|	Fe	57	120908.881	0.73	0.5677	0.039	6.949	mg/L
⌊>	Sc-1	45	158091.498	158091.50				mg/L
	Cl	35	49043.311	25510.97				mg/L
	Kr	83	62.334	-1.00				mg/L
	Br	81	13632.622	6183.85				mg/L
	P	31	40038.112	31986.20				mg/L
	S	34	180746.963	56399.19				mg/L
	Sr	88	16465.220	16348.54				mg/L

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
⌈	Li	6					
|	Be	9					
|	Al	27					
⌊>	Sc	45					
⌈	Ti	49					
|	V	51					
|	Cr	52					
|	Cr	53					
|	Mn	55					
|	Co	59					
|	Ni	60					
|	Cu	65					
|	Zn	66					
|>	Ge	72		107.926			
|	As	75					
|	Se	77					
|	Se	82					
⌊	Rb	85					
	Y	89					
	Rh	103					
⌈	Mo	98					
|	Ag	107					
|	Cd	114					
|>	In	115		100.145			
|	Sn	118					
⌊	Sb	123					
⌈	Ba	135					
|	Ce	140					
⌊>	Tb	159		103.385			
⌈	Ho	165					
|	Tl	203					
|	Tl	205					
|	Pb	206					
|	Pb	207					
|	Pb	208					
|	U	238					
⌊>	Bi	209		95.183			

Sample ID: L1104022030
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1104022030
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Method 6020 - Summary Report

Sample ID: L1104022032

Sample Date/Time: Monday, April 11, 2011 22:11:29
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 59
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	23578.050	0.05				ug/L
|	Be	9	8.000	-0.00	-0.0292	0.017	57.179	ug/L
|	Al	27	15812.606	0.08	2.5913	0.562	21.694	ug/L
⌊>	Sc	45	159922.912	159922.91				ug/L
⌈	Ti	49	96.677	0.00	0.0935	0.019	20.518	ug/L
|	V	51	2697.244	-0.00	-0.0108	0.014	124.947	ug/L
|	Cr	52	11833.783	0.01	0.3397	0.024	7.003	ug/L
|	Cr	53	613.414	-0.00	-0.2409	0.126	52.419	ug/L
|	Mn	55	3272.569	0.01	0.2213	0.013	5.711	ug/L
|	Co	59	93.335	0.00	-0.0121	0.000	4.018	ug/L
|	Ni	60	477.683	0.00	0.1881	0.002	1.167	ug/L
|	Cu	65	315.008	0.00	0.0596	0.008	13.149	ug/L
|	Zn	66	2589.028	0.01	1.1990	0.024	1.997	ug/L
|>	Ge	72	342542.463	342542.46				ug/L
|	As	75	-220.303	-0.00	-0.0211	0.016	77.284	ug/L
|	Se	77	87.334	0.00	-0.0487	0.053	108.179	ug/L
|	Se	82	1.145	0.00	0.0068	0.080	1181.855	ug/L
⌊	Rb	85	60.334	0.00				mg/L
	Y	89	224051.058	-1932.98				ug/L
	Rh	103	13.000	-1.00				ug/L
⌈	Mo	98	85.946	0.00	0.0388	0.004	11.215	ug/L
|	Ag	107	26.000	-0.00	-0.0225	0.001	2.346	ug/L
|	Cd	114	24.017	0.00	0.0318	0.003	10.967	ug/L
|>	In	115	332740.067	332740.07				ug/L
|	Sn	118	419.475	0.00	0.0614	0.004	5.957	ug/L
⌊	Sb	123	78.281	0.00	0.0166	0.001	9.026	ug/L
⌈	Ba	135	224.338	0.00	0.1179	0.003	2.873	ug/L
|	Ce	140	100.011	0.00				ug/L
⌊>	Tb	159	479048.311	479048.31				ug/L
⌈	Ho	165	26.669	-0.00				ug/L
|	Tl	203	23.334	-0.00	-0.0132	0.001	3.940	ug/L
|	Tl	205	50.005	-0.00	-0.0066	0.001	12.218	ug/L
|	Pb	206	402.012	0.00	0.0039	0.001	36.135	ug/L
|	Pb	207	355.343	0.00	-0.0021	0.005	238.254	ug/L
|	Pb	208	1608.400	0.00	-0.0015	0.002	123.022	ug/L
|	U	238	42.667	0.00	0.0096	0.000	3.160	ug/L
⌊>	Bi	209	429848.542	429848.54				ug/L

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Na	23	151876.997	0.60	0.0210	0.003	12.072	mg/L	
Mg	24	94372.670	0.59	0.0277	0.002	9.013	mg/L	
K	39	365783.490	0.36	0.0059	0.004	65.218	mg/L	
Ca	43	1203.526	0.01	0.0640	0.005	8.389	mg/L	
Fe	54	90055.126	0.33	0.1127	0.012	10.294	mg/L	
Fe	57	7833.853	0.02	0.0125	0.002	16.146	mg/L	
> Sc-1	45	159922.912	159922.91				mg/L	
Cl	35	16872.892	-6659.45				mg/L	
Kr	83	60.001	-3.33				mg/L	
Br	81	9932.273	2483.50				mg/L	
P	31	19051.625	10999.71				mg/L	
S	34	132814.841	8467.07				mg/L	
Sr	88	3247.521	3130.84				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		110.337			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		106.276			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		110.366			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		101.515			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: L1104022032
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Method 6020 - Summary Report

Sample ID: L1104030201

Sample Date/Time: Monday, April 11, 2011 22:18:35
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 60
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	22892.976	0.04				ug/L
|	Be	9	13.333	-0.00	-0.0109	0.023	213.612	ug/L
|	Al	27	89868.694	0.53	16.2951	0.902	5.538	ug/L
⌊>	Sc	45	164900.712	164900.71				ug/L
⌈	Ti	49	513.398	0.00	0.8529	0.190	22.333	ug/L
|	V	51	5677.061	0.01	0.3443	0.024	7.025	ug/L
|	Cr	52	17747.913	0.03	1.2186	0.021	1.752	ug/L
|	Cr	53	1253.537	0.00	0.5400	0.092	17.119	ug/L
|	Mn	55	5374556.722	16.58	481.0075	8.573	1.782	ug/L
|	Co	59	8103.364	0.02	0.8756	0.023	2.616	ug/L
|	Ni	60	10514.641	0.03	5.4171	0.241	4.450	ug/L
|	Cu	65	35110.554	0.11	17.4144	0.172	0.985	ug/L
|	Zn	66	20509.216	0.06	16.0768	0.195	1.212	ug/L
|>	Ge	72	324177.745	324177.74				ug/L
|	As	75	922.189	0.00	0.9933	0.070	7.016	ug/L
|	Se	77	104.001	0.00	0.1940	0.302	155.414	ug/L
|	Se	82	188.434	0.00	1.7091	0.089	5.229	ug/L
⌊	Rb	85	55494.787	0.17				mg/L
	Y	89	213601.885	-12382.15				ug/L
	Rh	103	260.006	246.01				ug/L
⌈	Mo	98	352.069	0.00	0.1357	0.010	7.062	ug/L
|	Ag	107	85.668	-0.00	-0.0121	0.002	13.460	ug/L
|	Cd	114	-4.519	-0.00	0.0102	0.009	85.955	ug/L
|>	In	115	307085.588	307085.59				ug/L
|	Sn	118	4041.350	0.01	0.9037	0.018	1.964	ug/L
⌊	Sb	123	358.416	0.00	0.0926	0.004	4.827	ug/L
⌈	Ba	135	165089.675	0.37	98.7707	0.650	0.658	ug/L
|	Ce	140	1833.686	0.00				ug/L
⌊>	Tb	159	447822.173	447822.17				ug/L
⌈	Ho	165	46.671	0.00				ug/L
|	Tl	203	35.667	-0.00	-0.0113	0.001	7.188	ug/L
|	Tl	205	63.340	-0.00	-0.0057	0.001	14.688	ug/L
|	Pb	206	4931.598	0.01	0.7166	0.015	2.156	ug/L
|	Pb	207	4246.611	0.01	0.6491	0.028	4.345	ug/L
|	Pb	208	19790.278	0.05	0.6845	0.023	3.354	ug/L
|	U	238	21631.923	0.06	0.5063	0.002	0.473	ug/L
⌊>	Bi	209	384912.002	384912.00				ug/L

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Na	23	193126937.043	1172.48	39.3097	1.663	4.231	mg/L	
Mg	24	91437789.113	555.38	27.9134	1.395	4.996	mg/L	
K	39	90929897.951	550.24	13.9834	0.605	4.323	mg/L	
Ca	43	1298345.906	7.89	83.7655	5.181	6.185	mg/L	
Fe	54	2085058.280	12.44	4.0630	0.301	7.411	mg/L	
Fe	57	927429.695	5.60	4.3382	0.313	7.208	mg/L	
> Sc-1	45	164900.712	164900.71				mg/L	
Cl	35	663311.049	639778.71				mg/L	
Kr	83	65.668	2.33				mg/L	
Br	81	164800.686	157351.91				mg/L	
P	31	41966.584	33914.67				mg/L	
S	34	665745.266	541397.49				mg/L	
Sr	88	7494435.770	7494319.09				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		104.421			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		98.082			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		103.172			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		90.903			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: L1104030601

Sample Date/Time: Monday, April 11, 2011 22:25:42
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 61
Method File: C:\elandata\Method\6020a.mth
Sample Description: 1

User ID: EDL
Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	24763.984	0.00				ug/L
|	Be	9	166.001	0.00	0.3288	0.029	8.856	ug/L
|	Al	27	82859974.189	346.26	10632.3214	394.253	3.708	ug/L
⌊>	Sc	45	239347.364	239347.36				ug/L
⌈	Ti	49	194853.660	0.58	340.2050	9.408	2.765	ug/L
|	V	51	469189.079	1.39	51.3841	0.336	0.653	ug/L
|	Cr	52	227534.262	0.65	28.4272	0.358	1.259	ug/L
|	Cr	53	25859.334	0.07	28.2050	0.994	3.523	ug/L
|	Mn	55	11726040.601	35.04	1016.7903	3.114	0.306	ug/L
|	Co	59	113537.097	0.34	12.1609	0.153	1.260	ug/L
|	Ni	60	31665.372	0.09	15.9009	0.049	0.309	ug/L
|	Cu	65	69148.273	0.21	33.3099	0.043	0.130	ug/L
|	Zn	66	286602.083	0.85	227.9374	2.030	0.890	ug/L
|>	Ge	72	334587.983	334587.98				ug/L
|	As	75	2778.629	0.01	2.5825	0.079	3.073	ug/L
|	Se	77	188.668	0.00	1.0884	0.253	23.253	ug/L
|	Se	82	68.236	0.00	0.5984	0.107	17.961	ug/L
⌊	Rb	85	200509.004	0.60				mg/L
	Y	89	327440.339	101456.30				ug/L
	Rh	103	40.000	26.00				ug/L
⌈	Mo	98	7145.570	0.02	2.5137	0.038	1.505	ug/L
|	Ag	107	436.347	0.00	0.0461	0.004	9.724	ug/L
|	Cd	114	7638.995	0.02	6.1501	0.226	3.667	ug/L
|>	In	115	311137.787	311137.79				ug/L
|	Sn	118	5359.969	0.02	1.1914	0.005	0.442	ug/L
⌊	Sb	123	26748.485	0.09	7.0076	0.045	0.637	ug/L
⌈	Ba	135	144769.213	0.32	84.7085	1.753	2.070	ug/L
|	Ce	140	1268045.957	2.77				ug/L
⌊>	Tb	159	457967.206	457967.21				ug/L
⌈	Ho	165	10012.679	0.02				ug/L
|	Tl	203	1810.182	0.00	0.2017	0.012	5.922	ug/L
|	Tl	205	4504.798	0.01	0.2091	0.008	3.653	ug/L
|	Pb	206	158798.496	0.39	23.4428	0.254	1.085	ug/L
|	Pb	207	137510.100	0.34	21.5756	0.505	2.339	ug/L
|	Pb	208	637483.809	1.57	22.5593	0.378	1.675	ug/L
|	U	238	53553.888	0.13	1.1780	0.010	0.845	ug/L
⌊>	Bi	209	405519.118	405519.12				ug/L

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Na	23	94551450.413	394.79	13.2366	0.469	3.543	mg/L	
Mg	24	8914287.130	37.26	1.8709	0.142	7.615	mg/L	
K	39	15779273.463	63.99	1.6233	0.009	0.574	mg/L	
Ca	43	140745.544	0.59	6.2281	0.222	3.559	mg/L	
Fe	54	14927196.748	62.14	20.2750	0.546	2.693	mg/L	
Fe	57	6624661.611	27.64	21.3955	0.677	3.166	mg/L	
> Sc-1	45	239347.364	239347.36				mg/L	
Cl	35	149254.259	125721.92				mg/L	
Kr	83	88.001	24.67				mg/L	
Br	81	15104.065	7655.29				mg/L	
P	31	272923.455	264871.54				mg/L	
S	34	253559.661	129211.89				mg/L	
Sr	88	390430.895	390314.22				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		107.775			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		99.376			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		105.509			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		95.770			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Mn 55 Upper, S, EEE	Mn	55	
Zn 66 Upper, S, EEE	Zn	66	

Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 4

Sample Date/Time: Monday, April 11, 2011 22:32:49
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 6
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	21790.659	0.05				ug/L
|	Be	9	12.667	-0.00	-0.0081	0.023	280.100	ug/L
|	Al	27	22797242.562	157.88	4848.0011	107.169	2.211	ug/L
⌊>	Sc	45	144436.342	144436.34				ug/L
⌈	Ti	49	47453.735	0.14	84.4429	1.230	1.457	ug/L
|	V	51	2227.575	-0.00	-0.0509	0.027	53.308	ug/L
|	Cr	52	8517.713	-0.00	-0.0340	0.034	99.148	ug/L
|	Cr	53	1183.522	0.00	0.4426	0.036	8.145	ug/L
|	Mn	55	3109.849	0.01	0.2191	0.014	6.228	ug/L
|	Co	59	1715.831	0.01	0.1659	0.011	6.546	ug/L
|	Ni	60	846.711	0.00	0.3880	0.020	5.105	ug/L
|	Cu	65	724.700	0.00	0.2680	0.015	5.769	ug/L
|	Zn	66	761.703	0.00	-0.1997	0.007	3.614	ug/L
|>	Ge	72	328092.383	328092.38				ug/L
|	As	75	-190.922	0.00	-0.0033	0.036	1096.944	ug/L
|	Se	77	138.668	0.00	0.5679	0.231	40.602	ug/L
|	Se	82	12.806	0.00	0.1124	0.058	51.550	ug/L
⌊	Rb	85	1903.867	0.01				mg/L
	Y	89	209026.474	-16957.56				ug/L
	Rh	103	20.667	6.67				ug/L
⌈	Mo	98	264377.884	0.87	95.1586	0.956	1.005	ug/L
|	Ag	107	89.001	-0.00	-0.0113	0.001	8.810	ug/L
|	Cd	114	81.788	0.00	0.0813	0.009	10.500	ug/L
|>	In	115	302826.881	302826.88				ug/L
|	Sn	118	119.201	-0.00	0.0000	0.001	2091.266	ug/L
⌊	Sb	123	153.742	0.00	0.0388	0.002	5.435	ug/L
⌈	Ba	135	80.668	0.00	0.0419	0.004	9.619	ug/L
|	Ce	140	236.693	0.00				ug/L
⌊>	Tb	159	437363.676	437363.68				ug/L
⌈	Ho	165	16.668	-0.00				ug/L
|	Tl	203	34.000	-0.00	-0.0117	0.000	2.768	ug/L
|	Tl	205	40.004	-0.00	-0.0070	0.001	7.287	ug/L
|	Pb	206	426.347	0.00	0.0110	0.002	21.330	ug/L
|	Pb	207	371.011	0.00	0.0036	0.002	48.852	ug/L
|	Pb	208	1687.739	0.00	0.0047	0.000	8.171	ug/L
|	U	238	24.000	0.00	0.0092	0.000	0.958	ug/L
⌊>	Bi	209	404520.131	404520.13				ug/L

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Na	23	58106674.574	402.15	13.4836	0.558	4.140	mg/L	
Mg	24	15792634.373	109.43	5.4986	0.243	4.419	mg/L	
K	39	29467863.455	202.30	5.1389	0.262	5.095	mg/L	
Ca	43	198454.259	1.37	14.5804	0.387	2.657	mg/L	
Fe	54	6461521.388	44.51	14.5231	0.330	2.272	mg/L	
Fe	57	2775597.327	19.19	14.8571	0.439	2.953	mg/L	
> Sc-1	45	144436.342	144436.34				mg/L	
Cl	35	1465234.001	1441701.66				mg/L	
Kr	83	60.667	-2.67				mg/L	
Br	81	9563.242	2114.47				mg/L	
P	31	1411420.815	1403368.91				mg/L	
S	34	266272.246	141924.47				mg/L	
Sr	88	8300.953	8184.27				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		105.682			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		96.722			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		100.762			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		95.534			

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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 4
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Method 6020 - Summary Report

Sample ID: QC Std 5

Sample Date/Time: Monday, April 11, 2011 22:39:58
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 7
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19301.985	0.04				ug/L
|	Be	9	30417.531	0.23	128.2131	5.662	4.416	ug/L
|	Al	27	19970480.037	151.60	4655.0972	240.472	5.166	ug/L
⌊>	Sc	45	131915.497	131915.50				ug/L
⌈	Ti	49	43066.868	0.15	88.7602	1.242	1.399	ug/L
|	V	51	686138.119	2.41	88.9789	2.600	2.922	ug/L
|	Cr	52	623385.204	2.17	94.6063	2.054	2.171	ug/L
|	Cr	53	107923.368	0.38	142.6746	3.588	2.515	ug/L
|	Mn	55	984732.940	3.47	100.8253	1.888	1.873	ug/L
|	Co	59	811252.540	2.86	102.8234	2.658	2.585	ug/L
|	Ni	60	174002.432	0.61	103.4919	3.037	2.935	ug/L
|	Cu	65	177923.889	0.63	101.4347	2.870	2.830	ug/L
|	Zn	66	105502.339	0.37	98.6557	0.941	0.953	ug/L
| >	Ge	72	283263.120	283263.12				ug/L
|	As	75	90165.069	0.32	92.7732	1.406	1.516	ug/L
|	Se	77	10170.503	0.04	131.1654	1.172	0.893	ug/L
|	Se	82	8654.324	0.03	89.9985	1.380	1.534	ug/L
⌊	Rb	85	1570.139	0.01				mg/L
	Y	89	173133.495	-52850.54				ug/L
	Rh	103	58.001	44.00				ug/L
⌈	Mo	98	222237.869	0.84	91.8279	0.912	0.994	ug/L
|	Ag	107	487279.651	1.85	95.7238	1.985	2.073	ug/L
|	Cd	114	109878.432	0.42	104.1734	4.301	4.128	ug/L
| >	In	115	263799.607	263799.61				ug/L
|	Sn	118	339.872	0.00	0.0634	0.004	5.744	ug/L
⌊	Sb	123	337320.441	1.28	104.2768	1.224	1.174	ug/L
⌈	Ba	135	139892.445	0.34	91.3363	0.567	0.621	ug/L
|	Ce	140	236.693	0.00				ug/L
⌊>	Tb	159	410367.038	410367.04				ug/L
⌈	Ho	165	16.668	-0.00				ug/L
|	Tl	203	776516.979	2.02	98.1814	0.871	0.887	ug/L
|	Tl	205	1951482.617	5.07	99.3815	2.242	2.255	ug/L
|	Pb	206	659561.497	1.71	102.6862	0.640	0.623	ug/L
|	Pb	207	587510.371	1.52	97.2342	1.432	1.473	ug/L
|	Pb	208	2714168.794	7.04	101.3099	0.898	0.887	ug/L
|	U	238	4730705.143	12.28	108.7554	1.027	0.944	ug/L
⌊>	Bi	209	385153.377	385153.38				ug/L

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Na	23	50973677.931	386.31	12.9523	0.390	3.014	mg/L	
Mg	24	13508921.910	102.49	5.1497	0.191	3.701	mg/L	
K	39	25775207.435	193.66	4.9193	0.169	3.441	mg/L	
Ca	43	185294.141	1.40	14.9088	0.377	2.528	mg/L	
Fe	54	5659753.321	42.76	13.9535	1.094	7.843	mg/L	
Fe	57	2548665.955	19.31	14.9510	0.805	5.381	mg/L	
> Sc-1	45	131915.497	131915.50				mg/L	
Cl	35	54127332.557	54103800.21				mg/L	
Kr	83	64.668	1.33				mg/L	
Br	81	10340.012	2891.24				mg/L	
P	31	1221646.856	1213594.95				mg/L	
S	34	246822.586	122474.81				mg/L	
Sr	88	7563.620	7446.94				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	88.979				
Cr	52	94.606				
Cr	53					
Mn	55	100.825				
Co	59	102.823				
Ni	60	103.492				
Cu	65	101.435				
Zn	66	98.656				
> Ge	72		91.242			
As	75	92.773				
Se	77					
Se	82	89.998				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	95.724				
Cd	114	104.173				
> In	115		84.256			
Sn	118					
Sb	123	104.277				
Ba	135	91.336				
Ce	140					
> Tb	159		94.543			
Ho	165					
Tl	203	98.181				
Tl	205					
Pb	206					
Pb	207					
Pb	208	101.310				
U	238	108.755				
> Bi	209		90.960			

Sample ID: QC Std 5
Report Date/Time: Monday, April 11, 2011 22:42:11
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 5
Report Date/Time: Monday, April 11, 2011 22:42:11
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 6

Sample Date/Time: Monday, April 11, 2011 22:47:06
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 5
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20921.867	0.04				ug/L
|	Be	9	16241.179	0.11	60.6386	2.480	4.089	ug/L
|	Al	27	261836.082	1.74	53.5823	1.915	3.574	ug/L
⌊>	Sc	45	148799.613	148799.61				ug/L
⌈	Ti	49	47132.271	0.15	87.8418	3.752	4.271	ug/L
|	V	51	390339.511	1.24	45.6192	0.702	1.540	ug/L
|	Cr	52	345348.185	1.08	46.8016	0.804	1.717	ug/L
|	Cr	53	44543.431	0.14	52.6573	1.008	1.914	ug/L
|	Mn	55	533199.429	1.70	49.3266	1.102	2.233	ug/L
|	Co	59	435784.226	1.39	49.9102	0.631	1.263	ug/L
|	Ni	60	92477.604	0.29	49.6872	0.178	0.359	ug/L
|	Cu	65	96788.825	0.31	49.8330	0.491	0.985	ug/L
|	Zn	66	59086.316	0.19	49.5413	0.291	0.588	ug/L
| >	Ge	72	313344.357	313344.36				ug/L
|	As	75	51021.946	0.16	47.5501	0.539	1.133	ug/L
|	Se	77	4377.625	0.01	50.4397	0.893	1.770	ug/L
|	Se	82	5175.947	0.02	48.6523	0.222	0.457	ug/L
⌊	Rb	85	2034.227	0.01				mg/L
	Y	89	203027.165	-22956.87				ug/L
	Rh	103	28.000	14.00				ug/L
⌈	Mo	98	264044.760	0.87	95.1037	0.711	0.747	ug/L
|	Ag	107	278513.932	0.92	47.6771	0.841	1.764	ug/L
|	Cd	114	59803.943	0.20	49.4066	0.910	1.843	ug/L
| >	In	115	302635.443	302635.44				ug/L
|	Sn	118	215649.176	0.71	50.4041	0.135	0.268	ug/L
⌊	Sb	123	186961.969	0.62	50.3720	0.124	0.247	ug/L
⌈	Ba	135	77883.609	0.18	48.0957	0.677	1.408	ug/L
|	Ce	140	50.005	0.00				ug/L
⌊>	Tb	159	433827.908	433827.91				ug/L
⌈	Ho	165	30.003	0.00				ug/L
|	Tl	203	409039.061	1.01	49.0586	0.183	0.372	ug/L
|	Tl	205	1022544.782	2.52	49.4052	0.828	1.675	ug/L
|	Pb	206	333847.559	0.82	49.2827	0.404	0.819	ug/L
|	Pb	207	310707.294	0.76	48.7595	0.601	1.233	ug/L
|	Pb	208	1400497.675	3.45	49.5668	0.283	0.571	ug/L
|	U	238	2458820.151	6.06	53.6324	0.078	0.146	ug/L
⌊>	Bi	209	405957.371	405957.37				ug/L

Sample ID: QC Std 6
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Na	23	23222760.231	155.86	5.2262	0.234	4.482	mg/L	
Mg	24	15641879.455	105.18	5.2848	0.152	2.874	mg/L	
K	39	30300077.264	201.91	5.1290	0.313	6.100	mg/L	
Ca	43	69642.041	0.47	4.9587	0.220	4.440	mg/L	
Fe	54	2539714.404	16.85	5.5015	0.279	5.072	mg/L	
Fe	57	1074456.959	7.19	5.5666	0.146	2.630	mg/L	
> Sc-1	45	148799.613	148799.61				mg/L	
Cl	35	44942.358	21410.02				mg/L	
Kr	83	54.334	-9.00				mg/L	
Br	81	8231.389	782.62				mg/L	
P	31	7706.981	-344.93				mg/L	
S	34	133458.888	9111.11				mg/L	
Sr	88	1977.061	1860.38				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	91.238				
Cr	52	93.603				
Cr	53					
Mn	55	98.653				
Co	59	99.820				
Ni	60	99.374				
Cu	65	99.666				
Zn	66	99.083				
> Ge	72		100.932			
As	75	95.100				
Se	77					
Se	82	97.305				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	95.354				
Cd	114	98.813				
> In	115		96.660			
Sn	118					
Sb	123	100.744				
Ba	135	96.191				
Ce	140					
> Tb	159		99.948			
Ho	165					
Tl	203	98.117				
Tl	205					
Pb	206					
Pb	207					
Pb	208	99.134				
U	238	107.265				
> Bi	209		95.873			

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 22:49:19

Approved: April 12, 2011

⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 6
Report Date/Time: Monday, April 11, 2011 22:49:19
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 7

Sample Date/Time: Monday, April 11, 2011 22:54:12
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 1
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	19368.746	0.03				ug/L
|	Be	9	14.000	-0.00	-0.0027	0.029	1057.056	ug/L
|	Al	27	3033.806	0.00	0.1682	0.153	90.680	ug/L
|>	Sc	45	146905.502	146905.50				ug/L
⌈	Ti	49	73.341	0.00	0.0658	0.060	91.559	ug/L
|	V	51	2149.096	-0.00	-0.0476	0.019	40.917	ug/L
|	Cr	52	8029.303	-0.00	-0.0453	0.013	29.224	ug/L
|	Cr	53	2643.951	0.00	2.2739	0.407	17.908	ug/L
|	Mn	55	2052.564	0.00	0.1347	0.002	1.307	ug/L
|	Co	59	76.668	0.00	-0.0130	0.000	1.742	ug/L
|	Ni	60	77.334	0.00	-0.0052	0.002	37.434	ug/L
|	Cu	65	110.002	-0.00	-0.0321	0.004	13.538	ug/L
|	Zn	66	382.011	-0.00	-0.4931	0.013	2.549	ug/L
|>	Ge	72	312389.848	312389.85				ug/L
|	As	75	-128.196	0.00	0.0468	0.037	78.540	ug/L
|	Se	77	94.000	0.00	0.1202	0.208	172.932	ug/L
|	Se	82	12.565	0.00	0.1161	0.053	45.506	ug/L
⌊	Rb	85	30.000	0.00				mg/L
	Y	89	211282.993	-14701.04				ug/L
	Rh	103	18.667	4.67				ug/L
⌈	Mo	98	132.321	0.00	0.0574	0.004	6.264	ug/L
|	Ag	107	69.668	-0.00	-0.0149	0.001	5.437	ug/L
|	Cd	114	-4.227	-0.00	0.0104	0.001	8.993	ug/L
|>	In	115	308593.286	308593.29				ug/L
|	Sn	118	2586.068	0.01	0.5654	0.014	2.565	ug/L
⌊	Sb	123	234.998	0.00	0.0595	0.004	7.153	ug/L
⌈	Ba	135	24.667	-0.00	0.0076	0.003	44.562	ug/L
|	Ce	140	30.003	-0.00				ug/L
|>	Tb	159	436011.821	436011.82				ug/L
⌈	Ho	165	26.669	-0.00				ug/L
|	Tl	203	83.001	0.00	-0.0059	0.001	24.313	ug/L
|	Tl	205	186.687	0.00	-0.0000	0.001	44697.289	ug/L
|	Pb	206	368.010	0.00	0.0016	0.001	91.094	ug/L
|	Pb	207	320.342	0.00	-0.0050	0.001	25.731	ug/L
|	Pb	208	1421.386	0.00	-0.0055	0.003	51.540	ug/L
|	U	238	157.669	0.00	0.0121	0.000	1.321	ug/L
|>	Bi	209	410307.965	410307.96				ug/L

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Na	23	40023.962	-0.08	-0.0018	0.001	32.071	mg/L
Mg	24	1056.828	0.00	-0.0018	0.000	2.501	mg/L
K	39	327246.043	0.30	0.0042	0.001	16.488	mg/L
Ca	43	123.346	-0.00	-0.0072	0.002	27.072	mg/L
Fe	54	41370.546	0.05	0.0205	0.004	21.010	mg/L
Fe	57	6365.998	0.01	0.0081	0.001	11.405	mg/L
> Sc-1	45	146905.502	146905.50				mg/L
Cl	35	25829.325	2296.98				mg/L
Kr	83	50.001	-13.33				mg/L
Br	81	8601.701	1152.93				mg/L
P	31	9525.223	1473.31				mg/L
S	34	138114.105	13766.33				mg/L
Sr	88	83.342	-33.34				mg/L

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51					
Cr	52					
Cr	53					
Mn	55					
Co	59					
Ni	60					
Cu	65					
Zn	66					
> Ge	72		100.624			
As	75					
Se	77					
Se	82					
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107					
Cd	114					
> In	115		98.563			
Sn	118					
Sb	123					
Ba	135					
Ce	140					
> Tb	159		100.451			
Ho	165					
Tl	203					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
U	238					
> Bi	209		96.901			

Sample ID: QC Std 7
Report Date/Time: Monday, April 11, 2011 22:56:24
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 7
Report Date/Time: Monday, April 11, 2011 22:56:24
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Approved: April 12, 2011

Method 6020 - Summary Report

Sample ID: QC Std 8

Sample Date/Time: Monday, April 11, 2011 23:01:20
Number of Replicates: 3
Aliquot Volume (mL):
Diluted To Volume (mL):
Autosampler Position: 9
Method File: C:\elandata\Method\6020a.mth
Sample Description:

User ID: EDL

Cumulative Autodilution Factor: 1
ELAN-ICP 200.8\6020 External Calibration

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Conc. Mean	Conc. SD	Conc. RSD	Sample Unit
⌈	Li	6	20337.389	0.03				ug/L
|	Be	9	12.667	-0.00	-0.0106	0.009	88.126	ug/L
|	Al	27	2833.743	0.00	0.1011	0.108	106.794	ug/L
|>	Sc	45	152962.728	152962.73				ug/L
⌈	Ti	49	80.008	0.00	0.0736	0.073	99.475	ug/L
|	V	51	5574.440	0.01	0.3348	0.034	10.147	ug/L
|	Cr	52	14104.749	0.02	0.7361	0.021	2.853	ug/L
|	Cr	53	2560.585	0.00	2.0695	0.179	8.656	ug/L
|	Mn	55	5883.456	0.01	0.4725	0.010	2.094	ug/L
|	Co	59	3670.043	0.01	0.3861	0.005	1.247	ug/L
|	Ni	60	3151.862	0.01	1.5973	0.029	1.847	ug/L
|	Cu	65	1749.837	0.01	0.7865	0.028	3.525	ug/L
|	Zn	66	7906.203	0.02	5.7168	0.105	1.839	ug/L
|>	Ge	72	323043.277	323043.28				ug/L
|	As	75	241.812	0.00	0.3839	0.041	10.554	ug/L
|	Se	77	135.334	0.00	0.5545	0.118	21.215	ug/L
|	Se	82	45.146	0.00	0.4090	0.077	18.867	ug/L
⌊	Rb	85	26.000	0.00				mg/L
	Y	89	213908.145	-12075.89				ug/L
	Rh	103	12.667	-1.33				ug/L
⌈	Mo	98	63.243	0.00	0.0330	0.004	12.147	ug/L
|	Ag	107	2323.627	0.01	0.3638	0.008	2.316	ug/L
|	Cd	114	255.343	0.00	0.2207	0.028	12.552	ug/L
|>	In	115	308524.364	308524.36				ug/L
|	Sn	118	152.535	-0.00	0.0072	0.002	34.635	ug/L
⌊	Sb	123	1616.340	0.01	0.4246	0.010	2.383	ug/L
⌈	Ba	135	1272.760	0.00	0.7652	0.020	2.675	ug/L
|	Ce	140	16.668	-0.00				ug/L
|>	Tb	159	441390.246	441390.25				ug/L
⌈	Ho	165	10.001	-0.00				ug/L
|	Tl	203	736.701	0.00	0.0710	0.005	7.670	ug/L
|	Tl	205	1857.025	0.00	0.0792	0.004	4.636	ug/L
|	Pb	206	3127.854	0.01	0.4018	0.002	0.553	ug/L
|	Pb	207	2922.123	0.01	0.3961	0.017	4.208	ug/L
|	Pb	208	12929.412	0.03	0.3947	0.008	2.104	ug/L
|	U	238	19399.328	0.05	0.4242	0.005	1.217	ug/L
|>	Bi	209	413324.304	413324.30				ug/L

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Na	23	14224.870	-0.26	-0.0078	0.000	2.706	mg/L	
Mg	24	386.713	-0.00	-0.0020	0.000	2.089	mg/L	
K	39	328544.411	0.22	0.0022	0.001	54.341	mg/L	
Ca	43	230.026	0.00	-0.0000	0.002	5740.242	mg/L	
Fe	54	39522.257	0.03	0.0130	0.007	52.446	mg/L	
Fe	57	6135.832	0.01	0.0056	0.001	24.340	mg/L	
> Sc-1	45	152962.728	152962.73				mg/L	
Cl	35	21034.108	-2498.23				mg/L	
Kr	83	60.001	-3.33				mg/L	
Br	81	8554.994	1106.22				mg/L	
P	31	8055.934	4.02				mg/L	
S	34	132493.790	8146.02				mg/L	
Sr	88	123.346	6.67				mg/L	

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Al	27					
> Sc	45					
Ti	49					
V	51	83.712				
Cr	52	92.017				
Cr	53					
Mn	55	94.494				
Co	59	96.514				
Ni	60	99.828				
Cu	65	98.317				
Zn	66	91.469				
> Ge	72		104.056			
As	75	95.970				
Se	77					
Se	82	102.251				
Rb	85					
Y	89					
Rh	103					
Mo	98					
Ag	107	90.939				
Cd	114	110.349				
> In	115		98.541			
Sn	118					
Sb	123	106.151				
Ba	135	102.023				
Ce	140					
> Tb	159		101.690			
Ho	165					
Tl	203	88.777				
Tl	205					
Pb	206					
Pb	207					
Pb	208	98.664				
U	238	106.051				
> Bi	209		97.613			

Sample ID: QC Std 8
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⌈	Na	23
|	Mg	24
|	K	39
|	Ca	43
|	Fe	54
|	Fe	57
⌊>	Sc-1	45
	Cl	35
	Kr	83
	Br	81
	P	31
	S	34
	Sr	88

QC Out Of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Sample ID: QC Std 8
Report Date/Time: Monday, April 11, 2011 23:03:34
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Approved: April 12, 2011

2.1.3 Metals CVAA Data (Mercury)

2.1.3.1 Summary Data

Login Number: L11040306

Department: Metals - AA

Analyst: Pierce Morris

METHOD

Preparation: SW-846 7470

Analysis: SW-846 7470

HOLDING TIMES

Sample Preparation: All holding times were met.

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

CALIBRATION

Initial Calibration: All acceptance criteria were met.

Alternate Source Standards: All acceptance criteria were met.

Interference Check Standards: All acceptance criteria were met.

Continuing Calibration Verification: All acceptance criteria were met.

Continuing Calibration Blank: All acceptance criteria were met.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Serial Dilution/Post Digestion Spikes: WG361466 - Due to a suspected pipetting error, the post digestion spike

analyzed on 12-APR-2011 at 14:10 yielded a high recovery for mercury. The post digestion spike was reanalyzed at 14:21 and met all acceptance criteria.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

Narrative ID: 25598
Approved By: Sheri Pfalzgraf



LABORATORY REPORT

L11040306

05/05/11 10:21

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA
Invoice Number: 616502
P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-4711-WC	L11040306-01	7470A	1	08-APR-11

Microbac Laboratories Inc.

Report Number: **L11040306**
Report Date : **May 5, 2011**

Sample Number:	**L11040306-01**	PrePrep Method:	**NONE**	Instrument:	**HYDRA**
Client ID:	**SWMU-57-4711-WC**	Prep Method:	**7470A**	Prep Date:	**04/11/2011 08:37**
Matrix:	**Water**	Analytical Method:	**7470A**	Cal Date:	**04/12/2011 13:37**
Workgroup Number:	**WG361466**	Analyst:	**PDM**	Run Date:	**04/12/2011 15:06**
Collect Date:	**04/07/2011 14:30**	Dilution:	**1**	File ID:	**HY.041211.150615**
Sample Tag:	**01**	Units:	**mg/L**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Mercury	**7439-97-6**		**U**	**0.000200**	**0.000100**

U Analyte was not detected. The concentration is below the reported LOD.

2.1.3.2 QC Summary

Example Cold Vapor Mercury Calculations
Hydra AA Mercury Analyzer

1.0 Initial Calibration (ICAL) Parameters
The system performs linear regression from data consisting of a blank and five standards.

2.0 Calculating the concentration (C) of an element in water using data from run log and quantitation report (note:the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Vi} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted to Volume (mL)	40
Vi = Aliquot Volume (mL)	40
D = Manual dilution factor, if required (10X = 10)	1
Cx = Concentration of element in ppb (ug/L)	0.1

3.0 Calculating the concentration (C) of an element in soil using data from prep log and quantitation report (note: the data system performs this calculation automatically when correction factors have been entered):

$$Cx = Cs \times \frac{Vf}{Ws} \times D$$

Where:	**Example:**
Cs = Concentration computed by the data system (ug/L)	0.1
Vf = Diluted to volume (mL)	40
Ws = Aliquot weight (g)	0.6
D = Manual dilution factor	1
Cx = Concentration of element in ug/kg	6.67

4.0 Adjusting the concentration to dry weight:

$$Cdry = \frac{Cx \times 100}{Px}$$

1 Cx = Concentration calculated as received (wet basis)	6.67
Px = Percent solids of sample (%wt)	80
$Cdry$ = Concentration calculated as dry weight (ug/kg)	8.33

8.33 ug/kg = 0.00833 mg/kg

Microbac Laboratories Inc.
Metals Digest Log

Workgroup: WG361331
Analyst: REK
Spike Analyst: REK
Method: 7470A
Run Date: 04/11/2011 08:37
Hotblock Start Temp: 92.9 @ 07:40
Hotblock End Temp: 95.6 @ 09:40

SOP: ME404 Revison 12
Spike Solution: STD44919
Spike Witness: VC
Digestion Tubes Lot #: COA15342
HNO3 Lot #: COA15353
H2SO4 Lot #: COA15354
K2S2O8 1:1 Lot #: RGT15459
KMnO4 1:1 Lot #: RGT15577
Mercury Water ICV Lot #: STD44921
HG H2O STDS 10PPM Lot #: STD44927

	SAMPLE #	Type	Matrix	Initial Amount	Final Volume	Spike Amount	Due Date
1	WG361331-02	BLANK	1	40 mL	40 mL		
2	WG361256-01	FBLK	17	4 mL	40 mL		
3	WG361331-03	LCS	1	40 mL	40 mL	4 mL	
4	L11040241-01	SAMP	1	40 mL	40 mL		04/21/11
5	L11040241-02	SAMP	1	40 mL	40 mL		04/21/11
6	WG361331-01	REF	1	40 mL	40 mL		
7	L11040241-03	RS01	1	40 mL	40 mL		04/21/11
8	WG361331-04	MS	1	36 mL	40 mL	4 mL	
9	L11040241-04	MS01	1	36 mL	40 mL	4 mL	04/21/11
10	WG361331-05	MSD	1	36 mL	40 mL	4 mL	
11	L11040241-05	SD01	1	36 mL	40 mL	4 mL	04/21/11
12	L11040241-06	SAMP	1	40 mL	40 mL		04/21/11
13	L11040241-07	SAMP	1	40 mL	40 mL		04/21/11
14	L11040241-08	SAMP	1	40 mL	40 mL		04/21/11
15	L11040241-09	SAMP	1	40 mL	40 mL		04/21/11
16	L11040241-10	SAMP	1	40 mL	40 mL		04/21/11
17	L11040253-02	SAMP	17	4 mL	40 mL		04/12/11
18	L11040253-04	SAMP	17	4 mL	40 mL		04/12/11
19	L11040253-06	SAMP	17	4 mL	40 mL		04/12/11
20	L11040253-08	SAMP	17	4 mL	40 mL		04/12/11
21	L11040290-01	SAMP	1	40 mL	40 mL		04/18/11
22	L11040291-01	SAMP	1	40 mL	40 mL		04/18/11
23	L11040291-02	SAMP	1	40 mL	40 mL		04/18/11
24	L11040291-03	SAMP	1	40 mL	40 mL		04/18/11
25	L11040291-04	SAMP	1	40 mL	40 mL		04/18/11
26	L11040302-01	SAMP	1	40 mL	40 mL		04/15/11
27	L11040306-01	SAMP	1	40 mL	40 mL		04/15/11

Analyst: [signature]

Reviewer: Brenda Gregory

HB_DIG - Modified 09/30/2009
PDF ID: 1971446
Report generated: 04/11/2011 10:36

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 041211F.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 12
Maintenance Log ID: 37061

Calibration Std: STD44927 ICV Std: STD44921 Post Spike: STD44927
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

361466
Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
1	HY.041211.132801	WG361586-01	Calibration Point		1		04/12/11 13:28
2	HY.041211.132943	WG361586-02	Calibration Point		1		04/12/11 13:29
3	HY.041211.133136	WG361586-03	Calibration Point		1		04/12/11 13:31
4	HY.041211.133339	WG361586-04	Calibration Point		1		04/12/11 13:33
5	HY.041211.133522	WG361586-05	Calibration Point		1		04/12/11 13:35
6	HY.041211.133710	WG361586-06	Calibration Point		1		04/12/11 13:37
7	HY.041211.134124	WG361586-07	Initial Calibration Verification		1		04/12/11 13:41
8	HY.041211.134307	WG361586-08	Initial Calib Blank		1		04/12/11 13:43
9	HY.041211.134654	WG361586-09	CCV		1		04/12/11 13:46
10	HY.041211.134838	WG361586-10	CCB		1		04/12/11 13:48
11	HY.041211.140306	WG361331-02	Method/Prep Blank	40/40	1		04/12/11 14:03
12	HY.041211.140450	WG361331-03	Laboratory Control S	40/40	1		04/12/11 14:04
13	HY.041211.140657	WG361256-01	Fluid Blank		1		04/12/11 14:06
14	HY.041211.140853	L11040241-01	MW-18-040611	40/40	1		04/12/11 14:08
15	HY.041211.141045	WG361466-01	Post Digestion Spike		1	L11040241-01	04/12/11 14:10
16	HY.041211.141237	L11040241-02	MW-16I-040611	40/40	1		04/12/11 14:12
17	HY.041211.141420	L11040241-03	MW-16S-040611	40/40	1	WG361331-01	04/12/11 14:14
18	HY.041211.142109	WG361466-01	Post Digestion Spike		1	L11040241-01	04/12/11 14:21
19	HY.041211.142353	WG361331-04	Matrix Spike	36/40	1	L11040241-03	04/12/11 14:23
20	HY.041211.142616	WG361331-05	Matrix Spike Duplica	36/40	1	L11040241-03	04/12/11 14:26
21	HY.041211.142800	WG361586-11	CCV		1		04/12/11 14:28
22	HY.041211.142953	WG361586-12	CCB		1		04/12/11 14:29
23	HY.041211.143142	L11040241-06	TW-01-040611		1		04/12/11 14:31
24	HY.041211.143327	L11040241-07	MW-19-040611		1		04/12/11 14:33
25	HY.041211.143509	L11040241-08	MW-20-040611		1		04/12/11 14:35
26	HY.041211.143741	L11040241-09	DUP-GW-040611-01		1		04/12/11 14:37
27	HY.041211.143924	L11040241-10	DUP-GW-040611-02		1		04/12/11 14:39
28	HY.041211.144117	L11040253-02	SSW-2		1		04/12/11 14:41
29	HY.041211.144330	WG361466-02	Post Digestion Spike		1	L11040253-02	04/12/11 14:43
30	HY.041211.144514	L11040253-04	NSW-3		1		04/12/11 14:45
31	HY.041211.144657	L11040253-06	ESW-2		1		04/12/11 14:46
32	HY.041211.144913	L11040253-08	B-4		1		04/12/11 14:49
33	HY.041211.145101	L11040291-01	PEF3004		1		04/12/11 14:51
34	HY.041211.145256	WG361586-13	CCV		1		04/12/11 14:52

Page: 1 Approved: April 12, 2011

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 041211F.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 12
Maintenance Log ID: 37061

Calibration Std: STD44927 ICV Std: STD44921 Post Spike: STD44927
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

361466
Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time
35	HY.041211.145502	WG361586-14	CCB		1		04/12/11 14:55
36	HY.041211.145650	L11040290-01	PFG8000	40/40	1		04/12/11 14:56
37	HY.041211.145834	L11040291-02	PEF3005	40/40	1		04/12/11 14:58
38	HY.041211.150030	L11040291-03	PEF3006	40/40	1		04/12/11 15:00
39	HY.041211.150234	L11040291-04	PEF30023	40/40	1		04/12/11 15:02
40	HY.041211.150416	L11040302-01	SANITARY LEACHATE	40/40	1		04/12/11 15:04
41	HY.041211.150615	L11040306-01	SWMU-57-4711-WC	40/40	1		04/12/11 15:06
42	HY.041211.150758	WG361586-15	CCV		1		04/12/11 15:07
43	HY.041211.150946	WG361586-16	CCB		1		04/12/11 15:09
44	HY.041211.155521	WG361586-17	CCV		1		04/12/11 15:55
45	HY.041211.155709	WG361586-18	CCB		1		04/12/11 15:57
46	HY.041211.160031	L11040241-06	TW-01-040611	40/40	1		04/12/11 16:00
47	HY.041211.160214	L11040241-07	MW-19-040611	40/40	1		04/12/11 16:02
48	HY.041211.160356	L11040241-08	MW-20-040611	40/40	1		04/12/11 16:03
49	HY.041211.160553	L11040241-09	DUP-GW-040611-01	40/40	1		04/12/11 16:05
50	HY.041211.160740	L11040241-10	DUP-GW-040611-02	40/40	1		04/12/11 16:07
51	HY.041211.160925	L11040253-02	SSW-2	4/40	1		04/12/11 16:09
52	HY.041211.161107	WG361466-02	Post Digestion Spike		1	L11040253-02	04/12/11 16:11
53	HY.041211.161300	L11040253-04	NSW-3	4/40	1		04/12/11 16:13
54	HY.041211.161453	WG361586-19	CCV		1		04/12/11 16:14
55	HY.041211.161637	WG361586-20	CCB		1		04/12/11 16:16
56	HY.041211.161819	L11040253-06	ESW-2	4/40	1		04/12/11 16:18
57	HY.041211.162006	L11040253-08	B-4	4/40	1		04/12/11 16:20
58	HY.041211.162234	L11040290-01	PFG8000		1		04/12/11 16:22
59	HY.041211.162544	L11040290-01	PFG8000		1		04/12/11 16:25
60	HY.041211.162923	L11040291-01	PEF3004	40/40	1		04/12/11 16:29
61	HY.041211.163125	WG361586-21	CCV		1		04/12/11 16:31
62	HY.041211.163309	WG361586-22	CCB		1		04/12/11 16:33

Comments

Seq.	Rerun	Dil.	Reason	Analytes
15			Data not used due to a pipetting error.	
23				

Page: 2 Approved: April 12, 2011

Maren Berry

Microbac Laboratories Inc.

Instrument Run Log

Instrument: HYDRA Dataset: 041211F.PRN
Analyst1: PDM Analyst2: N/A
Method: 7470 SOP: ME404 Rev: 12
Maintenance Log ID: 37061

Calibration Std: STD44927 ICV Std: STD44921 Post Spike: STD44927
ICSA: N/A ICSAB: N/A Int. Std:
CCV: LLCCV:

361466
Workgroups:

Comments:

Seq.	File ID	Sample	ID	Prep	Dil	Reference	Date/Time

Seq.	Rerun	Dil.	Reason	Analytes
			Data not used from 14:31 through 14:51 due to too many samples analyzed between check standards.	
58			Data not used.	
59			Data not used.	

Page: 3 Approved: April 12, 2011

Maren Berry

Microbac Laboratories Inc.

Data Checklist

Date: 12-APR-2011
Analyst: PDM
Analyst: NA
Method: 7470
Instrument: HYDRA
Curve Workgroup: 361586
Runlog ID: 39974
Analytical Workgroups: 361466

Calibration/Linearity	X
ICV/CCV	X
ICB/CCB	X
ICSA/ICSAB	X
CRI	
Blank/LCS	X
MS/MSD	X
Post Spike/Serial Dilution	X
Upload Results	X
Data Qualifiers	X
Generate PDF Instrument Data	X
Sign/Annotate PDF Data	X
Upload Curve Data	X
Workgroup Forms	X
Case Narrative	241, 253, 290, 291, 306
Client Forms	X
Level X	
Level 3	
Level 4	241, 253, 290, 291, 306
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	EDL
Secondary Reviewer	MMB
Comments	

Primary Reviewer:
12-APR-2011

Secondary Reviewer:
12-APR-2011

CHECKLIST1 - Modified 03/05/2008
Generated: APR-12-2011 18:25:20

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method 7470A AAB#: WG361466

Login Number: L11040306

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-4711-WC	01	04/07/11					04/11/11	3.8	28		04/12/11	5	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1973679
Report generated 04/12/2011 16:50

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L11040306	Work Group:	WG361466
Blank File ID:	HY.041211.140306	Blank Sample ID:	WG361331-02
Prep Date:	04/11/11 08:37	Instrument ID:	HYDRA
Analyzed Date:	04/12/11 14:03	Method:	7470A
Analyst:	PDM		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG361331-03	HY.041211.140450	04/12/11 14:04	01
SWMU-57-4711-WC	L11040306-01	HY.041211.150615	04/12/11 15:06	01

Report Name: BLANK_SUMMARY
PDF File ID: 1973680
Report generated 04/12/2011 16:50

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11040306 Prep Date: 04/11/11 08:37 Sample ID: WG361331-02
Instrument ID: HYDRA Run Date: 04/12/11 14:03 Prep Method: 7470A
File ID: HY.041211.140306 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG361466 Matrix: Water Units: mg/L
Contract #: Cal ID: HYDRA-12-APR-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Mercury	0.000100	0.000200	0.000100	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1973681
12-APR-2011 16:50

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361331-03
Instrument ID: HYDRA Run Time: 14:04 Prep Method: 7470A
File ID: HY.041211.140450 Analyst: PDM Method: 7470A
Workgroup (AAB#): WG361466 Matrix: Water Units: mg/L
QC Key: DOD4 Lot#: STD44919 Cal ID: HYDRA-12-APR-11

Analytes	Expected	Found	% Rec	LCS Limits	Q
Mercury	0.00400	0.00408	102	80 - 120	

LCS - Modified 03/06/2008
PDF File ID: 1973682
Report generated: 04/12/2011 16:50

Microbac Laboratories Inc.

MATRIX SPIKE AND MATRIX SPIKE DUP (MS/MSD)

Loginnum:L11040306 Cal ID:HYDRA- Worknum:WG361466
Instrument ID:HYDRA Contract #: Method:7470A
Parent ID:WG361331-01 File ID:HY.041211.141420 Dil:1 Matrix:WATER
Sample ID:WG361331-04 MS File ID:HY.041211.142353 Dil:1 Units:mg/L
Sample ID:WG361331-05 MSD File ID:HY.041211.142616 Dil:1

Analyte	Parent	MS Spiked	MS Found	MS %Rec	MSD Spiked	MSD Found	MSD %Rec	%RPD	%Rec Limits	RPD Limit	Q
Mercury	ND	0.00444	0.00466	105	0.00444	0.00454	102	2.42	80 - 120	20	

* FAILS %REC LIMIT

FAILS RPD LIMIT

NOTE: This is an internal quality control sample.

WG_MS_MSD_DRYWT - Modified 03/07/2008
PDF File ID:1973683
Report generated 04/12/2011 16:50

Microbac Laboratories Inc.
POST SPIKE REPORT

Sample Login ID: L11040306 **Worknum:** WG361466
Instrument ID: HYDRA **Method:** 7470A
Post Spike ID: WG361466-01 **File ID:** HY.041211.142109 **Dil:** 1 **Units:** ug/L
Sample ID: L11040241-01 **File ID:** HY.041211.140853 **Dil:** 1 **Matrix:** Water

Analyte	Post Spike Result	C	Sample Result	C	Spike Added(SA)	% R	Control Limit %R	Q
MERCURY	1.13		0	U	1	113.0	85 - 115	

N = % Recovery exceeds control limits
F = Result is between MDL and RL
U = Sample result is below MDL. A value of zero is used in the calculation

POST_SPIKE - Modified 03/06/2008
PDF File ID: 1973678
Report generated: 04/12/2011 16:51

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L11040306
Analytical Method: 7470A
ICAL Worknum: WG361586

Workgroup (AAB#): WG361466
Instrument ID: HYDRA
Initial Calibration Date: 04/12/2011 13:37

Analyte	WG361586-01		WG361586-02		WG361586-03		WG361586-04		WG361586-05		WG361586-06	
	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT	STD	INT
Mercury	0	79	0.200	544	1.00	3194	2.00	6293	5.00	16719	10.0	32816

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 1973684
Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

INITIAL CALIBRATION SUMMARY

Login Number: L11040306
Analytical Method: 7470A
ICAL Worknum: WG361586

Workgroup (AAB#): WG361466
Instrument ID: HYDRA
Initial Calibration Date: 04/12/2011 13:37

Analyte	R	Q
Mercury	1.000	

INT = Instrument intensity
R = Coefficient of correlation
Q = Data Qualifier
* = Out of Compliance; R < 0.995

INT_CAL_HG_FU - Modified 03/06/2008
PDF File ID: 1973684
Report generated 04/12/2011 16:51

Microbac Laboratories Inc.
INITIAL CALIBRATION BLANK (ICB)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361586-08
Instrument ID: HYDRA Run Time: 13:43 Method: 7470A
File ID: HY.041211.134307 Analyst: PDM Units: ug/L
Workgroup (AAB#): WG361466 Cal ID: HYDRA - 12-APR-11
Matrix: WATER

Analytes	MDL	RDL	Concentration	Qualifier
MERCURY	.1	.2	.1	U

U = Result is less than 2 x MDL
F = Result is between MDL and 2 x MDL
* = Result is above 2 x MDL

ICB - Modified 07/14/2009
PDF File ID: 1973686
Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/12/2011	Sample ID:	WG361586-10
Instrument ID:	HYDRA	Run Time:	13:48	Method:	7470A
File ID:	HY.041211.134838	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG361466	Cal ID:	HYDRA - 12-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1973689
Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/12/2011	Sample ID:	WG361586-12
Instrument ID:	HYDRA	Run Time:	14:29	Method:	7470A
File ID:	HY.041211.142953	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG361466	Cal ID:	HYDRA - 12-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1973689
Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/12/2011	Sample ID:	WG361586-14
Instrument ID:	HYDRA	Run Time:	14:55	Method:	7470A
File ID:	HY.041211.145502	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG361466	Cal ID:	HYDRA - 12-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1973689
Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/12/2011	Sample ID:	WG361586-16
Instrument ID:	HYDRA	Run Time:	15:09	Method:	7470A
File ID:	HY.041211.150946	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG361466	Cal ID:	HYDRA - 12-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1973689
Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/12/2011	Sample ID:	WG361586-18
Instrument ID:	HYDRA	Run Time:	15:57	Method:	7470A
File ID:	HY.041211.155709	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG361466	Cal ID:	HYDRA - 12-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1973689
Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION BLANK (CCB)

Login Number:	L11040306	Run Date:	04/12/2011	Sample ID:	WG361586-20
Instrument ID:	HYDRA	Run Time:	16:16	Method:	7470A
File ID:	HY.041211.161637	Analyst:	PDM	Units:	ug/L
Workgroup (AAB#):	WG361466	Cal ID:	HYDRA - 12-APR-11		
Matrix:	WATER	QAPP:	DOD4		

Analytes	MDL	RDL	Concentration	Qualifier
Mercury	0.100	0.200	0.100	U

U = Result is less than MDL.
F = Result is between MDL and RL.
* = Result is above RL.

CCB - Modified 03/05/2008
PDF File ID: 1973689
Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

INITIAL CALIBRATION VERIFICATION (ICV)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361586-07

Instrument ID: HYDRA Run Time: 13:41 Method: 7470A

File ID: HY.041211.134124 Analyst: PDM Units: ug/L

Workgroup (AAB#): WG361466 Cal ID: HYDRA - 12-APR-11

QC Key: DOD4

Analyte		Expected	Found	%REC	LIMITS	Q
Mercury		2	2.11	106	90 - 110	

* Exceeds LIMITS Limit

ICV - Modified 03/06/2008

PDF File ID: 1973685

Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361586-09

Instrument ID: HYDRA Run Time: 13:46 Method: 7470A

File ID: HY.041211.134654 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG361466 Cal ID: HYDRA - 12-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00210	mg/L	105	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1973688

Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361586-11

Instrument ID: HYDRA Run Time: 14:28 Method: 7470A

File ID: HY.041211.142800 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG361466 Cal ID: HYDRA - 12-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00195	mg/L	97.5	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1973688

Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361586-13

Instrument ID: HYDRA Run Time: 14:52 Method: 7470A

File ID: HY.041211.145256 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG361466 Cal ID: HYDRA - 12-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00207	mg/L	104	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1973688

Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361586-15

Instrument ID: HYDRA Run Time: 15:07 Method: 7470A

File ID: HY.041211.150758 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG361466 Cal ID: HYDRA - 12-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00206	mg/L	103	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1973688

Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361586-17

Instrument ID: HYDRA Run Time: 15:55 Method: 7470A

File ID: HY.041211.155521 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG361466 Cal ID: HYDRA - 12-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00184	mg/L	92.0	80 - 120		

* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1973688

Report generated 04/12/2011 16:51

Microbac Laboratories Inc.

CONTINUING CALIBRATION VERIFICATION (CCV)

Login Number: L11040306 Run Date: 04/12/2011 Sample ID: WG361586-19

Instrument ID: HYDRA Run Time: 16:14 Method: 7470A

File ID: HY.041211.161453 Analyst: PDM QC Key: DOD4

Workgroup (AAB#): WG361466 Cal ID: HYDRA - 12-APR-11

Matrix: WATER

Analyte		Expected	Found	UNITS	%REC	LIMITS		Q
Mercury, Total		0.00200	0.00197	mg/L	98.5	80 - 120		

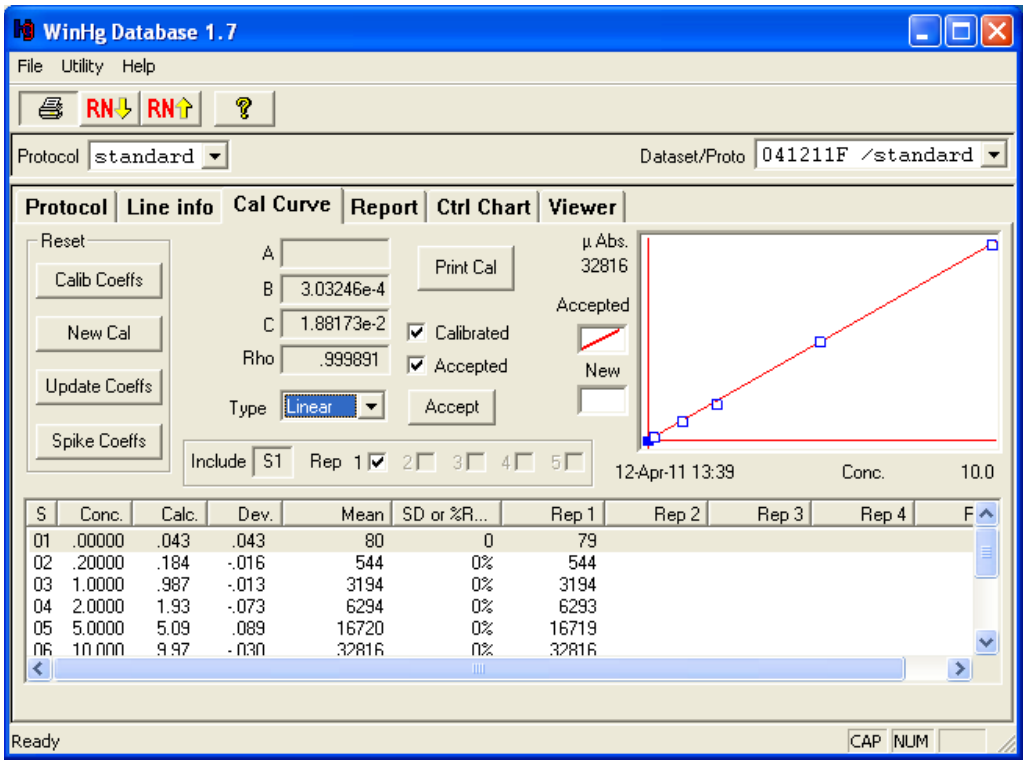
* Exceeds LIMITS Criteria

CCV - Modified 03/05/2008

PDF File ID: 1973688

Report generated 04/12/2011 16:51

2.1.3.3 Raw Data



Approved: April 12, 2011

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Standard: 1 Rep: 1              Seq:  1       13:28:01 12 Apr 11   HG

Hg    .000    ppb      79

*** Standard: 2 Rep: 1              Seq:  2       13:29:43 12 Apr 11   HG

Hg    .200    ppb      544

*** Standard: 3 Rep: 1              Seq:  3       13:31:36 12 Apr 11   HG

Hg    1.00    ppb      3194

*** Standard: 4 Rep: 1              Seq:  4       13:33:39 12 Apr 11   HG

Hg    2.00    ppb      6293

*** Standard: 5 Rep: 1              Seq:  5       13:35:22 12 Apr 11   HG

Hg    5.00    ppb      16719

*** Standard: 6 Rep: 1              Seq:  6       13:37:10 12 Apr 11   HG

Hg    10.0    ppb      32816

*** Check Standard: 2  Ck2ICV       Seq:  7       13:41:24 12 Apr 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          106.     2.11    2.00   ppb        .000

*** Check Standard: 3  Ck3ICB       Seq:  8       13:43:07 12 Apr 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          8.80     .018    .200   ppb        .000

*** Check Standard: 4  Ck4CCV       Seq:  9       13:46:54 12 Apr 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          105.     2.10    2.00   ppb        .000

*** Check Standard: 5  Ck5CCB       Seq:  10      13:48:38 12 Apr 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -3.33    -.007    .200   ppb        .000

*** Sample ID: WG36133102            Seq:  11     14:03:06 12 Apr 11   HG
                          PBW A7
Hg    .041    ppb       .000      .041

*** Sample ID: WG36133103            Seq:  12     14:04:50 12 Apr 11   HG
                          LCSW A7
Hg    4.08    ppb       .000      4.08
```

Approved: April 12, 2011

Erin D. Long

```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Sample ID: WG36125601            Seq:  13     14:06:57 12 Apr 11   HG
                          TCLP BLANK
Hg   -.044    ppb       .000     -.044

*** Sample ID: 1104024101            Seq:  14     14:08:53 12 Apr 11   HG

Hg    .012    ppb       .000      .012

*** Sample ID: WG36146601            Seq:  15     14:10:45 12 Apr 11   HG
                          1104024101PS.9
Hg    1.21    ppb       .000      1.21

*** Sample ID: 1104024102            Seq:  16     14:12:37 12 Apr 11   HG

Hg    .044    ppb       .000      .044

*** Sample ID: 1104024103            Seq:  17     14:14:20 12 Apr 11   HG
                          WG36133101
Hg    .001    ppb       .000      .001

*** Sample ID: WG36146601            Seq:  18     14:21:09 12 Apr 11   HG
                          1104024101PS.9
Hg    1.13    ppb       .000      1.13

*** Sample ID: WG36133104            Seq:  19     14:23:53 12 Apr 11   HG
                          1104024104S
Hg    4.19    ppb       .000      4.19

*** Sample ID: WG36133105            Seq:  20     14:26:16 12 Apr 11   HG
                          1104024105SD
Hg    4.09    ppb       .000      4.09

*** Check Standard: 4  Ck4CCV        Seq:  21     14:28:00 12 Apr 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          97.4     1.95    2.00   ppb        .000

*** Check Standard: 5  Ck5CCB        Seq:  22     14:29:53 12 Apr 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -13.6    -.027    .200   ppb        .000

*** Sample ID: 1104024106            Seq:  23     14:31:42 12 Apr 11   HG

Hg    .108    ppb       .000      .108

*** Sample ID: 1104024107            Seq:  24     14:33:27 12 Apr 11   HG

Hg    .036    ppb       .000      .036
```

Data not used due to possible pipetting error.

Data not used from 14:31 through 14:51 due to too many samples analyzed between check standards.

Approved: April 12, 2011

Erin D. Long

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 1104024108 Seq: 25 14:35:09 12 Apr 11 HG

Hg .040 ppb .000 .040

*** Sample ID: 1104024109 Seq: 26 14:37:41 12 Apr 11 HG

Hg .044 ppb .000 .044

*** Sample ID: 1104024110 Seq: 27 14:39:24 12 Apr 11 HG

Hg .082 ppb .000 .082

*** Sample ID: 1104025302 Seq: 28 14:41:17 12 Apr 11 HG

Hg .039 ppb .000 .039

*** Sample ID: WG36146602 Seq: 29 14:43:30 12 Apr 11 HG
1104025302PS.9
Hg 1.05 ppb .000 1.05

*** Sample ID: 1104025304 Seq: 30 14:45:14 12 Apr 11 HG

Hg .014 ppb .000 .014

*** Sample ID: 1104025306 Seq: 31 14:46:57 12 Apr 11 HG

Hg .001 ppb .000 .001

*** Sample ID: 1104025308 Seq: 32 14:49:13 12 Apr 11 HG

Hg -.017 ppb .000 -.017

110402910 *** Sample ID: ~~1104029001~~ Seq: 33 14:51:01 12 Apr 11 HG

Hg .001 ppb .000 .001

*** Check Standard: 4 Ck4CCV Seq: 34 14:52:56 12 Apr 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.	2.07	2.00	ppb	.000

*** Check Standard: 5 Ck5CCB Seq: 35 14:55:02 12 Apr 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		12.9	.026	.200	ppb	.000

1104029001 *** Sample ID: ~~1104029101~~ Seq: 36 14:56:50 12 Apr 11 HG

Hg .423 ppb .000 .423

Data not used from 14:31 through 14:51 due to too many samples analyzed between check standards.

Approved: April 12, 2011

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 1104029102 Seq: 37 14:58:34 12 Apr 11 HG

Hg	.014	ppb	.000	.014				

*** Sample ID: 1104029103 Seq: 38 15:00:30 12 Apr 11 HG

Hg	.124	ppb	.000	.124				

*** Sample ID: 1104029104 Seq: 39 15:02:34 12 Apr 11 HG

Hg	.040	ppb	.000	.040				

*** Sample ID: 1104030201 Seq: 40 15:04:16 12 Apr 11 HG

Hg	.031	ppb	.000	.031				

*** Sample ID: 1104030601 Seq: 41 15:06:15 12 Apr 11 HG

Hg	.032	ppb	.000	.032				

*** Check Standard: 4 Ck4CCV Seq: 42 15:07:58 12 Apr 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.	2.06	2.00	ppb	.000

*** Check Standard: 5 Ck5CCB Seq: 43 15:09:46 12 Apr 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		-20.5	-.041	.200	ppb	.000

Approved: April 12, 2011



```
Line   Conc.  Units     SD/RSD      1       2       3       4       5
-------------------------------------------------------------------------------

*** Check Standard: 4  Ck4CCV       Seq:  44      15:55:21 12 Apr 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          92.0     1.84    2.00   ppb        .000

*** Check Standard: 5  Ck5CCB       Seq:  45      15:57:09 12 Apr 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          2.28     .005    .200   ppb        .000

*** Sample ID: 1104024106           Seq:  46     16:00:31 12 Apr 11   HG

Hg    .099    ppb       .000      .099

*** Sample ID: 1104024107           Seq:  47     16:02:14 12 Apr 11   HG

Hg    .040    ppb       .000      .040

*** Sample ID: 1104024108           Seq:  48     16:03:56 12 Apr 11   HG

Hg    .027    ppb       .000      .027

*** Sample ID: 1104024109           Seq:  49     16:05:53 12 Apr 11   HG

Hg    .031    ppb       .000      .031

*** Sample ID: 1104024110           Seq:  50     16:07:40 12 Apr 11   HG

Hg    .053    ppb       .000      .053

*** Sample ID: 1104025302           Seq:  51     16:09:25 12 Apr 11   HG

Hg   -.026    ppb       .000     -.026

*** Sample ID: WG36146602           Seq:  52     16:11:07 12 Apr 11   HG
                          1104025302PS.9
Hg    .891    ppb       .000      .891

*** Sample ID: 1104025304           Seq:  53     16:13:00 12 Apr 11   HG

Hg   -.019    ppb       .000     -.019

*** Check Standard: 4  Ck4CCV       Seq:  54      16:14:53 12 Apr 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          98.6     1.97    2.00   ppb        .000

*** Check Standard: 5  Ck5CCB       Seq:  55      16:16:37 12 Apr 11   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg         -3.18    -.006    .200   ppb        .000
```

Approved: April 12, 2011

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 1104025306 Seq: 56 16:18:19 12 Apr 11 HG

Hg .029 ppb .000 .029

*** Sample ID: 1104025308 Seq: 57 16:20:06 12 Apr 11 HG

Hg .029 ppb .000 .029

*** Sample ID: 1104029001 Seq: 58 16:22:34 12 Apr 11 HG

Hg .422 ppb .000 .422

*** Sample ID: 1104029001 Seq: 59 16:25:44 12 Apr 11 HG

Hg .440 ppb .000 .440

*** Sample ID: 1104029101 Seq: 60 16:29:23 12 Apr 11 HG

Hg .003 ppb .000 .003

*** Check Standard: 4 Ck4CCV Seq: 61 16:31:25 12 Apr 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		97.3	1.95	2.00	ppb	.000

*** Check Standard: 5 Ck5CCB Seq: 62 16:33:09 12 Apr 11 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		4.56	.009	.200	ppb	.000

Data not used-samples analyzed for verification.

Approved: April 12, 2011

2.2 General Chemistry Data

2.2.1 BOD Data

2.2.1.1 Summary Data

Login Number: L11040306

Department: Conventionals

Analyst: Tammy Morris

METHOD

Analysis EPA405.1/SM 5210B (Biochemical Oxygen Demand)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

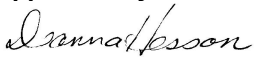
Duplicates: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 25899
Approved By: Deanna Hesson



LABORATORY REPORT

L11040306

05/05/11 10:21

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA
Invoice Number: 616502
P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-4711-WC	L11040306-01	SM5210B	1	08-APR-11

Microbac Laboratories Inc.

Report Number: **L11040306**
Report Date : **May 5, 2011**

Sample Number:	**L11040306-01**	PrePrep Method:	**NONE**	Instrument:	**YSI-5000**
Client ID:	**SWMU-57-4711-WC**	Prep Method:	**SM5210B**	Prep Date:	**04/08/2011 08:10**
Matrix:	**Water**	Analytical Method:	**SM5210B**	Cal Date:	
Workgroup Number:	**WG361175**	Analyst:	**TMM**	Run Date:	**04/08/2011 08:10**
Collect Date:	**04/07/2011 14:30**	Dilution:	**1**	File ID:	**00.1104080810-15**
		Units:	**mg/L**		

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Biochemical Oxygen Demand		**9.74**		**3.00**	**1.00**

2.2.1.2 QC Summary Data

Example BOD Calculations

$$(B1 - B2) * F = B$$

$$[(D1 - D2) - B]/(volume/300) = mg/l\ O$$

where:

B1 = initial DO of the seeded blank.
B2 = final DO of the seeded blank.
F = ratio of seed in sample to seed in the blank in decimal form.
D1 = initial DO of the sample.
D2 = final DO of the sample.
volume = ml of sample used.
300 = total ml in the BOD bottle (sample and dilution water).

Final BOD result is the average of 1,2 or 3 bottles that meet the criteria stated in the SOP.

Microbac Laboratories Inc.

Data Checklist

Date: 08-APR-2011
Analyst: TMM
Analyst: NA
Method: BOD
Instrument: YSI-5000
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG361175

Calibration/Linearity	4/8/11
Second Source Check	
ICV/CCV (std)	
ICB/CCB	
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	TMM
Secondary Reviewer	DIH
Comments	

Primary Reviewer:
13-APR-2011

Secondary Reviewer:
15-APR-2011

CHECKLIST1 - Modified 03/05/2008
Generated: APR-15-2011 08:09:09

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: SM5210B

AAB#: WG361175

Login Number: L11040306

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-4711-WC	01	04/07/11							2		04/08/11	.7	2	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1975219
Report generated 04/13/2011 16:21

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number: L11040306
Work Group: WG361175
Blank File ID: 00.1104080810-01
Blank Sample ID: WG361175-01
Prep Date: 04/08/11 08:10
Instrument ID: YSI-5000
Analyzed Date: 04/08/11 08:10
Method: SM5210B
Analyst: TMM

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG361175-02	00.1104080810-02	04/08/11 08:10	
LCS2	WG361175-03	00.1104080810-03	04/08/11 08:10	
LCSX	WG361175-04	00.1104080810-04	04/08/11 08:10	
DUP	WG361175-08	00.1104080810-10	04/08/11 08:10	
SWMU-57-4711-WC	L11040306-01	00.1104080810-15	04/08/11 08:10	

Report Name: BLANK_SUMMARY
PDF File ID: 1975220
Report generated 04/13/2011 16:21

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number:L11040306 Prep Date:04/08/11 08:10 Sample ID:WG361175-01
Instrument ID:YSI-5000 Run Date:04/08/11 08:10 Prep Method:SM5210B
File ID:00.1104080810-01 Analyst:TMM Method:SM5210B
Workgroup (AAB#):WG361175 Matrix:Water Units:mg/L
Contract #: Cal ID:YSI-50 -

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Biochemical Oxygen Demand	1.00	3.00	1.00	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1975221
13-APR-2011 16:21

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11040306 Analyst: TMM Prep Method: SM5210B
Instrument ID: YSI-5000 Matrix: Water Method: SM5210B
Workgroup (AAB#): WG361175 Units: mg/L
QC Key: DOD4 Lot #: STD44446

Sample ID: WG361175-02 LCS File ID: 00.1104080810-02 Run Date: 04/08/2011 08:10
Sample ID: WG361175-03 LCS2 File ID: 00.1104080810-03 Run Date: 04/08/2011 08:10

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Biochemical Oxygen Demand	198	223	113	198	218	110	2.44	84.6 - 115.4	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1975222
Report generated: 04/13/2011 16:21

2.2.1.3 Raw Data

BIOCHEMICAL OXYGEN DEMAND

WORKGROUP: WG361175

LCS/SPIKE: Std 44446 =200

Daily Dilution: 10(10,000)/500

Daily Dilution: 20(200)/500 =20

2nd Source: Std 43506

ADT - ON: Tmm 4/8/11 @810

ADT - OFF: Tmm 4/8/11 @1230

- ✓ LCS made fresh today
- ✓ LCS pH (6.5-7.5) pH = 6.908
- ✓ Dilution water D.O. = 7.27
- ✓ Dilution water made: 4/8/11
- ✓ Seed 1 cap. Per 850 mL DI water
- ✓ LCS added to bottles
- ✓ Spike added to sample
- ✓ Duplicate analyzed
- ✓ Chlorine checked on all samples
- NA Nitrification inhibitor (HACH Formula 2533) Lot: _____

BOD *

BOD-C _____

EPA Method 405.1/SM 5210B SOP K4051 Revision #: 17 Instrument: YSI 5000 Incubator: 3

All DO reading in mg/L O

		Volume (mL)	Initial D.O.	Final D.O
UNSEEDED BOD BLANK	1	200	8.03	7.89
	2			

		Volume (mL)	Initial D.O.	Final D.O
UNSEEDED BOD-C BLANK	1			
	2			

		Volume (mL)	Initial D.O.	Final D.O
BOD SEEDED CONTROL BLANK (10mL SEED)	1	200	8.07	6.36 6.485
	2	200	8.10	6.61 0.320

		Volume (mL)	Initial D.O.	Final D.O
BOD-C SEEDED CONTROL BLANK (10mL SEED)	1			
	2			

		Volume (mL)	Initial D.O.	Final D.O
BOD BLANK (2mL SEED) Air Added	1	200	6.87 8.58	7.97
	2	200	6.85 8.68	8.32

		Volume (mL)	Initial D.O.	Final D.O
BOD-C BLANK (2mL SEED)	1			
	2			

		Volume (mL)	Initial D.O.	Final D.O
BOD LCS (198 mg/L)	1	6	8.08	3.26
BOD-C LCS (198 mg/L) Inhibitor added ____	2	7	8.10	2.61

		Volume (mL)	Initial D.O.	Final D.O
BOD LCS (198 mg/L)	1	6	8.11	3.48
BOD-C LCS (198 mg/L) Inhibitor added ____	2	7	8.10	2.64

		Volume (mL)	Initial D.O.	Final D.O
2nd SOURCE	1	3	8.13	3.59
	2	4	8.11	2.34

Reviewed By: _____

Page 1 of ___

DCN#86637

Approved: April 15, 2011

WORKGROUP: WG361175

Client: Kemron Mountwood
Source: INFluent 001/Comp
Sample No: 4-236-03
Initial pH: 6.704 Final pH: ____
Chlorine: ____
Nitrification inhibitor added: NO
Comments:

Volume (mL)	Initial D.O.	Final D.O
3	8.07	7.19
5	8.04	6.79
10	8.05	5.93
20	7.94	3.80
50	7.77	3.43

Client: Kemron SAbic
Source: Outlet 001/Comp
Sample No: 4-849-02
Initial pH: 7.525 Final pH: ____
Chlorine: ____
Nitrification inhibitor added: NO
Comments:

Volume (mL)	Initial D.O.	Final D.O
20	8.04	7.64
75	8.39	
200	9.40	8.42

Client: Allied waste
Source: Sanitary Loadette
Sample No: 4-302-01
Initial pH: 6.844 Final pH: ____
Chlorine: ____
Nitrification inhibitor added: NO
Comments:

Volume (mL)	Initial D.O.	Final D.O
2	8.01	
5	8.00	
10	8.06	6.42
20	8.09	5.33
75	8.32	.07 <1

Client: Kemron (Radford)
Source: Sumu-57-4711-uc
Sample No: 4-306-01
Initial pH: 7.706 Final pH: ____
Chlorine: ____
Nitrification inhibitor added: NO
Comments: Air Added

Volume (mL)	Initial D.O.	Final D.O
5	8.10	
20	8.13	7.27
75	8.60	5.70
200	9.72	
	9.14	2.72

Client: Cytec Inlet
Source: ____
Sample No: 4-308-01
Initial pH: 7.360 Final pH: ____
Chlorine: ____
Nitrification inhibitor added: NO
Comments:

Volume (mL)	Initial D.O.	Final D.O
2	8.18	6.81
5	8.02	5.89
10	7.98	3.92
20	7.78	<1

3

DCN#86637

Approved: April 15, 2011

Microbac Laboratories Inc.

BOD REPORT

Workgroup (AAB#): WG361175

Product: SM5210B

Analyte: BIOCHEMICAL OXYGEN DEMAND

Analyst: TMM

Run Date: 04/08/2011 08:10

SAMPLE NUMBER	DIL	SEED	VOL1	IDO1	FDO1	RESULT1	VOL2	IDO2	FDO2	RESULT2	VOL3	IDO3	FDO3	RESULT3	RESULT	Units
WG361175-01	1	0.32	200	8.58	7.97	0.4350	200.0	8.68	8.32	0.06000	200.0				0.2475	mg/L
WG361175-02	1	0.32	6	8.08	3.26	225.0	7.0	8.10	2.61	221.6	200.0				223.3	mg/L
WG361175-03	1	0.32	6	8.11	3.48	215.5	7.0	8.10	2.64	220.3	200.0				217.9	mg/L
WG361175-04	1	0.32	3	8.13	3.59	422.0	4.0	8.11	2.34	408.8	200.0				415.4	mg/L
L11040192-01	1	0.32	200	9.40	7.55	2.295	200.0				200.0				F 2.295	mg/L
L11040194-01	1	0.32	200	9.11	5.47	4.980	200.0				200.0				4.980	mg/L
WG361175-05	1	0.32	200	9.11	5.47	4.980	200.0				200.0				4.980	mg/L
WG361175-06	1	0.32	20	8.15	5.72	31.65	50.0	8.18	2.94	29.52	200.0				30.58	mg/L
L11040209-01	1	0.32	200	9.34	8.64	0.5700	200.0				200.0				ND	mg/L
L11040226-01	1	0.32	10	8.10	7.61	5.100	200.0				200.0				ND	mg/L
WG361175-07	1	0.32	10	8.10	7.61	5.100	200.0				200.0				5.100	mg/L
WG361175-08	1	0.32	10	8.10	7.66	3.600	200.0				200.0				3.600	mg/L
L11040236-01	1	0.32	200	9.35	7.20	2.745	200.0				200.0				ND	mg/L
L11040236-03	1	0.32	50	7.77	3.43	24.12	20.0	7.94	3.80	57.30	10.0	8.05	5.93	54.00	45.14	mg/L
L11040249-02	1	0.32	200	9.40	8.42	0.9900	200.0				200.0				ND	mg/L
L11040302-01	1	0.32	20	8.09	5.33	36.60	200.0				200.0				36.60	mg/L
L11040306-01	1	0.32	200	9.14	2.72	9.150	75.0	8.60	5.70	10.32	200.0				9.735	mg/L
L11040308-01	1	0.32	10	7.98	3.92	112.2	5.0	8.02	5.89	108.6	200.0				110.4	mg/L
L11040308-02	1	0.32	1	8.00	3.63	1215	0.5	8.00	5.52	1296	200.0				1256	mg/L
L11040308-03	1	0.32	5	7.94	2.58	302.4	2.0	7.95	5.34	343.5	200.0				323.0	mg/L
L11040308-05	100	0.32	5	7.95	4.42	192.6	3.0	7.98	5.52	214.0	200.0				20330	mg/L
L11040308-04	100	0.32	5	8.08	4.42	200.4	3.0	8.08	5.73	203.0	200.0				20170	mg/L

Report Name: BOD_REPORT

Report Generated: 13-APR-2011 16:14

[redacted]

Approved: April 15, 2011

2.2.2 COD Data

2.2.2.1 Summary Data

Login Number: L11040306

Department: Conventionals

Analyst: Deanna Hesson

METHOD

Analysis EPA 410.4 MOD/SM5220D/HACH 8000 (Chemical Oxygen Demand)

HOLDING TIMES

Sample Analysis: All holding times were met.

PREPARATION

Sample preparation proceeded normally.

BATCH QA/QC

Method Blank: All acceptance criteria were met.

Laboratory Control Sample: All acceptance criteria were met.

Duplicates: All acceptance criteria were met.

Matrix Spikes: All acceptance criteria were met.

SAMPLES

Samples: All acceptance criteria were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Microbac Laboratories Inc., both technically and for completeness, except for the conditions noted above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager or designated person, as verified by the following signature.

Narrative ID: 25898
Approved By: Deanna Hesson

LABORATORY REPORT

L11040306

05/05/11 10:21

Submitted By

Microbac Laboratories Inc.
158 Starlite Drive
Marietta , OH 45750
(740) 373 - 4071

For

Account Name: Kemron Environmental Services
156 Starlite Drive

Marietta, OH 45750
Attention: Mary Lou Rochette

Project Number: 2820.216
Project: Radford AAP
Site: RADFORD VIRGINIA
Invoice Number: 616502
P.O. Number: MSA

Sample Analysis Summary

Client ID	Lab ID	Method	Dilution	Date Received
SWMU-57-4711-WC	L11040306-01	410.4 MOD	1	08-APR-11

Microbac Laboratories Inc.

Report Number: **L11040306**
Report Date : **May 5, 2011**

Sample Number: **L11040306-01**
Client ID: **SWMU-57-4711-WC**
Matrix: **Water**
Workgroup Number: **WG361906**
Collect Date: **04/07/2011 14:30**

PrePrep Method: **NONE**
Prep Method: **METHOD**
Analytical Method: **410.4 MOD**
Analyst: **DIH**
Dilution: **1**
Units: **mg/L**

Instrument: **UV-120-1V**
Prep Date: **04/14/2011 09:10**
Cal Date: **04/04/2011 09:00**
Run Date: **04/14/2011 09:10**
File ID: **1V.1104140910-23**

Analyte	CAS. Number	Result	Qual	LOQ	LOD
Chemical Oxygen Demand		**73.7**		**20.0**	**10.0**

2.2.2.2 QC Summary Data

Example Calculations for Visible Spectrophotometric Methods

Linear Calibration Model

Step 1 - Retrieve Curve Data from ICAL

m = slope of the linear equation
b = intercept from the linear equation
x = instrument response as absorbance or OD
y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:
y = mx + b

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of m from plot:	2.7599	
Value of b from plot:	0.0153	
Absorbance of unknown from quantitation report (x):	0.3765	
Calculated concentration (y):	1.05440235	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	1.05	mg/L

SmartChem Autoanalyzer - Quadratic Calibration for Chloride and Sulfate

Step 1 - Retrieve Curve Data from Smartchem ICAL

A, B, C = constants from the ICAL quadratic regression

x = instrument response as absorbance or OD

y = concentration of analyte (mg/L)

Step 2: Calculate the instrument concentration, y

Where:

y = Ax^2 + Bx + C

Step 3: Solve for analyte concentration in sample, Cy

Cy = (y) (D)

Example Calculation (LCS):

Value of A from plot:	101.2796	
Value of B from plot:	318.9056	
Value of C from plot:	-2.2712	
Absorbance of unknown from quantitation report (x):	0.1583	
Calculated concentration (y):	50.7495108	
Dilution factor (D):	1.00	
Concentration of analyte in sample, Cy:	50.75	mg/L

Microbac Laboratories Inc.

Data Checklist

Date: 14-APR-2011
Analyst: DIH
Analyst: NA
Method: COD-LO
Instrument: UV-120-1V
Curve Workgroup: NA
Runlog ID:
Analytical Workgroups: WG361906

Calibration/Linearity	4/4/2011
Second Source Check	X
ICV/CCV (std)	X
ICB/CCB	X
Blank	X
LCS/LCS Dup	X
MS/MSD	X
Duplicate	X
Upload Results	X
Client Forms	X
QC Violation Sheet	X
Case Narratives	X
Signed Raw Data	X
STD/LCS on benchsheet	X
Check for compliance with method and project specific requirements	X
Check the completeness of reported information	X
Check the information for the report narrative	X
Primary Reviewer	DIH
Secondary Reviewer	JBK
Comments	

Primary Reviewer:
15-APR-2011

Secondary Reviewer:
15-APR-2011

CHECKLIST1 - Modified 03/05/2008
Generated: APR-15-2011 11:21:14

Microbac Laboratories Inc.

HOLDING TIMES
EQUIVALENT TO AFCEE FORM 9

Analytical Method: 410.4 MOD AAB#: WG361906

Login Number: L11040306

Client ID	ID	Date Collected	TCLP Date	Time Held	Max Hold	Q	Extract Date	Time Held	Max Hold	Q	Run Date	Time Held	Max Hold	Q
SWMU-57-4711-WC	01	04/07/11							28		04/14/11	6.8	28	

* = SEE PROJECT QAPP REQUIREMENTS

HOLD_TIMES - Modified 03/06/2008
PDF File ID: 1978362
Report generated 04/15/2011 13:55

Microbac Laboratories Inc.

METHOD BLANK SUMMARY

Login Number:	L11040306	Work Group:	WG361906
Blank File ID:	1V.1104140910-02	Blank Sample ID:	WG361906-01
Prep Date:	04/14/11 09:10	Instrument ID:	UV-120-1V
Analyzed Date:	04/14/11 09:10	Method:	410.4 MOD
Analyst:	DIH		

This Method Blank Applies To The Following Samples:

Client ID	Lab Sample ID	Lab File ID	Time Analyzed	TAG
LCS	WG361906-02	1V.1104140910-03	04/14/11 09:10	
LCS2	WG361906-03	1V.1104140910-04	04/14/11 09:10	
SWMU-57-4711-WC	L11040306-01	1V.1104140910-23	04/14/11 09:10	
DUP	WG361906-05	1V.1104140910-24	04/14/11 09:10	

Report Name: BLANK_SUMMARY
PDF File ID: 1978363
Report generated 04/15/2011 13:55

Microbac Laboratories Inc.

METHOD BLANK REPORT

Login Number: L11040306 Prep Date: 04/14/11 09:10 Sample ID: WG361906-01
Instrument ID: UV-120-1V Run Date: 04/14/11 09:10 Prep Method: METHOD
File ID: 1V.1104140910-02 Analyst: DIH Method: 410.4 MOD
Workgroup (AAB#): WG361906 Matrix: Water Units: mg/L
Contract #: Cal ID: UV-120-04-APR-11

Analytes	LOD	LOQ	Concentration	Dilution	Qualifier
Chemical Oxygen Demand	10.0	20.0	10.0	1	U

LOD Method Detection Limit
LOQ Reporting/Practical Quantitation Limit
ND Analyte Not detected at or above reporting limit
* |Analyte concentration| > 1/2 RL

Report Name:BLANK
PDF ID: 1978364
15-APR-2011 13:55

Microbac Laboratories Inc.
LABORATORY CONTROL SAMPLE (LCS)

Login Number: L11040306 Analyst: DIH Prep Method: METHOD
Instrument ID: UV-120-1V Matrix: Water Method: 410.4 MOD
Workgroup (AAB#): WG361906 Units: mg/L
QC Key: DOD4 Lot #: STD43558

Sample ID: WG361906-02 LCS File ID: 1V.1104140910-03 Run Date: 04/14/2011 09:10
Sample ID: WG361906-03 LCS2 File ID: 1V.1104140910-04 Run Date: 04/14/2011 09:10

Analytes	LCS			LCS2			%RPD	%Rec Limits	RPD Lmt	Q
	Known	Found	% REC	Known	Found	% REC				
Chemical Oxygen Demand	100	94.5	94.5	100	93.6	93.6	0.961	90 - 110	20	

LCS_LCS2 - Modified 03/06/2008
PDF File ID: 1978365
Report generated: 04/15/2011 13:55

2.2.2.3 Raw Data

WG 360738

Curves

Parameter: COD - Low

Spectrophotometer: HACH DR 120-W

Calibration (Curve) standard stock: STD 44450

Concentration: 10,000 mg/L

Recipe for preparation of curve standards found in:

SOP: K465 Revision: 13 Page: 10

Second Source Stock STD 3558 (concentration: 1000)

Daily Preparation: 5(1000)/180 =

concentration = 100

Calibration Standards (mg/L)	Volume (mL)	Cell Size (cm)	Wavelength (nm)	Absorbance
STD 5 (150)	2 mL	1cm	420	0.164 0.172
STD 6 (100)				0.284 / 0.286
STD 7 (50)				0.408 / 0.406
STD 8 (30)				0.449 / 0.449
STD 9 (20)				0.469 / 0.481
STD M (0.00)				0.510 / 0.519
2nd Source (100)	2 mL	1cm	420	~~0.444 / 0.437~~ DUP 04-04-11 0.3 M

Analyst: Dorothy Payne Date/Time: 04-04-11/0900

DCN#86575

Approved: April 04, 2011

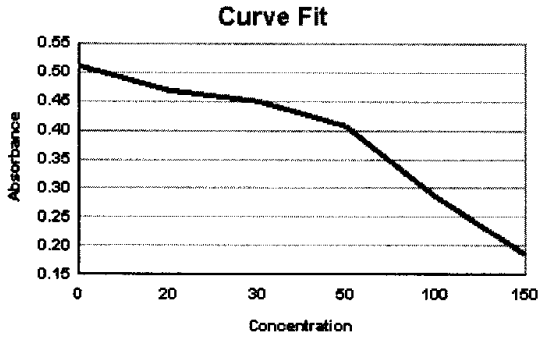
Microbac Laboratories Inc.
INITIAL CALIBRATION

Workgroup:WG360738
Analytical Method:400
Instrument ID:UV-120-1V

Analyst:DLP
Initial Calibration Date:04/04/2011

Analyte: CHEMICAL OXYGEN DEMAND
Number of Points: 6
Slope: -0.00221301
Y-Intercept: 0.513092
Coef. Of Correlation (R^2): 0.998528
Coef. Of Correlation (R): 0.999264

Concentration X	Absorbance Y	X^2	X * Y	Y-Fitted (mX^2+B)
0.00	0.510	0.00	0.00	0.513092
20.0	0.469	400	9.38	0.468832
30.0	0.449	900	13.5	0.446702
50.0	0.408	2500	20.4	0.402442
100	0.284	10000	28.4	0.291791
150	0.184	22500	27.6	0.181141



WG_ICAL_CAL_WET - Modified 03/06/2008
Report generated 04/04/2011 14:54

[redacted]

Approved: April 04, 2011

Microbac Laboratories Inc.
ALTERNATE SOURCE REPORT

Workgroup #: WG360738
File ID: 1V.1104040900-07
CCV ID: WG360738-07
Units: mg/L
Analyte: CHEMICAL OXYGEN DEMAND

Instrument ID: UV-120-1V
Run Date: 04/04/2011
Run Time: 09:00
Analyst: DLP
Cal ID: UV-120 - 04-APR-11 09:00:06

Analyte	Expected	Found	RF	%D	Q
Chemical Oxygen Demand	100	91.3	0.00311	8.7	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

WET_WG_SSCV - Modified 03/06/2008
Report generated 04/04/2011 14:54

[redacted]

Approved: April 04, 2011

COD

EPA 410.4/SM5220D/HACH 8000 | CCV: std 44450 | LCS: std 43558 | Spike: std 43558

SOP K4105 Revision #: 13 | Daily dilution: 4/50(10000)=800 | Daily dilution: 5/50(1000) | Daily dilution: 0.1/2(1000)

Curve ID: 4/4/11 | Daily dilution: 5/50(800)=80 | Daily dilution: =100 | Daily dilution: =50

Wavelength (nm): 420 | Hot Block Temp: 148 C | Spectrophotometer: UV-120-1V

SAMPLE	DILUTION	ABSORBANCE 1	ABSORBANCE 2
CCV: 80 mg/L		0.326	
BLANK:		0.521	
LCS: 100 mg/L		0.304	
LCS DUP: 100 mg/L		0.306	
04-317-01		0.313	
03		0.499	
05		0.481	
04-319-01		0.480	
02		0.492	
04-269-01		0.508	
03	1/2 CL	0.487	
05		0.514	
07		0.510	
04-270-01		0.596	
dup 0203		0.512	
04-403-04		0.539	
07		0.507	
04-390-02	1/2 CL	0.413	
03	1/2 CL	0.476	
04-294-01		0.442	
02		0.409	
04-338-03		0.469	
04-402-01		0.496	
04-306-01		~~0.450~~ dup	0.350
DUP: 403-07		0.514	
MS: (50)		0.398	
MDS: (50)		0.390	
CCV: 80 mg/L		0.332	

ANALYST: Deanne Gibson

DATE/TIME: (on) 4/14/11/0910

DATE/TIME: (off) 4/14/11/1110

DCN#86726

Approved: April 15, 2011

Microbac Laboratories Inc.
SAMPLE REPORT

Workgroup: WG361906 **Analyst:** DIH
Analyte: CHEMICAL OXYGEN DEMAND **Date:** 04/14/2011

Sample ID	I Vol	F Vol	Response	Slope	Y Intercept	Anal. Conc.	Rep. Conc.	Dil	Units
WG361906-01	2	2	0.521	-0.002213	0.5131	-3.5733	-3.5733	1	mg/L
WG361906-02	2	2	0.304	-0.002213	0.5131	94.483	94.483	1	mg/L
WG361906-03	2	2	0.306	-0.002213	0.5131	93.579	93.579	1	mg/L
L11040317-01	2	2	0.313	-0.002213	0.5131	90.416	90.416	1	mg/L
L11040317-03	2	2	0.499	-0.002213	0.5131	6.3679	ND	1	mg/L
L11040317-05	2	2	0.481	-0.002213	0.5131	14.502	14.502 F	1	mg/L
L11040319-01	2	2	0.480	-0.002213	0.5131	14.954	14.954 F	1	mg/L
L11040319-02	2	2	0.492	-0.002213	0.5131	9.5311	ND	1	mg/L
L11040269-01	2	2	0.508	-0.002213	0.5131	2.3011	ND	1	mg/L
L11040269-03	2	2	0.487	-0.002213	0.5131	11.790	23.581 F	2	mg/L
L11040269-05	2	2	0.514	-0.002213	0.5131	-0.41015	ND	1	mg/L
L11040269-07	2	2	0.510	-0.002213	0.5131	1.3973	ND	1	mg/L
L11040270-01	2	2	0.596	-0.002213	0.5131	-37.464	ND	1	mg/L
L11040270-03	2	2	0.512	-0.002213	0.5131	0.49360	ND	1	mg/L
L11040403-04	2	2	0.539	-0.002213	0.5131	-11.707	ND	1	mg/L
WG361906-04	2	2	0.507	-0.002213	0.5131	2.7530	2.7530	1	mg/L
L11040403-07	2	2	0.507	-0.002213	0.5131	2.7530	ND	1	mg/L
L11040390-02	2	2	0.413	-0.002213	0.5131	45.229	90.458	2	mg/L
L11040390-03	2	2	0.476	-0.002213	0.5131	16.761	33.522 F	2	mg/L
L11040394-01	2	2	0.442	-0.002213	0.5131	32.125	32.125	1	mg/L
L11040394-02	2	2	0.409	-0.002213	0.5131	47.037	47.037	1	mg/L
L11040338-03	2	2	0.469	-0.002213	0.5131	19.924	19.924 F	1	mg/L
L11040306-01	2	2	0.350	-0.002213	0.5131	73.697	73.697	1	mg/L
WG361906-05	2	2	0.514	-0.002213	0.5131	-0.41015	-0.41015	1	mg/L
WG361906-06	2	2	0.398	-0.002213	0.5131	52.007	52.007	1	mg/L
WG361906-07	2	2	0.390	-0.002213	0.5131	55.622	55.622	1	mg/L
L11040402-01	2	2	0.496	-0.002213	0.5131	7.7236	ND	1	mg/L

UV_SAMPLE_REPORT - Modified 03/06/2008

Report generated 04/15/2011 10:00

[redacted]

Approved: April 15, 2011

Microbac Laboratories Inc.
CONTINUING CALIBRATION REPORT

Workgroup #: WG361983
File ID: 1V.1104140910-01
CCV ID: WG361983-01
Units: mg/L
Analyte: CHEMICAL OXYGEN DEMAND

Instrument ID: UV-120-1V
Run Date: 04/14/2011
Run Time: 09:10
Analyst: DIH
Cal ID: UV-120 - 04-APR-11

Analyte	Expected	Found	RF	%D	Q
Chemical Oxygen Demand	80	84.5	0.00408	5.6	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

WET_WG_CCV - Modified 03/06/2008

Report generated 04/15/2011 09:55

[redacted]

Approved: April 15, 2011

Microbac Laboratories Inc.
CONTINUING CALIBRATION REPORT

Workgroup #: WG361983
File ID: 1V.1104140910-27
CCV ID: WG361983-02
Units: mg/L
Analyte: CHEMICAL OXYGEN DEMAND

Instrument ID: UV-120-1V
Run Date: 04/14/2011
Run Time: 09:10
Analyst: DIH
Cal ID: UV-120 - 04-APR-11

Analyte	Expected	Found	RF	%D	Q
Chemical Oxygen Demand	80	81.8	0.00415	2.3	

* Exceeds %D Limit

CCC Calibrtion Check Compounds
SPCC System Performance Check Compounds

WET_WG_CCV - Modified 03/06/2008

Report generated 04/15/2011 09:55

[redacted]

Approved: April 15, 2011

3.0 Attachments

Microbac Laboratories Inc.
Analyst Listing
May 5, 2011

ADC – ANTHONY D. CANTER	AJF – AMANDA J. FICKIESEN	ALB – ANNIE L. BROWN
ALV – AMY L. VALENTINE	AML – TONY M. LONG	AZH – AFTER HOURS
BLG – BRENDA L. GREENWALT	BRG – BRENDA R. GREGORY	CAA – CASSIE A. AUGENSTEIN
CAF – CHERYL A. FLOWERS	CEB – CHAD E. BARNES	CLC – CHRYS L. CRAWFORD
CLS – CARA L. STRICKLER	CLW – CHARISSA L. WINTERS	CPD – CHAD P. DAVIS
CSH – CHRIS S. HILL	DDE – DEBRA D. ELLIOTT	DEL – DON E. LIGHTFRITZ
DEV – DAVID E. VANDENBERG	DGB – DOUGLAS G. BUTCHER	DIH – DEANNA I. HESSON
DLB – DAVID L. BUMGARNER	DLP – DOROTHY L. PAYNE	DLR – DIANNA L. RAUCH
ECL – ERIC C. LAWSON	EDL – ERIN D. LONG	ERP – ERIN R. PORTER
FJB – FRANCES J. BOLDEN	HAV – HEMA VILASAGAR	HJR – HOLLY J. REED
JAL – JOHN A. LENT	JBK – JEREMY B. KINNEY	JDH – JUSTIN D. HESSON
JKT – JANE K. THOMPSON	JLL – JOHN L. LENT	JWR – JOHN W. RICHARDS
JWS – JACK W. SHEAVES	JYH – JI Y. HU	KEB – KATIE E. BARNES
KHR – KIM H. RHODES	KRA – KATHY R. ALBERTSON	LKN – LINDA K. NEDEFF
LSB – LESLIE S. BUCINA	MDA – MIKE D. ALBERTSON	MDC – MIKE D. COCHRAN
MES – MARY E. SCHILLING	MMB – MAREN M. BEERY	MRT – MICHELLE R. TAYLOR
MSW – MATT S. WILSON	PDM – PIERCE D. MORRIS	PWD – PAUL W. DENT
RAH – ROY A. HALSTEAD	RB – BOB BUCHANAN	REK – BOB E. KYER
RLK – ROBIN L. KLINGER	RWC – RODNEY W. CAMPBELL	SJP – SUZANNE J. PAUGH
SLM – STEPHANIE L. MOSSBURG	SLP – SHERI L. PFALZGRAF	TIP – TAE I. PARRISH
TMB – TIFFANY M. BAILEY	TMM – TAMMY M. MORRIS	VC – VICKI COLLIER
WJB – WILL J. BEASLEY	WTD – WADE T. DELONG	

Microbac Laboratories Inc.
List of Valid Qualifiers
May 05, 2011

Qualkey: DOD

Qualifier	Description
*	Surrogate or spike compound out of range
+	Correlation coefficient for the MSA is less than 0.995
<	Result is less than the associated numerical value.
>	Result is greater than the associated numerical value.
A	See the report narrative
B	The reported result is associated with a contaminated method blank.
B1	Target analyte detected in method blank at or above the method reporting limit
B3	Target analyte detected in calibration blank at or above the method reporting limit
B4	The BOD unseeded dilution water blank exceeded 0.2 mg/L
C	Confirmed by GC/MS
CG	Confluent growth
DL	Surrogate or spike compound was diluted out
E	Estimated concentration due to sample matrix interference
EDL	Elevated sample reporting limits, presence of non-target analytes
EMPC	Estimated Maximum Possible Concentration
F, S	Estimated result below quantitation limit; method of standard additions(MSA)
FL	Free Liquid
H1	Sample analysis performed past holding time.
I	Semiquantitative result (out of instrument calibration range)
J	Estimated concentration; sample matrix interference.
J	Estimated value ; the analyte concentration was greater than the highest standard
J	Estimated value ; the analyte concentration was less than the low standard (LOQ)
J	The reported result is an estimated value.
J,B	Analyte detected in both the method blank and sample above the MDL.
J,P	Estimate; columns don't agree to within 40%
J,S	Estimated concentration; analyzed by method of standard addition (MSA)
L	Sample reporting limits elevated due to matrix interference
L1	The associated blank spike (LCS) recovery was above the laboratory acceptance limits.
L2	The associated blank spike (LCS) recovery was below the laboratory acceptance limits.
M	Matrix effect; the concentration is an estimate due to matrix effect.
N	Nontarget analyte; the analyte is a tentativlely identified compound (TIC) by GC/MS
NA	Not applicable
ND	Not detected at or above the reporting limit (RL).
ND, L	Not detected; sample reporting limit (RL) elevated due to interference
ND, S	Not detected; analyzed by method of standard addition (MSA)
NF	Not found by library search
NFL	No free liquid
NI	Non-ignitable
NR	Analyte is not required to be analyzed
NS	Not spiked
P	Concentrations >40% difference between the two GC columns
Q	One or more quality control criteria failed. See narrative.
QNS	Quantity of sample not sufficient to perform analysis
RA	Reanalysis confirms reported results
RE	Reanalysis confirms sample matrix interference
S	Analyzed by method of standard addition (MSA)
SMI	Sample matrix interference on surrogate
SP	Reported results are for spike compounds only
TIC	Library Search Compound
TNTC	Too numerous to count
U	Analyte was not detected. The concentration is below the reported LOD.
UJ	Undetected; the analyte was analyzed for, but not detected.
UQ	Undetected; the analyte was analyzed for, but not detected.
W	Post-digestion spike for furnace AA out of control limits
X	Exceeds regulatory limit
X, S	Exceeds regulatory limit; method of standard additions (MSA)
Z	Cannot be resolved from isomer - see below

*****Special Notes for Organic Analytes**

Qualkey: DOD

1. Acrolein and acrylonitrile by method 624 are semi-quantitative screens only.
2. 1,2-Diphenylhydrazine is unstable and is reported as azobenzene.
3. N-nitrosodiphenylamine cannot be separated from diphenylamine.
4. 3-Methylphenol and 4-Methylphenol are unresolvable compounds.
5. m-Xylene and p-Xylene are unresolvable compounds.
6. The reporting limits for Appendix II/IX compounds by method 8270 are based on EPA estimated PQLs referenced in 40 CFR Part 264, Appendix IX. They are not always achievable for every compound an are matrix dependent.

COC No. A 2171

156 Starlite Drive
Marietta, OH 45750

KEMRON
ENVIRONMENTAL SERVICES

CHAIN-OF-CUSTODY RECORD

Phone: 740-373-4308
Fax: 740-376-2536

Company Name: UXB - KEMRON

Project Contact: MARY LOU ROCHETTE

Contact Phone #: 740-373-4308

Turn Around Requirements: 5-DAY

Location: SWMU-57 RFAAP

Project ID: MRL0669 (DECON CHARACTERIZATION)

Sampler (print): JONAH ANDERSON

Signature:

Program: ☐ CWA ☐ RCRA ☐ DOD ☐ AFCEE ☐ Other

Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold	COD	BOD	TAL - METALS	TOTAL # (LAB USE)	ADDITIONAL REQUIREMENTS
SWMU-57-4711-WC		X	4-7-11	1430	WATER	3		1	1	1		FOR RFAAP PERL QAPP ★ PLEASE ★ LET US KNOW ASAP - THANKS

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	4-7-11	1615			
Relinquished by: (Signature)	Date	Time	Remarks:		

Microbac OVD
Received: 04/08/2011 10:17
By: BRENDA GREENWALT
221000013901

Brenda Greenwalt

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

Page _____ of _____

COOLER INSPECTION

Received: 04/08/2011 10:17
Delivery Method: FedEx
Opened By: Brenda Greenwalt
Comments:

Login(s): L11040306|

Cooler(s)

Cooler #	Temp Gun	Temp	Tracking #	COC #	Comments
0013927	G	1.0	345750981100256387504383865020 06	2171	

1	Yes	Were shipping coolers sealed?
2	Yes	Were custody seals intact?
3	Yes	Were cooler temperatures in range of 0-6?
4	Yes	Was ice present?
5	Yes	Were COC's received/information complete/signed and dated?
6	Yes	Were sample containers and labels intact and match COC?
7	Yes	Were the correct containers and volumes received?
8	Yes	Were samples received within EPA hold times?
9	Yes	Were correct perservatives used? (water only)
10	Yes	Were pH ranges acceptable? (voa's excluded)
11	NA	Were VOA samples free of headspace (less than 6mm)?

Discrepancies:

Microbac - Ohio Valley Division
158 Starlite Drive
Marietta, OH 45750
Tel: (740)373-4071 Fax: (740)373-4835

Microbac Laboratories Inc.

Internal Chain of Custody Report

Login: L11040306
Account: 2820
Project: 2820.216
Samples: 1
Due Date: 15-APR-2011

Samplenum	Container ID	Products
L11040306-01	818108	BOD

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	L1	08-APR-2011 11:32	JKT	
2	ANALYZ	L1	WET	08-APR-2011 12:09	TMM	RLK
3	STORE	WET	A2	11-APR-2011 07:52	AZH	TMM

Samplenum	Container ID	Products
L11040306-01	818109	COD-HIGH COD-LOW

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	08-APR-2011 11:32	JKT	
2	ANALYZ	W1	WET	14-APR-2011 07:48	DIH	JKT
3	STORE	WET	A2	18-APR-2011 07:46	AZH	DIH

Samplenum	Container ID	Products
L11040306-01	818110	AL BA CO FE HG MG MN NA NI PB-AX V ZN AG AS-A›

Bottle: 1

Seq.	Purpose	From	To	Date/Time	Accept	Relinquish
1	LOGIN	COOLER	W1	08-APR-2011 11:32	JKT	
2	PREP	W1	DIG	08-APR-2011 12:51	REK	RLK
3	ANALYZ*	DIG	METALS	11-APR-2011 10:51	EDL	REK
4	STORE	DIG	A2	11-APR-2011 14:21	JKT	ERP

Sample extract/digestate/leachate

A1 - Sample Archive (COLD)
A2 - Sample Archive (AMBIENT)
F1 - Volatiles Freezer in Login
V1 - Volatiles Refrigerator in Login
W1 - Walkin Cooler in Login