

Metals

Case Narrative

Colorado Oil & Gas Conservation Commission TBAL

Work Order Number: 1312158

1. This report consists of 1 water sample.
2. The sample was received cool and intact by ALS on 12/13/13.
3. The sample was to be analyzed for dissolved metals. The sample was filtered through a 0.45 micron filter and preserved with nitric acid to a pH less than 2 prior to analysis.
4. The sample was prepared and analyzed based on Methods for the Determination of Metals in Environmental Samples – Supplement 1 procedures.

Prior to analysis by Trace ICP, an ionization buffer was added to the sample to improve the sodium and potassium quantitation.

For analysis by Trace ICP and ICP-MS, the sample was digested following method 200.2 and the current revision of SOP 806.

5. Analysis by Trace ICP followed method 200.7 and the current revision of SOP 807.

Analysis by ICP-MS followed method 200.8 and the current revision of SOP 827.

6. All standards and solutions are NIST traceable and were used within their recommended shelf life.
7. The sample was prepared and analyzed within the established hold times.

All in house quality control procedures were followed, as described below.

8. General quality control procedures.



- A filter (method) blank and laboratory control sample were filtered, preserved, and digested at the same time as the sample.
- The preparation (method) blank associated with this digestion batch was below the reporting limit for the requested analytes.
- All laboratory control sample criteria were met.
- All initial and continuing calibration blanks were below the reporting limit for the requested analytes.
- All initial and continuing calibration verifications were within the acceptance criteria for the requested analytes.
- The interference check samples associated with Method 200.7 were within acceptance criteria.
- The interference check samples associated with Method 200.8 were analyzed.

9. Matrix specific quality control procedures.

Per method requirements, matrix QC was performed for each analysis. Since a sample from this order number was not the selected quality control (QC) sample, matrix specific QC results are not included in this report.

10. The sample required a dilution to bring sodium into the analytical range of the Trace ICP.

It is a standard practice that samples for ICP-MS are analyzed at a dilution.

11. Sodium Adsorption Ration (SAR) was determined by calculation based on a reference from the client. Calcium, magnesium, and sodium concentrations were determined by ICP, Method 200.7.

$$SAR = Na / (((Ca + Mg) / 2)^{1/2})$$

The analyte results are the me/L concentrations based on conversions from their mg/L concentrations. Please note that the SAR value is unitless.



The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

Jill Latelle
Jill Latelle
Inorganics Primary Data Reviewer

12/26/13
Date

Erin Miller
Erin Miller
Inorganics Final Data Reviewer

12/26/13
Date



Inorganic Data Reporting Qualifiers

The following qualifiers are used by the laboratory when reporting results of inorganic analyses.

- Result qualifier -- A "B" is entered if the reported value was obtained from a reading that was less than the Reporting Limit but greater than or equal to the Method Detection Limit (MDL). If the analyte was analyzed for but not detected a "U" is entered. For samples, negative values are reported as non-detects ("U" flagged). For blanks, if the absolute value of the negative value is above the MDL and below the reporting limit, then the result is "B" flagged.
- QC qualifier -- Specified entries and their meanings are as follows:
 - E - The reported value is estimated because of the presence of interference. An explanatory note may be included in the narrative.
 - M - Duplicate injection precision was not met.
 - N - Spiked sample recovery not within control limits. A post spike is analyzed for all ICP analyses when the matrix spike and or spike duplicate fail and the native sample concentration is less than four times the spike added concentration.
 - Z - Spiked recovery not within control limits. An explanatory note may be included in the narrative.
 - * - Duplicate analysis (relative percent difference) not within control limits.
 - S - SAR value is estimated as one or more analytes used in the calculation were not detected above the detection limit.



Chain of Custody

ALS Environmental -- FC

Sample Number(s) Cross-Reference Table

OrderNum: 1312158

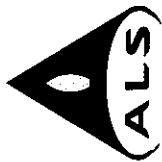
Client Name: Colorado Oil & Gas Conservation Commission

Client Project Name: TBAL

Client Project Number:

Client PO Number: PHA 14-22

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
285485 Molokai 13-36	1312158-1		WATER	12-Dec-13	10:03



ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

Chain-of-Custody

Form 202/8

WORKORDER # 1312158									
PAGE 1 of 1									
Form 202/8									
Chain-of-Custody									
SAMPLER CONTACT									
SITE ID									
ADD FORMAT									
PURCHASE ORDER									
BILL TO COMPANY									
INVOICE ATTN TO									
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PHONE									
FAX									
E-MAIL									
peter.gintantse@state.ca.gov									
Lab ID									
Field ID									
Matrix									
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QC									
DATE 12-Dec-13									
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DISPOSAL									
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6070 + 14-Biox-ETC									
548 GIL									
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Higgins									
Landfill									
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ALS Environmental - Fort Collins
CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCC

Workorder No: 1312158

Project Manager: ARW

Initials: JLR

Date: 12/13/13

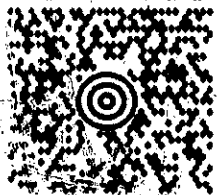


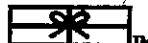
1. Does this project require any special handling in addition to standard ALS procedures?		YES	<input checked="" type="radio"/> NO
2. Are custody seals on shipping containers intact?	NONE	<input checked="" type="radio"/> YES	NO
3. Are Custody seals on sample containers intact?	NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		<input checked="" type="radio"/> YES	NO
5. Are the COC and bottle labels complete and legible?		<input checked="" type="radio"/> YES	NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		<input checked="" type="radio"/> YES	NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	<input checked="" type="radio"/> YES	NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	YES	NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	<input checked="" type="radio"/> YES	NO
10. Is there sufficient sample for the requested analyses?		<input checked="" type="radio"/> YES	NO
11. Were all samples placed in the proper containers for the requested analyses?		<input checked="" type="radio"/> YES	NO
12. Are all samples within holding times for the requested analyses?		<input checked="" type="radio"/> YES	NO
13. Were all sample containers received intact? (not broken or leaking, etc.)		<input checked="" type="radio"/> YES	NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: ____ < green pea ____ > green pea	N/A	<input checked="" type="radio"/> YES	NO
15. Do any water samples contain sediment? Amount Amount of sediment: ____ dusting ____ moderate ____ heavy	N/A	YES	<input checked="" type="radio"/> NO
16. Were the samples shipped on ice?		<input checked="" type="radio"/> YES	NO
17. Were cooler temperatures measured at 0.1-6.0°C? IR gun used*: #2 <input checked="" type="radio"/> #4	RAD ONLY	<input checked="" type="radio"/> YES	NO
Cooler #: <u>1</u>			
Temperature (°C): <u>5°</u>			
No. of custody seals on cooler: <u>1</u>			
External µR/hr reading: <u>10</u>			
Background µR/hr reading: <u>10</u>			
DOT Survey/ Acceptance Information			
Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? <input checked="" type="radio"/> YES / NO / NA (If no, see Form 008.)			

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

If applicable, was the client contacted? YES / NO / ☒ NA Contact: _____ Date/Time: _____

Project Manager Signature / Date: [Signature] 12-13-13

1312158

PETER GINTAUTAS 719-846-3091 COLORADO OIL & GAS CONSERVATIO 213 CORUNDUM RD TRINIDAD CO 81082		21 LBS	1 OF 1
SHIP TO: AMY WOLF 970-490-1511 ALS LABORATORY GROUP 225 COMMERCE DRIVE FORT COLLINS CO 80524-2762		DWT: 14,13,12	10 1-
	CO 805 0-01 		
UPS NEXT DAY AIR		1	
TRACKING #: 1Z 014 8WR 01 9135 4328			
			
BILLING: P/P			
Reference#1: Project T3AL Project 2130			
UPS 15.6.12		WNTIE70 45.0A 10/2013	
			

Temp = 5°C



Sample Results

Dissolved Metals by 200.7

Method EPA200.7 Revision 4.4

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 285485 Molokai 13-36

Lab ID: 1312158-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 12-Dec-13

Date Extracted: 17-Dec-13

Date Analyzed: 18-Dec-13

Prep Method: EPA200.2 Rev 2.2

Prep Batch: IP131217-5

QC Batch ID: IP131217-5-1

Run ID: IT131218-2A2

Cleanup: NONE

Basis: As Received

File Name: 131218A.

Analyst: Steve Workman

Sample Aliquot: 50 ml

Final Volume: 50 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/LOQ	MDL/LOD/DL	Result Qualifier	EPA Qualifier
7440-41-7	BERYLLIUM	1	0.0003	0.002	0.0003	U	
7440-42-8	BORON	1	0.33	0.1	0.03		
7440-70-2	CALCIUM	1	2.9	1	0.06		
7440-47-3	CHROMIUM	1	0.0015	0.01	0.0015	U	
7439-89-6	IRON	1	2.5	0.1	0.006		
7439-93-2	LITHIUM	1	0.041	0.01	0.003		
7439-95-4	MAGNESIUM	1	0.34	1	0.06	B	
7440-02-0	NICKEL	1	0.006	0.02	0.006	B	
7440-09-7	POTASSIUM	1	2.4	1	0.2		
7440-21-3	SILICON	1	9.5	0.05	0.015		
7440-23-5	SODIUM	5	400	5	0.45		
	SODIUM ADSORPTION RATIO	5	59	0.85	0.31		
7440-62-2	VANADIUM	1	0.0015	0.01	0.0015	U	

Data Package ID: *it1312158-1*

Date Printed: Thursday, December 26, 2013

ALS Environmental -- FC

Page 1 of 1

LIMS Version: 6.682

Dissolved Metals by 200.8

Method EPA200.8 Revision 5.4

Sample Results

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Field ID: 285485 Molokai 13-36

Lab ID: 1312158-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 12-Dec-13

Date Extracted: 17-Dec-13

Date Analyzed: 18-Dec-13

Prep Method: EPA200.2 Rev 2.2

Prep Batch: IP131217-5

QCBatchID: IP131217-5-2

Run ID: IM131218-10A4

Cleanup: NONE

Basis: As Received

File Name: 010SMPL_

Analyst: Ross Miller

Sample Aliquot: 50 ml

Final Volume: 50 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	RptLimit/LOQ	MDL/LOD/DL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	0.024	0.05	0.015	B	
7440-36-0	ANTIMONY	10	0.00021	0.0003	0.0001	B	
7440-38-2	ARSENIC	10	0.00076	0.002	0.0006	B	
7440-39-3	BARIUM	10	0.16	0.001	0.0003		
7440-43-9	CADMIUM	10	0.00012	0.0003	0.00012	U	
7440-48-4	COBALT	10	0.00042	0.001	0.0003	B	
7440-50-8	COPPER	10	0.003	0.01	0.003	U	
7439-92-1	LEAD	10	0.00015	0.0005	0.00015	U	
7439-96-5	MANGANESE	10	0.042	0.002	0.0006		
7439-98-7	MOLYBDENUM	10	0.0016	0.001	0.0005		
7782-49-2	SELENIUM	10	0.0005	0.001	0.0005	U	
7440-22-4	SILVER	10	0.00003	0.0001	0.00003	U	
7440-23-5	SODIUM	10	400	1	0.3		
7440-24-6	STRONTIUM	10	0.51	0.001	0.0003		
7440-28-0	THALLIUM	10	0.00006	0.0002	0.00006	U	
7440-29-1	THORIUM	10	0.00015	0.0002	0.00006	B	
7440-61-1	URANIUM	10	0.00003	0.0001	0.00003	U	
7440-66-6	ZINC	10	0.0092	0.02	0.006	B	

Data Package ID: im1312158-1

Date Printed: Thursday, December 26, 2013

ALS Environmental -- FC

Page 1 of 1

LIMS Version: 6.682



Summary Report Forms

Metals by 200.7

Method EPA200.7 Revision 4.4

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: FP131217-5MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 17-Dec-13

Date Analyzed: 18-Dec-13

Prep Batch: IP131217-5

QCBatchID: IP131217-5-1

Run ID: IT131218-2A2

Cleanup: NONE

Basis: N/A

File Name: 131218A.

Sample Aliquot: 50 ml

Final Volume: 50 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ	MDL	Result Qualifier	EPA Qualifier
7440-41-7	BERYLLIUM	1	0.0003	0.002	0.0003	U	
7440-42-8	BORON	1	0.03	0.1	0.03	U	
7440-70-2	CALCIUM	1	0.06	1	0.06	U	
7440-47-3	CHROMIUM	1	0.0015	0.01	0.0015	U	
7439-89-6	IRON	1	0.006	0.1	0.006	U	
7439-93-2	LITHIUM	1	0.003	0.01	0.003	U	
7439-95-4	MAGNESIUM	1	0.06	1	0.06	U	
7440-02-0	NICKEL	1	0.006	0.02	0.006	U	
7440-09-7	POTASSIUM	1	0.2	1	0.2	U	
7440-21-3	SILICON	1	0.015	0.05	0.015	U	
7440-23-5	SODIUM	1	0.09	1	0.09	U	
7440-62-2	VANADIUM	1	0.0015	0.01	0.0015	U	

Data Package ID: it1312158-1

Date Printed: Thursday, December 26, 2013

ALS Environmental -- FC

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LIMS Version: 6.682

Metals by 200.7

Method EPA200.7 Revision 4.4

Laboratory Control Sample

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: FP131217-5LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 12/17/2013

Date Analyzed: 12/18/2013

Prep Method: EPA200.22.2

Prep Batch: IP131217-5

QCBatchID: IP131217-5-1

Run ID: IT131218-2A2

Cleanup: NONE

Basis: N/A

File Name: 131218A.

Sample Aliquot: 50 ml

Final Volume: 50 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7440-41-7	BERYLLIUM	0.05	0.0486	0.002		97	85 - 115%
7440-42-8	BORON	1	1.02	0.1		102	85 - 115%
7440-70-2	CALCIUM	40	40.1	1		100	85 - 115%
7440-47-3	CHROMIUM	0.2	0.201	0.01		100	85 - 115%
7439-89-6	IRON	1	0.936	0.1		94	85 - 115%
7439-93-2	LITHIUM	0.5	0.509	0.01		102	85 - 115%
7439-95-4	MAGNESIUM	40	40.2	1		101	85 - 115%
7440-02-0	NICKEL	0.5	0.504	0.02		101	85 - 115%
7440-09-7	POTASSIUM	40	42.6	1		107	85 - 115%
7440-21-3	SILICON	1	1.1	0.05		110	85 - 115%
7440-23-5	SODIUM	40	40.6	1		102	85 - 115%
7440-62-2	VANADIUM	0.5	0.535	0.01		107	85 - 115%

Data Package ID: *it1312158-1*

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ALS Environmental -- FC

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Prep Batch ID: IP131217-5

Start Date: 12/17/13

End Date: 12/17/13

Concentration Method: NONE

Batch Created By: NAQ

Start Time: 12:48

End Time: 18:00

Extract Method: EPA200.22.2

Date Created: 12/17/13

Prep Analyst: Nathan A. Quatier

Initial Volume Units: ml

Time Created: 12:56

Comments:

Final Volume Units: ml

Validated By: NAQ

Date Validated: 12/17/13

Time Validated: 15:21

QC Batch ID: IP131217-5-1

Lab ID	QC Type	Field ID	Matrix	Date Collected	Initial Wt/Vol	Final Wt/Vol	Cleanup Method	Cleanup DF	Order Number
FP131217-5	MB	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1312134
FP131217-5	LCS	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1312134
1312134-1	MS	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1312134
1312134-1	MSD	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1312134
1312134-1	DUP	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1312134
1312134-1	SMP	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1312134
1312158-1	SMP	285485 Molokai 13-36	WATER	12/12/2013	50	50	NONE	1	1312158

QC Types

CAR	Carrier reference sample	DUP	Laboratory Duplicate
LCS	Laboratory Control Sample	LCSD	Laboratory Control Sample Duplicat
MB	Method Blank	MS	Laboratory Matrix Spike
MSD	Laboratory Matrix Spike Duplicate	REP	Sample replicate
RVS	Reporting Level Verification Standar	SMP	Field Sample
SYS	Sample Yield Spike		

Metals by 200.7

Method EPA200.7

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: ICV

QC Type: Initial Calibration

File Name: 131218A.

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 12:30

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7440-41-7	BERYLLIUM	0.25	0.252	0.002		101	95 - 105%
7440-42-8	BORON	0.5	0.491	0.1		98	95 - 105%
7440-70-2	CALCIUM	25	25.2	1		101	95 - 105%
7440-47-3	CHROMIUM	0.5	0.511	0.01		102	95 - 105%
7439-89-6	IRON	10	9.94	0.1		99	95 - 105%
7439-93-2	LITHIUM	0.25	0.249	0.01		100	95 - 105%
7439-95-4	MAGNESIUM	25	24.9	1		100	95 - 105%
7440-02-0	NICKEL	0.5	0.493	0.02		99	95 - 105%
7440-09-7	POTASSIUM	25	24.2	1		97	95 - 105%
7440-21-3	SILICON	2.5	2.52	0.05		101	95 - 105%
7440-23-5	SODIUM	25	24.2	1		97	95 - 105%
7440-62-2	VANADIUM	0.25	0.253	0.01		101	95 - 105%

Data Package ID: *it1312158-1*

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Metals by 200.7

Method EPA200.7

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCV1

QC Type: Continuing Calibration

File Name: 131218A.

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 12:40

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7440-41-7	BERYLLIUM	0.5	0.492	0.002		98	90 - 110%
7440-42-8	BORON	1	0.986	0.1		99	90 - 110%
7440-70-2	CALCIUM	50	50.3	1		101	90 - 110%
7440-47-3	CHROMIUM	1	1.00	0.01		100	90 - 110%
7439-89-6	IRON	20	20.1	0.1		101	90 - 110%
7439-93-2	LITHIUM	0.5	0.546	0.01		109	90 - 110%
7439-95-4	MAGNESIUM	50	49.6	1		99	90 - 110%
7440-02-0	NICKEL	1	0.982	0.02		98	90 - 110%
7440-09-7	POTASSIUM	50	51.5	1		103	90 - 110%
7440-21-3	SILICON	5	4.95	0.05		99	90 - 110%
7440-23-5	SODIUM	50	52.8	1		106	90 - 110%
7440-62-2	VANADIUM	0.5	0.498	0.01		100	90 - 110%

Data Package ID: *it1312158-1*

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Metals by 200.7

Method EPA200.7 Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCV2

QC Type: Continuing Calibration

File Name: 131218A.

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 12:59

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7440-41-7	BERYLLIUM	0.5	0.481	0.002		96	90 - 110%
7440-42-8	BORON	1	0.978	0.1		98	90 - 110%
7440-70-2	CALCIUM	50	49.5	1		99	90 - 110%
7440-47-3	CHROMIUM	1	0.985	0.01		99	90 - 110%
7439-89-6	IRON	20	19.7	0.1		99	90 - 110%
7439-93-2	LITHIUM	0.5	0.539	0.01		108	90 - 110%
7439-95-4	MAGNESIUM	50	48.8	1		98	90 - 110%
7440-02-0	NICKEL	1	0.975	0.02		98	90 - 110%
7440-09-7	POTASSIUM	50	50.8	1		102	90 - 110%
7440-21-3	SILICON	5	4.87	0.05		97	90 - 110%
7440-23-5	SODIUM	50	49.6	1		99	90 - 110%
7440-62-2	VANADIUM	0.5	0.491	0.01		98	90 - 110%

Data Package ID: *it1312158-1*

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Metals by 200.7

Method EPA200.7

Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCV3

QC Type: Continuing Calibration

File Name: 131218A.

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 13:42

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7440-41-7	BERYLLIUM	0.5	0.479	0.002		96	90 - 110%
7440-42-8	BORON	1	0.980	0.1		98	90 - 110%
7440-70-2	CALCIUM	50	49.3	1		99	90 - 110%
7440-47-3	CHROMIUM	1	0.980	0.01		98	90 - 110%
7439-89-6	IRON	20	19.7	0.1		98	90 - 110%
7439-93-2	LITHIUM	0.5	0.511	0.01		102	90 - 110%
7439-95-4	MAGNESIUM	50	48.9	1		98	90 - 110%
7440-02-0	NICKEL	1	0.989	0.02		99	90 - 110%
7440-09-7	POTASSIUM	50	50.9	1		102	90 - 110%
7440-21-3	SILICON	5	4.86	0.05		97	90 - 110%
7440-23-5	SODIUM	50	51.4	1		103	90 - 110%
7440-62-2	VANADIUM	0.5	0.491	0.01		98	90 - 110%

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Metals by 200.7

Method EPA200.7 Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCV4

QC Type: Continuing Calibration

File Name: 131218A.

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 14:15

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7440-41-7	BERYLLIUM	0.5	0.474	0.002		95	90 - 110%
7440-42-8	BORON	1	0.978	0.1		98	90 - 110%
7440-70-2	CALCIUM	50	49.8	1		100	90 - 110%
7440-47-3	CHROMIUM	1	0.980	0.01		98	90 - 110%
7439-89-6	IRON	20	19.6	0.1		98	90 - 110%
7439-93-2	LITHIUM	0.5	0.503	0.01		101	90 - 110%
7439-95-4	MAGNESIUM	50	48.4	1		97	90 - 110%
7440-02-0	NICKEL	1	1.01	0.02		101	90 - 110%
7440-09-7	POTASSIUM	50	50.3	1		101	90 - 110%
7440-21-3	SILICON	5	4.77	0.05		95	90 - 110%
7440-23-5	SODIUM	50	51.9	1		104	90 - 110%
7440-62-2	VANADIUM	0.5	0.490	0.01		98	90 - 110%

Data Package ID: it1312158-1

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Metals by 200.7

Method EPA200.7 Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCV5

QC Type: Continuing Calibration

File Name: 131218A.

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 14:35

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7440-41-7	BERYLLIUM	0.5	0.482	0.002		96	90 - 110%
7440-42-8	BORON	1	0.992	0.1		99	90 - 110%
7440-70-2	CALCIUM	50	51.0	1		102	90 - 110%
7440-47-3	CHROMIUM	1	0.999	0.01		100	90 - 110%
7439-89-6	IRON	20	20.0	0.1		100	90 - 110%
7439-93-2	LITHIUM	0.5	0.512	0.01		102	90 - 110%
7439-95-4	MAGNESIUM	50	49.1	1		98	90 - 110%
7440-02-0	NICKEL	1	1.03	0.02		103	90 - 110%
7440-09-7	POTASSIUM	50	51.1	1		102	90 - 110%
7440-21-3	SILICON	5	4.83	0.05		97	90 - 110%
7440-23-5	SODIUM	50	48.0	1		96	90 - 110%
7440-62-2	VANADIUM	0.5	0.497	0.01		99	90 - 110%

Data Package ID: *it1312158-1*

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Metals by 200.7

Method EPA200.7 Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCV6

QC Type: Continuing Calibration

File Name: 131218A.

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 15:38

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7440-41-7	BERYLLIUM	0.5	0.469	0.002		94	90 - 110%
7440-42-8	BORON	1	0.987	0.1		99	90 - 110%
7440-70-2	CALCIUM	50	49.9	1		100	90 - 110%
7440-47-3	CHROMIUM	1	0.976	0.01		98	90 - 110%
7439-89-6	IRON	20	19.5	0.1		98	90 - 110%
7439-93-2	LITHIUM	0.5	0.507	0.01		101	90 - 110%
7439-95-4	MAGNESIUM	50	48.5	1		97	90 - 110%
7440-02-0	NICKEL	1	1.03	0.02		103	90 - 110%
7440-09-7	POTASSIUM	50	50.8	1		102	90 - 110%
7440-21-3	SILICON	5	4.73	0.05		95	90 - 110%
7440-23-5	SODIUM	50	52.4	1		105	90 - 110%
7440-62-2	VANADIUM	0.5	0.488	0.01		98	90 - 110%

Data Package ID: *it1312158-1*

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Metals by 200.7

Method EPA200.7

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: ICB

QC Type: Initial Calibration

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 12:33:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7440-41-7	BERYLLIUM	0.000176	0.002	U
7440-42-8	BORON	-0.00468	0.1	B
7440-70-2	CALCIUM	-0.0358	1	B
7440-47-3	CHROMIUM	0.00051	0.01	U
7439-89-6	IRON	0.00494	0.1	U
7439-93-2	LITHIUM	0.00296	0.01	B
7439-95-4	MAGNESIUM	0.0456	1	B
7440-02-0	NICKEL	0.000932	0.02	U
7440-09-7	POTASSIUM	0.109	1	U
7440-21-3	SILICON	-0.0139	0.05	B
7440-23-5	SODIUM	0.0475	1	B
7440-62-2	VANADIUM	0.000532	0.01	U

Data Package ID: *it1312158-1*

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Metals by 200.7

Method EPA200.7

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCB1

QC Type: Continuing Calibration

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 12:41:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7440-41-7	BERYLLIUM	0.000467	0.002	B
7440-42-8	BORON	-0.00446	0.1	B
7440-70-2	CALCIUM	-0.0244	1	B
7440-47-3	CHROMIUM	0.00051	0.01	U
7439-89-6	IRON	0.00968	0.1	B
7439-93-2	LITHIUM	0.00295	0.01	B
7439-95-4	MAGNESIUM	0.0568	1	B
7440-02-0	NICKEL	0.000932	0.02	U
7440-09-7	POTASSIUM	0.109	1	U
7440-21-3	SILICON	-0.00926	0.05	B
7440-23-5	SODIUM	0.0597	1	B
7440-62-2	VANADIUM	0.000532	0.01	U

Data Package ID: it1312158-1

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Metals by 200.7

Method EPA200.7

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCB2

QC Type: Continuing Calibration

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 1:00:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7440-41-7	BERYLLIUM	0.000383	0.002	B
7440-42-8	BORON	-0.00355	0.1	B
7440-70-2	CALCIUM	-0.031	1	B
7440-47-3	CHROMIUM	0.00051	0.01	U
7439-89-6	IRON	0.0064	0.1	B
7439-93-2	LITHIUM	0.003	0.01	B
7439-95-4	MAGNESIUM	0.0487	1	B
7440-02-0	NICKEL	0.000932	0.02	U
7440-09-7	POTASSIUM	0.109	1	U
7440-21-3	SILICON	-0.0152	0.05	B
7440-23-5	SODIUM	0.0873	1	B
7440-62-2	VANADIUM	0.000532	0.01	U

Data Package ID: it1312158-1

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Metals by 200.7

Method EPA200.7

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCB3

QC Type: Continuing Calibration

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 1:43:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7440-41-7	BERYLLIUM	0.00026	0.002	B
7440-42-8	BORON	-0.00575	0.1	B
7440-70-2	CALCIUM	-0.0276	1	B
7440-47-3	CHROMIUM	0.00051	0.01	U
7439-89-6	IRON	0.00694	0.1	B
7439-93-2	LITHIUM	0.00305	0.01	B
7439-95-4	MAGNESIUM	0.0519	1	B
7440-02-0	NICKEL	-0.00108	0.02	B
7440-09-7	POTASSIUM	0.109	1	U
7440-21-3	SILICON	-0.0129	0.05	B
7440-23-5	SODIUM	0.0812	1	B
7440-62-2	VANADIUM	0.000532	0.01	U

Data Package ID: it1312158-1

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Metals by 200.7

Method EPA200.7

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCB4

QC Type: Continuing Calibration

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 2:16:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7440-41-7	BERYLLIUM	0.000633	0.002	B
7440-42-8	BORON	-0.00484	0.1	B
7440-70-2	CALCIUM	-0.0272	1	B
7440-47-3	CHROMIUM	0.00051	0.01	U
7439-89-6	IRON	0.00778	0.1	B
7439-93-2	LITHIUM	0.00302	0.01	B
7439-95-4	MAGNESIUM	0.0556	1	B
7440-02-0	NICKEL	0.000932	0.02	U
7440-09-7	POTASSIUM	0.109	1	U
7440-21-3	SILICON	-0.0232	0.05	B
7440-23-5	SODIUM	0.0796	1	B
7440-62-2	VANADIUM	-0.000552	0.01	B

Data Package ID: it1312158-1

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Metals by 200.7

Method EPA200.7

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCB5

QC Type: Continuing Calibration

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 2:37:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7440-41-7	BERYLLIUM	0.00076	0.002	B
7440-42-8	BORON	-0.00452	0.1	B
7440-70-2	CALCIUM	-0.025	1	B
7440-47-3	CHROMIUM	0.00051	0.01	U
7439-89-6	IRON	0.00778	0.1	B
7439-93-2	LITHIUM	0.00321	0.01	B
7439-95-4	MAGNESIUM	0.0542	1	B
7440-02-0	NICKEL	0.000932	0.02	U
7440-09-7	POTASSIUM	0.109	1	U
7440-21-3	SILICON	-0.0195	0.05	B
7440-23-5	SODIUM	0.15	1	B
7440-62-2	VANADIUM	0.000532	0.01	U

Data Package ID: it1312158-1

Date Printed: Thursday, December 26, 2013

ALS Environmental -- FC

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LIMS Version: 6.682

Metals by 200.7

Method EPA200.7

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCB6

QC Type: Continuing Calibration

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Time Analyzed: 3:39:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7440-41-7	BERYLLIUM	0.000426	0.002	B
7440-42-8	BORON	-0.00382	0.1	B
7440-70-2	CALCIUM	-0.0156	1	B
7440-47-3	CHROMIUM	0.00051	0.01	U
7439-89-6	IRON	0.0107	0.1	B
7439-93-2	LITHIUM	0.00291	0.01	B
7439-95-4	MAGNESIUM	0.0614	1	B
7440-02-0	NICKEL	0.000932	0.02	U
7440-09-7	POTASSIUM	0.109	1	U
7440-21-3	SILICON	-0.0236	0.05	B
7440-23-5	SODIUM	0.129	1	B
7440-62-2	VANADIUM	0.000532	0.01	U

Data Package ID: it1312158-1

Date Printed: Thursday, December 26, 2013

ALS Environmental -- FC

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LIMS Version: 6.682

Metals by 200.7

Method EPA200.7

ICP Interference Check Sample

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Result Units: MG/L

CASNO	Target Analyte	Spike Added		Results		% Rec.
		ICSA1	ICSAB1	ICSA1	ICSAB1	
7440-41-7	BERYLLIUM		0.5		0.48100	96
7440-42-8	BORON		1		0.94300	94
7440-70-2	CALCIUM	250	250	263	264	105
7440-47-3	CHROMIUM		0.5		0.48100	96
7439-89-6	IRON	100	100	112	113	113
7439-93-2	LITHIUM		1		1.15	115
7439-95-4	MAGNESIUM	250	250	264	265	106
7440-02-0	NICKEL		1		0.93800	94
7440-09-7	POTASSIUM					
7440-21-3	SILICON		1		0.95	95
7440-23-5	SODIUM					
7440-62-2	VANADIUM		0.5		0.48600	97

Data Package ID: *it1312158-1*

Date Printed: Thursday, December 26, 2013

ALS Environmental -- FC

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LIMS Version: 6.682

Metals by 200.7

Method EPA200.7

ICP Interference Check Sample

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Run ID: IT131218-2A2

Date Analyzed: 12/18/2013

Result Units: MG/L

CASNO	Target Analyte	Spike Added		Results		% Rec.
		ICSA2	ICSAB2	ICSA2	ICSAB2	
7440-41-7	BERYLLIUM		0.5		0.47	94
7440-42-8	BORON		1		0.96700	97
7440-70-2	CALCIUM	250	250	271	270	108
7440-47-3	CHROMIUM		0.5		0.484	97
7439-89-6	IRON	100	100	111	112	112
7439-93-2	LITHIUM		1		1.08000	108
7439-95-4	MAGNESIUM	250	250	263	264	105
7440-02-0	NICKEL		1		1.01	101
7440-09-7	POTASSIUM					
7440-21-3	SILICON		1		0.908	91
7440-23-5	SODIUM					
7440-62-2	VANADIUM		0.5		0.489	98

Data Package ID: *it1312158-1*

Date Printed: Thursday, December 26, 2013

ALS Environmental -- FC

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LIMS Version: 6.682

Metals Linear Ranges

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Instrument ID: ICPTTrace2

Active Date: 03/02/2010

Expiration Date: 05/31/2015

CASNO	Target Analyte	Concentration (ppm)
7429-90-5	ALUMINUM	500
7440-36-0	ANTIMONY	2
7440-38-2	ARSENIC	5
7440-39-3	BARIUM	10
7440-41-7	BERYLLIUM	1
7440-42-8	BORON	10
7440-43-9	CADMIUM	5
7440-70-2	CALCIUM	500
7440-47-3	CHROMIUM	10
7440-48-4	COBALT	5
7440-50-8	COPPER	10
7439-89-6	IRON	200
7439-92-1	LEAD	10
7439-93-2	LITHIUM	5
7439-95-4	MAGNESIUM	500
7439-96-5	MANGANESE	10
7439-98-7	MOLYBDENUM	10
7440-02-0	NICKEL	10
7440-09-7	POTASSIUM	250
7782-49-2	SELENIUM	5
7440-21-3	SILICON	50
7440-22-4	SILVER	2
7440-23-5	SODIUM	150
7440-24-6	STRONTIUM	10
7440-28-0	THALLIUM	5
7440-29-1	THORIUM	1
7440-61-1	URANIUM	50
7440-62-2	VANADIUM	5
7440-66-6	ZINC	10

ICP Interelement Correction Factors

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Instrument ID: ICPTTrace2

Active Date: 11/6/2013

Expiration Date: 11/6/2014

Page 1

Analyte	Lamda (nm)	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	Th
ALUMINIUM																	
ANTIMONY									0.0033								
BERYLLIUM																	
CADMIUM				0.0068507													
CHROMIUM																	
COBALT					-0.001400												
COPPER																	
LEAD		0.000134										0.000086					
SELENIUM												-0.000148					
SILICON																	
SILVER																	
THALLIUM												-0.000973			-0.00137		
URANIUM												0.001035					
VANADIUM									-0.0014			-0.000244					

ICP Interelement Correction Factors

Lab Name: ALS Environmental -- FC
Work Order Number: 1312158
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: TBAL

Instrument ID: ICPTTrace2
Active Date: 11/6/2013
Expiration Date: 11/6/2014

Analyte	Lamda (nm)	K	Se	Ag	Na	Ti	V	Zn	Sn	Ti	Mo	Li	Sr	B	Si	U	Zr
ALUMINIUM							0.0125517				0.0033239					0.00796	
ANTIMONY											-0.005606						
BERYLLIUM							0.00275									0.0001	
CADMIUM																	
CHROMIUM																0.0006733	
COBALT										0.002105							
COPPER																0.000281	
LEAD										-0.000532	-0.001621					0.0007168	
SELENIUM																-0.000588	
SILICON										0.0009037	-0.004063					0.000318	
SILVER																0.0006982	0.0038966
THALLIUM							0.0026359			0.00002						-0.000582	
URANIUM																	
VANADIUM																	

ICPTrace2 Run Log -- 12/18/2013

Instrument ID: ICPTrace2

File Name: 131218A.

AnalRunID: IT131218-2A1

CalibRefID: IT131218-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		RINSE	1	12/18/2013	11:50
		MIXAHIGH	1	12/18/2013	12:17
		MIXBHIGH	1	12/18/2013	12:19
		MIXCHIGH	1	12/18/2013	12:21
		ICV	1	12/18/2013	12:30
		ICB	1	12/18/2013	12:33
		CR11	1	12/18/2013	12:35
		ICSA1	1	12/18/2013	12:36
		ICSAB1	1	12/18/2013	12:38
		CCV1	1	12/18/2013	12:40
		CCB1	1	12/18/2013	12:41
		IP131217-6MB	1	12/18/2013	12:43
		IP131217-6LCS	1	12/18/2013	12:44
		1312153-1	1	12/18/2013	12:46
		1312153-1DUP	1	12/18/2013	12:48
		ZZZZZZ	1	12/18/2013	12:49
		1312153-1MS	1	12/18/2013	12:51
		1312153-1MSD	1	12/18/2013	12:52
		1312153-2	1	12/18/2013	12:54
		1312157-1	1	12/18/2013	12:55
- Na		1312190-1	1	12/18/2013	12:57
		CCV2	1	12/18/2013	12:59
		CCB2	1	12/18/2013	13:00
		FP131217-5MB	1	12/18/2013	13:02
		FP131217-5LCS	1	12/18/2013	13:04
- S		1312134-1	1	12/18/2013	13:05
- S		1312134-1DUP	1	12/18/2013	13:07
- S		1312134-1SER	5	12/18/2013	13:10
- Na,S,Si,Zr		1312134-1MS	1	12/18/2013	13:13
- Fe,Na,Pb,S,Se,Si,Ti,U,V,Zr		1312134-1MSD	1	12/18/2013	13:14
- Na	285485 Molokai 13-36	1312158-1	1	12/18/2013	13:16
		1312153-1SER	5	12/18/2013	13:20
Ag,Al,As,B,Ba,Be,Bi,Ca,Cd,Co,Cr,Cu,Fe,K,Li,Mg,Mn,Mo,Ni,P,Pb,S,Sb,Se,Si,Sn,Sr,Ti,Tl,U,V,Zn,Zr		1312190-1	10	12/18/2013	13:40
		CCV3	1	12/18/2013	13:42
		CCB3	1	12/18/2013	13:43

Data Package ID: IT1312158-1

ICPTrace2 Run Log -- 12/18/2013

Instrument ID: ICPTrace2

File Name: 131218A.

AnalRunID: IT131218-2A1

CalibRefID: IT131218-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
Ag,Al,As,B,Ba,Be,Bi,Ca,Cd,Co,Cr,Cu,Fe,K,Li,Mg,Mn,Mo,Ni,P,Pb,Sb,Se,Sn,Sr,Ti,Tl,U,V,Zn		1312134-1MS	5	12/18/2013	13:45
Ag,Al,As,B,Ba,Be,Bi,Ca,Cd,Co,Cr,Cu,K,Li,Mg,Mn,Mo,Ni,P,Sb,Sn,Sr,Ti,Zn		1312134-1MSD	5	12/18/2013	13:48
Ag,Al,As,B,Ba,Be,Bi,Ca,Cd,Co,Cr,Cu,Fe,K,Li,Mg,Mn,Mo,Ni,P,Pb,S,Sb,Se,Sn,Sr,Ti,Tl,U,V,Zn,Zr	285485 Molokai 13-36	1312158-1	5	12/18/2013	13:50
- S		1312134-1A	1	12/18/2013	13:51
		IP131218-2MB	1	12/18/2013	14:03
		IP131218-2LCS	1	12/18/2013	14:04
		ZZZZZZ	1	12/18/2013	14:06
		1312216-1	1	12/18/2013	14:09
		1312216-1DUP	1	12/18/2013	14:10
		1312216-1SER	5	12/18/2013	14:12
		CCV4	1	12/18/2013	14:15
		CCB4	1	12/18/2013	14:16
		1312216-1MS	1	12/18/2013	14:19
		1312216-1MSD	1	12/18/2013	14:21
		1312216-4	1	12/18/2013	14:22
		IP131218-2	1	12/18/2013	14:24
		EX131217-3MB	1	12/18/2013	14:26
		IP131218-1LCS	1	12/18/2013	14:27
- Na		1312210-1	1	12/18/2013	14:29
- Na		1312210-1DUP	1	12/18/2013	14:30
- Na		1312210-1SER	5	12/18/2013	14:32
- Na		1312210-1MS	1	12/18/2013	14:33
		CCV5	1	12/18/2013	14:35
		CCB5	1	12/18/2013	14:37
- Na		1312210-1MSD	1	12/18/2013	14:38
		1312149-2	1	12/18/2013	14:40
- Li,Na		1312232-1	100	12/18/2013	15:26
- Li,Na		1312232-2	100	12/18/2013	15:28
Ag,Al,As,B,Ba,Be,Bi,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Ni,P,Pb,S,Sb,Se,Sn,Sr,Ti,Tl,U,V,Zn,Zr		1312232-1	1000	12/18/2013	15:29
Ag,Al,As,B,Ba,Be,Bi,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Ni,P,Pb,S,Sb,Se,Sn,Sr,Ti,Tl,U,V,Zn,Zr		1312232-2	1000	12/18/2013	15:31
		CRI2	1	12/18/2013	15:33
		ICSA2	1	12/18/2013	15:34
		ICSAB2	1	12/18/2013	15:36
		CCV6	1	12/18/2013	15:38
		CCB6	1	12/18/2013	15:39

Data Package ID: IT1312158-1

Metals by 200.8

Method EPA200.8 Revision 5.4

Method Blank

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: FP131217-5MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 17-Dec-13

Date Analyzed: 18-Dec-13

Prep Batch: IP131217-5

QCBatchID: IP131217-5-2

Run ID: IM131218-10A4

Cleanup: NONE

Basis: N/A

File Name: 013SMPL.

Sample Aliquot: 50 ml

Final Volume: 50 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	DF	Result	RptLimit/ LOQ	MDL	Result Qualifier	EPA Qualifier
7429-90-5	ALUMINUM	10	0.015	0.05	0.015	U	
7440-36-0	ANTIMONY	10	0.0001	0.0003	0.0001	U	
7440-38-2	ARSENIC	10	0.0006	0.002	0.0006	U	
7440-39-3	BARIUM	10	0.0003	0.001	0.0003	U	
7440-43-9	CADMIUM	10	0.00012	0.0003	0.00012	U	
7440-48-4	COBALT	10	0.0003	0.001	0.0003	U	
7440-50-8	COPPER	10	0.003	0.01	0.003	U	
7439-92-1	LEAD	10	0.00015	0.0005	0.00015	U	
7439-96-5	MANGANESE	10	0.001	0.002	0.0006	B	
7439-98-7	MOLYBDENUM	10	0.0005	0.001	0.0005	U	
7782-49-2	SELENIUM	10	0.0005	0.001	0.0005	U	
7440-22-4	SILVER	10	0.00003	0.0001	0.00003	U	
7440-23-5	SODIUM	10	0.3	1	0.3	U	
7440-24-6	STRONTIUM	10	0.0003	0.001	0.0003	U	
7440-28-0	THALLIUM	10	0.00006	0.0002	0.00006	U	
7440-29-1	THORIUM	10	0.00006	0.0002	0.00006	U	
7440-61-1	URANIUM	10	0.00003	0.0001	0.00003	U	
7440-66-6	ZINC	10	0.006	0.02	0.006	U	

Data Package ID: im1312158-1

Date Printed: Thursday, December 26, 2013

ALS Environmental -- FC

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LIMS Version: 6.682

Metals by 200.8

Method EPA200.8 Revision 5.4

Laboratory Control Sample

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: FM131217-5LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 12/17/2013

Date Analyzed: 12/18/2013

Prep Method: EPA200.22.2

Prep Batch: IP131217-5

QCBatchID: IP131217-5-2

Run ID: IM131218-10A4

Cleanup: NONE

Basis: N/A

File Name: 014SMPL.

Sample Aliquot: 50 ml

Final Volume: 50 ml

Result Units: MG/L

Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
7429-90-5	ALUMINUM	5	4.57	0.05		91	85 - 115%
7440-36-0	ANTIMONY	0.03	0.0307	0.0003		102	85 - 115%
7440-38-2	ARSENIC	0.1	0.096	0.002		96	85 - 115%
7440-39-3	BARIUM	0.1	0.0959	0.001		96	85 - 115%
7440-43-9	CADMIUM	0.03	0.031	0.0003		103	85 - 115%
7440-48-4	COBALT	0.1	0.0981	0.001		98	85 - 115%
7440-50-8	COPPER	1	1.02	0.01		102	85 - 115%
7439-92-1	LEAD	0.05	0.0526	0.0005		105	85 - 115%
7439-96-5	MANGANESE	0.2	0.195	0.002		98	85 - 115%
7439-98-7	MOLYBDENUM	0.1	0.0971	0.001		97	85 - 115%
7782-49-2	SELENIUM	0.1	0.102	0.001		102	85 - 115%
7440-22-4	SILVER	0.01	0.00993	0.0001		99	85 - 115%
7440-23-5	SODIUM	10	10.1	1		101	85 - 115%
7440-24-6	STRONTIUM	0.1	0.1	0.001		100	85 - 115%
7440-28-0	THALLIUM	0.002	0.00218	0.0002		109	85 - 115%
7440-29-1	THORIUM	0.01	0.0105	0.0002		105	85 - 115%
7440-61-1	URANIUM	0.01	0.0102	0.0001		102	85 - 115%
7440-66-6	ZINC	2	1.98	0.02		99	85 - 115%

Data Package ID: im1312158-1

Date Printed: Thursday, December 26, 2013

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LIMS Version: 6.682

Prep Batch ID: IP131217-5

Start Date: 12/17/13

End Date: 12/17/13

Concentration Method: NONE

Batch Created By: NAQ

Start Time: 12:48

End Time: 18:00

Extract Method: EPA200.22.2

Date Created: 12/17/13

Prep Analyst: Nathan A. Quatier

Initial Volume Units: ml

Time Created: 12:56

Comments:

Final Volume Units: ml

Validated By: NAQ

Date Validated: 12/17/13

Time Validated: 15:21

QC Batch ID: IP131217-5-2

Lab ID	QC Type	Field ID	Matrix	Date Collected	Initial Wt/Vol	Final Wt/Vol	Cleanup Method	Cleanup DF	Order Number
FP131217-5	MB	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1312134
FM131217-5	LCS	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1312134
1312134-1	MS	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1312134
1312134-1	MSD	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1312134
1312134-1	DUP	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1312134
1312134-1	SMP	XXXXXX	WATER	XXXXXX	50	50	NONE	1	1312134
1312158-1	SMP	285485 Molokai 13-36	WATER	12/12/2013	50	50	NONE	1	1312158

QC Types

CAR	Carrier reference sample	DUP	Laboratory Duplicate
LCS	Laboratory Control Sample	LCSD	Laboratory Control Sample Duplicat
MB	Method Blank	MS	Laboratory Matrix Spike
MSD	Laboratory Matrix Spike Duplicate	REP	Sample replicate
RVS	Reporting Level Verification Standar	SMP	Field Sample
SYS	Sample Yield Spike		

Metals by 200.8

Method EPA200.8 Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: ICV

QC Type: Initial Calibration

File Name: 008SMPL.

Run ID: IM131218-10A4

Date Analyzed: 12/18/2013

Time Analyzed: 11:18

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	1	0.971	0.005		97	90 - 110%
7440-36-0	ANTIMONY	0.006	0.00587	0.00003		98	90 - 110%
7440-38-2	ARSENIC	0.02	0.0194	0.0002		97	90 - 110%
7440-39-3	BARIUM	0.02	0.0196	0.0001		98	90 - 110%
7440-43-9	CADMIUM	0.006	0.00599	0.00003		100	90 - 110%
7440-48-4	COBALT	0.02	0.0200	0.0001		100	90 - 110%
7440-50-8	COPPER	0.2	0.206	0.001		103	90 - 110%
7439-92-1	LEAD	0.01	0.0100	0.00005		100	90 - 110%
7439-96-5	MANGANESE	0.04	0.0400	0.0002		100	90 - 110%
7439-98-7	MOLYBDENUM	0.02	0.0194	0.0001		97	90 - 110%
7782-49-2	SELENIUM	0.02	0.0200	0.0001		100	90 - 110%
7440-22-4	SILVER	0.002	0.00205	0.00001		102	90 - 110%
7440-23-5	SODIUM	20	19.9	0.1		99	90 - 110%
7440-24-6	STRONTIUM	0.02	0.0193	0.0001		96	90 - 110%
7440-28-0	THALLIUM	0.0004	0.000399	0.00002		100	90 - 110%
7440-29-1	THORIUM	0.002	0.00197	0.00002		99	90 - 110%
7440-61-1	URANIUM	0.002	0.00195	0.00001		98	90 - 110%
7440-66-6	ZINC	0.4	0.406	0.002		101	90 - 110%

Data Package ID: *im1312158-1*

Date Printed: Thursday, December 26, 2013

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LIMS Version: 6.682

Metals by 200.8

Method EPA200.8 Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCV1

QC Type: Continuing Calibration

File Name: 020SMPL.

Run ID: IM131218-10A4

Date Analyzed: 12/18/2013

Time Analyzed: 12:22

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	0.5	0.469	0.005		94	90 - 110%
7440-36-0	ANTIMONY	0.003	0.00296	0.00003		99	90 - 110%
7440-38-2	ARSENIC	0.01	0.00965	0.0002		96	90 - 110%
7440-39-3	BARIUM	0.01	0.00973	0.0001		97	90 - 110%
7440-43-9	CADMIUM	0.003	0.00297	0.00003		99	90 - 110%
7440-48-4	COBALT	0.01	0.00982	0.0001		98	90 - 110%
7440-50-8	COPPER	0.1	0.102	0.001		102	90 - 110%
7439-92-1	LEAD	0.005	0.00506	0.00005		101	90 - 110%
7439-96-5	MANGANESE	0.02	0.0191	0.0002		96	90 - 110%
7439-98-7	MOLYBDENUM	0.01	0.00956	0.0001		96	90 - 110%
7782-49-2	SELENIUM	0.01	0.00937	0.0001		94	90 - 110%
7440-22-4	SILVER	0.001	0.00103	0.00001		103	90 - 110%
7440-23-5	SODIUM	10	9.90	0.1		99	90 - 110%
7440-24-6	STRONTIUM	0.01	0.00952	0.0001		95	90 - 110%
7440-28-0	THALLIUM	0.0002	0.000203	0.00002		101	90 - 110%
7440-29-1	THORIUM	0.001	0.000990	0.00002		99	90 - 110%
7440-61-1	URANIUM	0.001	0.000987	0.00001		99	90 - 110%
7440-66-6	ZINC	0.2	0.198	0.002		99	90 - 110%

Data Package ID: *im1312158-1*

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Metals by 200.8

Method EPA200.8 Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCV2

QC Type: Continuing Calibration

File Name: 032SMPL.

Run ID: IM131218-10A4

Date Analyzed: 12/18/2013

Time Analyzed: 13:12

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	0.5	0.456	0.005		91	90 - 110%
7440-36-0	ANTIMONY	0.003	0.00286	0.00003		95	90 - 110%
7440-38-2	ARSENIC	0.01	0.00926	0.0002		93	90 - 110%
7440-39-3	BARIUM	0.01	0.00956	0.0001		96	90 - 110%
7440-43-9	CADMIUM	0.003	0.00290	0.00003		97	90 - 110%
7440-48-4	COBALT	0.01	0.00958	0.0001		96	90 - 110%
7440-50-8	COPPER	0.1	0.100	0.001		100	90 - 110%
7439-92-1	LEAD	0.005	0.00498	0.00005		100	90 - 110%
7439-96-5	MANGANESE	0.02	0.0188	0.0002		94	90 - 110%
7439-98-7	MOLYBDENUM	0.01	0.00949	0.0001		95	90 - 110%
7782-49-2	SELENIUM	0.01	0.00953	0.0001		95	90 - 110%
7440-22-4	SILVER	0.001	0.000978	0.00001		98	90 - 110%
7440-23-5	SODIUM	10	9.73	0.1		97	90 - 110%
7440-24-6	STRONTIUM	0.01	0.00917	0.0001		92	90 - 110%
7440-28-0	THALLIUM	0.0002	0.000197	0.00002		98	90 - 110%
7440-29-1	THORIUM	0.001	0.000995	0.00002		99	90 - 110%
7440-61-1	URANIUM	0.001	0.000939	0.00001		94	90 - 110%
7440-66-6	ZINC	0.2	0.198	0.002		99	90 - 110%

Data Package ID: *im1312158-1*

Date Printed: Thursday, December 26, 2013

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Metals by 200.8

Method EPA200.8 Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCV3

QC Type: Continuing Calibration

File Name: 043SMPL.

Run ID: IM131218-10A4

Date Analyzed: 12/18/2013

Time Analyzed: 13:55

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	0.5	0.456	0.005		91	90 - 110%
7440-36-0	ANTIMONY	0.003	0.00290	0.00003		97	90 - 110%
7440-38-2	ARSENIC	0.01	0.00921	0.0002		92	90 - 110%
7440-39-3	BARIUM	0.01	0.00986	0.0001		99	90 - 110%
7440-43-9	CADMIUM	0.003	0.00293	0.00003		98	90 - 110%
7440-48-4	COBALT	0.01	0.00948	0.0001		95	90 - 110%
7440-50-8	COPPER	0.1	0.100	0.001		100	90 - 110%
7439-92-1	LEAD	0.005	0.00500	0.00005		100	90 - 110%
7439-96-5	MANGANESE	0.02	0.0191	0.0002		96	90 - 110%
7439-98-7	MOLYBDENUM	0.01	0.00942	0.0001		94	90 - 110%
7782-49-2	SELENIUM	0.01	0.00982	0.0001		98	90 - 110%
7440-22-4	SILVER	0.001	0.00101	0.00001		101	90 - 110%
7440-23-5	SODIUM	10	9.71	0.1		97	90 - 110%
7440-24-6	STRONTIUM	0.01	0.00930	0.0001		93	90 - 110%
7440-28-0	THALLIUM	0.0002	0.000190	0.00002		95	90 - 110%
7440-29-1	THORIUM	0.001	0.000998	0.00002		100	90 - 110%
7440-61-1	URANIUM	0.001	0.000969	0.00001		97	90 - 110%
7440-66-6	ZINC	0.2	0.197	0.002		98	90 - 110%

Data Package ID: *im1312158-1*

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Metals by 200.8

Method EPA200.8 Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCV4

QC Type: Continuing Calibration

File Name: 002SMPL_

Run ID: IM131218-10A4

Date Analyzed: 12/18/2013

Time Analyzed: 14:44

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	0.5	0.455	0.005		91	90 - 110%
7440-36-0	ANTIMONY	0.003	0.00280	0.00003		93	90 - 110%
7440-38-2	ARSENIC	0.01	0.00964	0.0002		96	90 - 110%
7440-39-3	BARIUM	0.01	0.00931	0.0001		93	90 - 110%
7440-43-9	CADMIUM	0.003	0.00291	0.00003		97	90 - 110%
7440-48-4	COBALT	0.01	0.00979	0.0001		98	90 - 110%
7440-50-8	COPPER	0.1	0.101	0.001		101	90 - 110%
7439-92-1	LEAD	0.005	0.00498	0.00005		100	90 - 110%
7439-96-5	MANGANESE	0.02	0.0195	0.0002		98	90 - 110%
7439-98-7	MOLYBDENUM	0.01	0.00940	0.0001		94	90 - 110%
7782-49-2	SELENIUM	0.01	0.0100	0.0001		100	90 - 110%
7440-22-4	SILVER	0.001	0.000993	0.00001		99	90 - 110%
7440-23-5	SODIUM	10	10.0	0.1		100	90 - 110%
7440-24-6	STRONTIUM	0.01	0.00934	0.0001		93	90 - 110%
7440-28-0	THALLIUM	0.0002	0.000191	0.00002		95	90 - 110%
7440-29-1	THORIUM	0.001	0.000937	0.00002		94	90 - 110%
7440-61-1	URANIUM	0.001	0.000976	0.00001		98	90 - 110%
7440-66-6	ZINC	0.2	0.200	0.002		100	90 - 110%

Data Package ID: *im1312158-1*

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Metals by 200.8

Method EPA200.8 Calibration Verifications

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCV5

QC Type: Continuing Calibration

File Name: 013SMPL_

Run ID: IM131218-10A4

Date Analyzed: 12/18/2013

Time Analyzed: 15:14

Result Units: MG/L

CASNO	Target Analyte	Spike Added	Result	Reporting Limit	Result Qualifier	% Rec.	Control Limits
7429-90-5	ALUMINUM	0.5	0.457	0.005		91	90 - 110%
7440-36-0	ANTIMONY	0.003	0.00293	0.00003		98	90 - 110%
7440-38-2	ARSENIC	0.01	0.00957	0.0002		96	90 - 110%
7440-39-3	BARIUM	0.01	0.00927	0.0001		93	90 - 110%
7440-43-9	CADMIUM	0.003	0.00302	0.00003		101	90 - 110%
7440-48-4	COBALT	0.01	0.00978	0.0001		98	90 - 110%
7440-50-8	COPPER	0.1	0.101	0.001		101	90 - 110%
7439-92-1	LEAD	0.005	0.00501	0.00005		100	90 - 110%
7439-96-5	MANGANESE	0.02	0.0198	0.0002		99	90 - 110%
7439-98-7	MOLYBDENUM	0.01	0.00951	0.0001		95	90 - 110%
7782-49-2	SELENIUM	0.01	0.0100	0.0001		100	90 - 110%
7440-22-4	SILVER	0.001	0.000929	0.00001		93	90 - 110%
7440-23-5	SODIUM	10	10.1	0.1		101	90 - 110%
7440-24-6	STRONTIUM	0.01	0.00928	0.0001		93	90 - 110%
7440-28-0	THALLIUM	0.0002	0.000189	0.00002		94	90 - 110%
7440-29-1	THORIUM	0.001	0.000928	0.00002		93	90 - 110%
7440-61-1	URANIUM	0.001	0.000967	0.00001		97	90 - 110%
7440-66-6	ZINC	0.2	0.202	0.002		101	90 - 110%

Data Package ID: *im1312158-1*

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Metals by 200.8

Method EPA200.8

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: ICB

QC Type: Initial Calibration

Run ID: IM131218-10A4

Date Analyzed: 12/18/2013

Time Analyzed: 11:26:00 AM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.000694	0.005	U
7440-36-0	ANTIMONY	0.0000117	0.00003	U
7440-38-2	ARSENIC	0.0000148	0.0002	U
7440-39-3	BARIUM	0.0000221	0.0001	U
7440-43-9	CADMIUM	0.0000115	0.00003	U
7440-48-4	COBALT	9.95E-06	0.0001	U
7440-50-8	COPPER	0.000125	0.001	U
7439-92-1	LEAD	6.82E-06	0.00005	U
7439-96-5	MANGANESE	0.000196	0.0002	B
7439-98-7	MOLYBDENUM	0.0000321	0.0001	U
7782-49-2	SELENIUM	0.0000325	0.0001	U
7440-22-4	SILVER	1.69E-06	0.00001	U
7440-23-5	SODIUM	0.00953	0.1	U
7440-24-6	STRONTIUM	-0.000013	0.0001	B
7440-28-0	THALLIUM	0.000004	0.00002	B
7440-29-1	THORIUM	0.000009	0.00002	B
7440-61-1	URANIUM	2.92E-06	0.00001	U
7440-66-6	ZINC	0.000191	0.002	U

Data Package ID: im1312158-1

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Metals by 200.8

Method EPA200.8

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCB1

QC Type: Continuing Calibration

Run ID: IM131218-10A4

Date Analyzed: 12/18/2013

Time Analyzed: 12:26:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.000694	0.005	U
7440-36-0	ANTIMONY	0.0000117	0.00003	U
7440-38-2	ARSENIC	0.0000148	0.0002	U
7440-39-3	BARIUM	0.0000221	0.0001	U
7440-43-9	CADMIUM	0.0000115	0.00003	U
7440-48-4	COBALT	9.95E-06	0.0001	U
7440-50-8	COPPER	0.000125	0.001	U
7439-92-1	LEAD	6.82E-06	0.00005	U
7439-96-5	MANGANESE	0.000021	0.0002	B
7439-98-7	MOLYBDENUM	0.0000321	0.0001	U
7782-49-2	SELENIUM	0.0000325	0.0001	U
7440-22-4	SILVER	0.000002	0.00001	B
7440-23-5	SODIUM	0.00953	0.1	U
7440-24-6	STRONTIUM	-0.000011	0.0001	B
7440-28-0	THALLIUM	0.000005	0.00002	B
7440-29-1	THORIUM	0.000016	0.00002	B
7440-61-1	URANIUM	2.92E-06	0.00001	U
7440-66-6	ZINC	0.000191	0.002	U

Data Package ID: im1312158-1

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Metals by 200.8

Method EPA200.8

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCB2

QC Type: Continuing Calibration

Run ID: IM131218-10A4

Date Analyzed: 12/18/2013

Time Analyzed: 1:16:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.000694	0.005	U
7440-36-0	ANTIMONY	0.0000117	0.00003	U
7440-38-2	ARSENIC	0.0000148	0.0002	U
7440-39-3	BARIUM	0.000038	0.0001	B
7440-43-9	CADMIUM	0.0000115	0.00003	U
7440-48-4	COBALT	9.95E-06	0.0001	U
7440-50-8	COPPER	0.000125	0.001	U
7439-92-1	LEAD	6.82E-06	0.00005	U
7439-96-5	MANGANESE	-0.000035	0.0002	B
7439-98-7	MOLYBDENUM	0.0000321	0.0001	U
7782-49-2	SELENIUM	0.0000325	0.0001	U
7440-22-4	SILVER	0.000002	0.00001	B
7440-23-5	SODIUM	0.00953	0.1	U
7440-24-6	STRONTIUM	7.66E-06	0.0001	U
7440-28-0	THALLIUM	0.000007	0.00002	B
7440-29-1	THORIUM	0.000011	0.00002	B
7440-61-1	URANIUM	2.92E-06	0.00001	U
7440-66-6	ZINC	0.000191	0.002	U

Data Package ID: im1312158-1

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Metals by 200.8

Method EPA200.8

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCB3

QC Type: Continuing Calibration

Run ID: IM131218-10A4

Date Analyzed: 12/18/2013

Time Analyzed: 1:58:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.000694	0.005	U
7440-36-0	ANTIMONY	0.0000117	0.00003	U
7440-38-2	ARSENIC	0.0000148	0.0002	U
7440-39-3	BARIUM	0.000034	0.0001	B
7440-43-9	CADMIUM	0.0000115	0.00003	U
7440-48-4	COBALT	9.95E-06	0.0001	U
7440-50-8	COPPER	0.000125	0.001	U
7439-92-1	LEAD	6.82E-06	0.00005	U
7439-96-5	MANGANESE	-0.000076	0.0002	B
7439-98-7	MOLYBDENUM	0.0000321	0.0001	U
7782-49-2	SELENIUM	0.0000325	0.0001	U
7440-22-4	SILVER	0.000004	0.00001	B
7440-23-5	SODIUM	0.00953	0.1	U
7440-24-6	STRONTIUM	-0.00001	0.0001	B
7440-28-0	THALLIUM	0.000005	0.00002	B
7440-29-1	THORIUM	0.000011	0.00002	B
7440-61-1	URANIUM	2.92E-06	0.00001	U
7440-66-6	ZINC	0.000191	0.002	U

Data Package ID: im1312158-1

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Metals by 200.8

Method EPA200.8

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCB4

QC Type: Continuing Calibration

Run ID: IM131218-10A4

Date Analyzed: 12/18/2013

Time Analyzed: 2:47:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.000694	0.005	U
7440-36-0	ANTIMONY	0.0000117	0.00003	U
7440-38-2	ARSENIC	0.0000148	0.0002	U
7440-39-3	BARIUM	0.000061	0.0001	B
7440-43-9	CADMIUM	0.0000115	0.00003	U
7440-48-4	COBALT	9.95E-06	0.0001	U
7440-50-8	COPPER	0.000125	0.001	U
7439-92-1	LEAD	6.82E-06	0.00005	U
7439-96-5	MANGANESE	-0.000174	0.0002	B
7439-98-7	MOLYBDENUM	0.0000321	0.0001	U
7782-49-2	SELENIUM	0.0000325	0.0001	U
7440-22-4	SILVER	1.69E-06	0.00001	U
7440-23-5	SODIUM	0.0106	0.1	B
7440-24-6	STRONTIUM	7.66E-06	0.0001	U
7440-28-0	THALLIUM	0.000008	0.00002	B
7440-29-1	THORIUM	0.000016	0.00002	B
7440-61-1	URANIUM	2.92E-06	0.00001	U
7440-66-6	ZINC	0.000191	0.002	U

Data Package ID: im1312158-1

Date Printed: Thursday, December 26, 2013

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Metals by 200.8

Method EPA200.8

Calibration Blanks

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Lab ID: CCB5

QC Type: Continuing Calibration

Run ID: IM131218-10A4

Date Analyzed: 12/18/2013

Time Analyzed: 3:17:00 PM

Result Units: MG/L

CASNO	Target Analyte	Result	Reporting Limit	Result Qualifier
7429-90-5	ALUMINUM	0.000722	0.005	B
7440-36-0	ANTIMONY	0.0000117	0.00003	U
7440-38-2	ARSENIC	0.0000148	0.0002	U
7440-39-3	BARIUM	0.0000221	0.0001	U
7440-43-9	CADMIUM	0.0000115	0.00003	U
7440-48-4	COBALT	9.95E-06	0.0001	U
7440-50-8	COPPER	0.000125	0.001	U
7439-92-1	LEAD	6.82E-06	0.00005	U
7439-96-5	MANGANESE	-0.000133	0.0002	B
7439-98-7	MOLYBDENUM	0.0000321	0.0001	U
7782-49-2	SELENIUM	0.0000325	0.0001	U
7440-22-4	SILVER	0.000002	0.00001	B
7440-23-5	SODIUM	0.0116	0.1	B
7440-24-6	STRONTIUM	-0.000018	0.0001	B
7440-28-0	THALLIUM	0.000008	0.00002	B
7440-29-1	THORIUM	0.000019	0.00002	B
7440-61-1	URANIUM	2.92E-06	0.00001	U
7440-66-6	ZINC	0.000191	0.002	U

Data Package ID: im1312158-1

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Metals by 200.8

Method EPA200.8

ICP Interference Check Sample

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Run ID: IM131218-10A4

Date Analyzed: 12/18/2013

Result Units: MG/L

CASNO	Target Analyte	Spike Added		Results		% Rec.
		ICSA1	ICSAB1	ICSA1	ICSAB1	
7429-90-5	ALUMINUM	10	10.5	8.57	9.06000	86
7440-36-0	ANTIMONY		0.003		0.00304	101
7440-38-2	ARSENIC		0.01		0.00986	99
7440-39-3	BARIUM		0.01		0.00978	98
7440-43-9	CADMIUM		0.003		0.00292	97
7440-48-4	COBALT		0.01		0.00996	100
7440-50-8	COPPER		0.1		0.10100	101
7439-92-1	LEAD		0.005		0.00515	103
7439-96-5	MANGANESE		0.02		0.0211	105
7439-98-7	MOLYBDENUM	0.2	0.21	0.181	0.189	90
7782-49-2	SELENIUM		0.01		0.00969	97
7440-22-4	SILVER		0.001		0.00099	99
7440-23-5	SODIUM	25	35	24.6000	33.3	95
7440-24-6	STRONTIUM		0.01		0.00981	98
7440-28-0	THALLIUM		0.0002		0.00021	104
7440-29-1	THORIUM		0.001		0.00106	106
7440-61-1	URANIUM		0.001		0.00103	103
7440-66-6	ZINC		0.2		0.19900	100

Data Package ID: *im1312158-1*

Date Printed: Thursday, December 26, 2013

ALS Environmental -- FC

Page 1 of 1

LIMS Version: 6.682

Metals Linear Ranges

Lab Name: ALS Environmental -- FC

Work Order Number: 1312158

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: TBAL

Instrument ID: ICPMS2

Active Date: 04/01/2010

Expiration Date: 04/01/2015

CASNO	Target Analyte	Concentration (ppm)
7429-90-5	ALUMINUM	50
7440-36-0	ANTIMONY	0.3
7440-38-2	ARSENIC	1
7440-39-3	BARIUM	1
7440-41-7	BERYLLIUM	0.5
7440-42-8	BORON	10
7440-43-9	CADMIUM	0.3
7440-70-2	CALCIUM	500
7440-47-3	CHROMIUM	5
7440-48-4	COBALT	1
7440-50-8	COPPER	10
7439-89-6	IRON	50
7439-92-1	LEAD	0.5
7439-93-2	LITHIUM	10
7439-95-4	MAGNESIUM	100
7439-96-5	MANGANESE	2
7439-98-7	MOLYBDENUM	1
7440-02-0	NICKEL	5
7440-09-7	POTASSIUM	500
7782-49-2	SELENIUM	1
7440-22-4	SILVER	0.1
7440-23-5	SODIUM	1000
7440-24-6	STRONTIUM	1
7440-28-0	THALLIUM	0.02
7440-29-1	THORIUM	0.1
7440-61-1	URANIUM	0.1
7440-62-2	VANADIUM	1
7440-66-6	ZINC	20

ICPMS2 Run Log -- 12/18/2013

Instrument ID: ICPMS2
 File Name: 13L18K00
 AnalRunID: IM131218-10A1
 CalibRefID: IM131218-10A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		blank	1	12/18/2013	10:57
		H/1000	1	12/18/2013	11:00
		H/100	1	12/18/2013	11:03
		H/10	1	12/18/2013	11:07
		HIGH	1	12/18/2013	11:10
		ICV	1	12/18/2013	11:18
		ICB	1	12/18/2013	11:26
		CRI1	1	12/18/2013	11:29
		ICSA1	1	12/18/2013	11:33
		ICSAB1	1	12/18/2013	11:36
		FP131217-5MB	10	12/18/2013	11:44
		FM131217-5LCS	10	12/18/2013	11:47
		1312160-1	10	12/18/2013	11:51
		1312160-4	10	12/18/2013	11:54
		1312160-5	10	12/18/2013	11:57
		1312160-7	10	12/18/2013	12:01
		1312160-6	10	12/18/2013	12:04
		CCV1	1	12/18/2013	12:22
		CCB1	1	12/18/2013	12:26
		1312147-1	10	12/18/2013	12:30
		IP131217-4MB	10	12/18/2013	12:38
		IP131217-4LCS	10	12/18/2013	12:41
		1312080-1	10	12/18/2013	12:45
		1312080-1DUP	10	12/18/2013	12:48
		1312080-1SER	50	12/18/2013	12:51
		1312080-1MS	10	12/18/2013	12:55
		1312080-1MSD	10	12/18/2013	12:58
		1312080-1A	10	12/18/2013	13:01
		1312080-2	10	12/18/2013	13:04
		CCV2	1	12/18/2013	13:12
		CCB2	1	12/18/2013	13:16
		1312080-3	10	12/18/2013	13:21
		1312080-4	10	12/18/2013	13:24
		1312080-5	10	12/18/2013	13:27
		1312080-6	10	12/18/2013	13:31

Data Package ID: IM1312158-1

ICPMS2 Run Log -- 12/18/2013

Instrument ID: ICPMS2

File Name: 13L18K00

AnalRunID: IM131218-10A1

CalibRefID: IM131218-10A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		1311454-2	10	12/18/2013	13:34
		1311454-6	10	12/18/2013	13:37
		1311454-10	10	12/18/2013	13:41
		1311454-14	10	12/18/2013	13:44
		1311454-18	10	12/18/2013	13:47
		CCV3	1	12/18/2013	13:55
		CCB3	1	12/18/2013	13:58
		IP131217-6MB	10	12/18/2013	14:10
		IM131217-6LCS	10	12/18/2013	14:13
		1312153-1	10	12/18/2013	14:16
		1312153-1DUP	10	12/18/2013	14:19
		1312153-1SER	50	12/18/2013	14:22
		1312153-1MS	10	12/18/2013	14:26
		1312153-1MSD	10	12/18/2013	14:29
		1312153-2	10	12/18/2013	14:32
		1312157-1	10	12/18/2013	14:35
		1312190-1	10	12/18/2013	14:40
		CCV4	1	12/18/2013	14:44
		CCB4	1	12/18/2013	14:47
		1312134-1	10	12/18/2013	14:50
		1312134-1DUP	10	12/18/2013	14:52
		1312134-1SER	50	12/18/2013	14:55
		1312134-1MS	10	12/18/2013	14:57
		1312134-1MSD	10	12/18/2013	15:00
		1312134-1A	10	12/18/2013	15:02
	285485 Molokai 13-36	1312158-1	10	12/18/2013	15:07
		1312207-1	10	12/18/2013	15:09
		1312207-2	10	12/18/2013	15:12
		CCV5	1	12/18/2013	15:14
		CCB5	1	12/18/2013	15:17
		IP131218-1MB	10	12/18/2013	15:20
		IM131218-1LCS	10	12/18/2013	15:22
		1312210-1	100	12/18/2013	15:25
		1312210-1DUP	100	12/18/2013	15:27
		1312210-1SER	500	12/18/2013	15:30

Data Package ID: IM1312158-1

ICPMS2 Run Log -- 12/18/2013

Instrument ID: ICPMS2

File Name: 13L18K00

AnalRunID: IM131218-10A1

CalibRefID: IM131218-10A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		1312210-1MS	100	12/18/2013	15:32
		1312210-1MSD	100	12/18/2013	15:35
		1312210-2	100	12/18/2013	15:38
		CCV6	1	12/18/2013	15:40
		CCB6	1	12/18/2013	15:43

Data Package ID: IM1312158-1



Raw Data

HEADER INFORMATION FOR ANALYTICAL SEQUENCE 131218A

Instrument: Trace2

Analyst: Steve Workman

Analysis Date: 12/18/2013

STANDARD SOLUTION CODES

Stock A (ST130422-8) Exp. 4-22-2014		
<u>Element</u>		<u>ug/ml</u>
Al, Ca, Mg		1000
K		500
Na		300
Fe		400
Li		20
<u>Standard</u>	<u>Dilution</u>	<u>Procedure</u>
A1	1/2 of Stock A	5ml of Stock A to 10ml final volume.
A2	1/2.5 of Stock A1	2ml of Stock A1 to a 5ml final volume.
A3	1/5 of Stock A1	1ml of Stock A1 to a 5ml final volume.
A4	1/10 of A1	1ml of Standard A1 up to a 10ml final volume.
A5	1/10 of A4	1ml of Standard A4 up to a 10ml final volume.

Stock B (ST110316-5) Exp. 2-28-15		
<u>Element</u>		<u>ug/ml</u>
P, Si		100
B, Ba, Cr, Cu, Mn, Mo, Ni, Pb, Sn, Sr, Ti, Zn		20
As, Cd, Co, Se, Tl, V		10
Sb		4
Be		2

Stock Ag- 1000 ug/ml (ST100407-4) Exp. 2-28-15

Stock Th – 1000 ug/ml (ST100407-5) Exp. 2-28-15

The following dilutions of Stock Ag and Stock Th are made to provide the daily calibration Standards.

<u>Standard</u>	<u>Dilution</u>	<u>Procedure</u>
B1	1/2 of Stock B	5ml of Stock B, 0.02ml of Stock Ag and 0.02ml of Stock
	1/500 Ag and 1/500 Th	Th up to a 10ml final volume.
B2	1/10 of B1	1.0ml of Standard B1 up to a 10ml final volume.
B3	1/10 of B2	1.0ml of Standard B2 up to a 10ml final volume.

Stock C (ST120813-5) Exp. 6/30/15		
<u>Element</u>		<u>ug/ml</u>
S, U		100
Bi, Zr		10
<u>Standard</u>	<u>Dilution</u>	<u>Procedure</u>
C1	1/2 of Stock C	5ml of Stock C up to a 10ml final volume.
C2	1/10 of C1	1.0ml of Standard C1 up to a 10ml final volume.
C3	1/10 of C2	1.0ml of Standard C2 up to a 10ml final volume.

RL STD (Reporting Limit Standard) Intermediate.

(ST100301-54) Exp. 2-28-15

<u>Element</u>	<u>ug/ml</u>
K, Na	500
Ca, Mg	200
Al, U	100
B, Fe, P, S, Si	50
Li, Mo, Sn, Sr, Ti	10
Sb	8
Ni, As, Bi, Se, Tl, Zn, Zr	5
Pb	3
Ag, Ba, Co, Cr, Cu, Mn, V, Th	2
Be, Cd	1

RL STD (working standard) made daily by diluting the intermediate above 1000 fold. This working standard has concentration levels at the normal ALS-FC reporting limits for all elements except Ca, Mg and Na, K which are at 0.2ppm and 0.5ppm; this is below the normal ALS-FC reporting limit.

RL2 (working standard) made daily by diluting the intermediate above 333 fold.

Blank Solution

Double D.I. water, 3% HNO₃ and 5% HCl
Used for Std. Blank, ICB and CCB

CCV (ST120621-3) Exp. 12-18-13	
<u>Element</u>	<u>ug/ml</u>
Al, Ca, Mg, K, Na	50
Fe	20
U, P, S, Si	5
B, Ba, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sn, Zn, Zr	1
As, Be, Bi, Cd, Co, Li, Sb, Sr, Ti, Tl, V	0.5
Ag, Th	0.2

ICV (ST120621-3) Exp. 12-18-13

Prepared daily by diluting the CCV (described above) 1/2.
The 1/2 dilution is made by diluting 5ml of the CCV to a 10ml final volume.
The resulting concentrations are:

<u>Element</u>	<u>ug/ml</u>
Al, Ca, Mg, K, Na	25
Fe	10
U, P, S, Si	2.5
B, Ba, Cr, Cu, Mn, Mo, Ni, Pb, Se, Sn, Zn, Zr	0.5
As, Be, Bi, Cd, Co, Li, Sb, Sr, Ti, Tl, V	0.25
Ag, Th	0.1

CRI (ST120621-6) Exp. 12-18-13

Made By diluting
1.0ml of CRI Stock (ST120621-5) Exp. 12-18-13
to a 100ml final volume.

<u>Element</u>	<u>ug/ml</u>
Ca, Mg, K, Na	5.0
Al, B, Ba	0.4
Fe, U, P, S	0.2
Sb	0.12
Co, Si,, Sn, V, Th	0.1
Ni	0.08
Cu, Bi, Zr	0.05
Zn	0.04
Mn	0.03
Ag, Cr, Li, Mo, Sr, Ti, Tl	0.02
Be, Cd, As, Se,	0.01
Pb	0.006

ICSA (ST120621-1) Exp. 12-18-13

<u>Element</u>	<u>ug/ml</u>
Ca, Mg, Al	250
Fe	100

ICSAB (ST120621-2) Exp. 12-18-13

<u>Element</u>	<u>ug/ml</u>
Ca, Mg, Al	250
Fe	100
U	10

B, Si, Li, Mo, Sn, Sr, Ti, Cd, Zn, Ni, P, S	1.0
Sb	0.6
Ba, Be, Co, V, Cr, Cu, Mn, Bi, Zr	0.5
Ag	0.2
As, Tl	0.1
Se, Pb, Th	0.05

Pipette ID Numbers

1.0ml to 5.0ml --- M-55
0.1ml to 1.0ml --- M-61
0.01ml to 0.1ml --- M-57

Acid Lot Numbers

HCl – J35042
HNO₃ – J41037

Inter Element Correction Information

The following table summarizes spectral interferences that have been identified and for which IEC's are used. If a sample contains a concentration of an interfering element that exceeds the upper analytical range, and an affected element is being determined, it is necessary to dilute the sample to bring the interfering element into analytical range.

<u>Interfering Element (ug/ml)</u>	<u>Affected Element</u>
Al (500)	Pb
Mg (500)	Th
Fe (200)	Se, Tl, V, Pb, U
Si (50)	Zr
U (50)	Al, Cr, Cu, Bi, Pb, Se, Ag, Tl, Si, Be
Ba (10)	Co
Cr (10)	Sb
Cu (10)	Bi
Mn (10)	Tl
Mo (10)	Al, Si, Pb, Sb
Ti (10)	Co, Bi, Si, Sn, Tl, Pb, Zr
As (5)	Cd
V (5)	Al, Be, Tl
Zr (5)	Ag

The following table lists element concentrations (ug/ml) that no significant spectral interferences have been observed.

<u>Element</u>	<u>Concentration</u>	<u>Element</u>	<u>Concentration</u>	<u>Element</u>	<u>Concentration</u>
K	500	Se	10	Li	5
Na	500	Pb	10	Cd	5
Ca	500	Zn	10	Co	5
P	50	Sr	10	Ag	2
S	50	Sn	10	Sb	2
Ni	10	Bi	5	Be	1
B	10	Tl	5		

2X – Dilution made by diluting 2.5ml of sample up to a 5ml final volume.
3X - Dilution made by diluting 2.0ml of sample up to a 6ml final volume.
4X - Dilution made by diluting 2.0ml of sample up to a 8ml final volume.
5X - Dilution made by diluting 1.0ml of sample to a 5ml final volume.
10X - Dilution made by diluting 0.5ml of sample to a 5ml final volume.
20X – Dilution made by diluting 0.25ml of sample to a 5ml final volume.
25X – Dilution made by diluting 0.2ml of sample to a 5ml final volume.
50X – Dilution made by diluting 0.1ml of sample to a 5ml final volume.

100X – Dilution made by diluting 0.05ml of sample to a 5ml final volume.
500X – Dilution made by diluting 0.02ml of sample to a 10ml final volume.
1000X – Dilution made by diluting a 10X dilution 100X.

Comments

1312134-1A: 0.1ml of ST131010-4 and 0.1ml of ST131010-5 brought to 5ml volume with digestate.

1. Please see run log and work orders for elements of interest.

Daily Maintenance

1. Check/ Change Peristaltic pump tubing.
2. Check the torch for deposits, clean if necessary.
3. Check/ Empty drain water.

Daily Maintenance done by _____ SMW _____.

Monthly Maintenance

1. Check/Clean nebulizer and spray chamber.
2. Clean air filters
3. Check/Clean entrance slit.
4. Fill water recirculating reservoir.

Monthly maintenance done by: SMW 11-16-2013

Major problems / adjustments / repairs recorded in the ICP Maintenance Log (3716).

ICPTrace2 Run Log -- 12/18/2013

Instrument ID: ICPTrace2

File Name: 131218A.

AnalRunID: IT131218-2A1

CalibRefID: IT131218-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
		RINSE	1	12/18/2013	11:50
		MIXAHIGH	1	12/18/2013	12:17
		MIXBHIGH	1	12/18/2013	12:19
		MIXCHIGH	1	12/18/2013	12:21
		ICV	1	12/18/2013	12:30
		ICB	1	12/18/2013	12:33
		CR11	1	12/18/2013	12:35
		ICSA1	1	12/18/2013	12:36
		ICSAB1	1	12/18/2013	12:38
		CCV1	1	12/18/2013	12:40
		CCB1	1	12/18/2013	12:41
		IP131217-6MB	1	12/18/2013	12:43
		IP131217-6LCS	1	12/18/2013	12:44
		1312153-1	1	12/18/2013	12:46
		1312153-1DUP	1	12/18/2013	12:48
		ZZZZZZ	1	12/18/2013	12:49
		1312153-1MS	1	12/18/2013	12:51
		1312153-1MSD	1	12/18/2013	12:52
		1312153-2	1	12/18/2013	12:54
		1312157-1	1	12/18/2013	12:55
- Na		1312190-1	1	12/18/2013	12:57
		CCV2	1	12/18/2013	12:59
		CCB2	1	12/18/2013	13:00
		FP131217-5MB	1	12/18/2013	13:02
		FP131217-5LCS	1	12/18/2013	13:04
- S		1312134-1	1	12/18/2013	13:05
- S		1312134-1DUP	1	12/18/2013	13:07
- S		1312134-1SER	5	12/18/2013	13:10
- Na,S,Si,Zr		1312134-1MS	1	12/18/2013	13:13
- Fe,Na,Pb,S,Se,Si,Ti,U,V,Zr		1312134-1MSD	1	12/18/2013	13:14
- Na		1312158-1	1	12/18/2013	13:16
		1312153-1SER	5	12/18/2013	13:20
Ag,Al,As,B,Ba,Be,Bi,Ca,Cd,Co,Cr,Cu,Fe,K,Li,Mg,Mn,Mo,Ni,P,Pb,S,Sb,Se,Si,Sn,Sr,Ti,Tl,U,V,Zn,Zr		1312190-1	10	12/18/2013	13:40
		CCV3	1	12/18/2013	13:42
		CCB3	1	12/18/2013	13:43

Data Package ID:

ICPTrace2 Run Log -- 12/18/2013

Instrument ID: ICPTrace2

File Name: 131218A.

AnalRunID: IT131218-2A1

CalibRefID: IT131218-2A1

Comment	Field ID	Lab ID	DF	Date Analyzed	Time Analyzed
Ag,Al,As,B,Ba,Be,Bi,Ca,Cd,Co,Cr,Cu,Fe,K,Li,Mg,Mn,Mo,Ni,P,Pb,Sb,Se,Sn,Sr,Ti,Tl,U,V,Zn		1312134-1MS	5	12/18/2013	13:45
Ag,Al,As,B,Ba,Be,Bi,Ca,Cd,Co,Cr,Cu,K,Li,Mg,Mn,Mo,Ni,P,Sb,Sn,Sr,Ti,Zn		1312134-1MSD	5	12/18/2013	13:48
Ag,Al,As,B,Ba,Be,Bi,Ca,Cd,Co,Cr,Cu,Fe,K,Li,Mg,Mn,Mo,Ni,P,Pb,S,Sb,Se,Sn,Sr,Ti,Tl,U,V,Zn,Zr		1312158-1	5	12/18/2013	13:50
- S		1312134-1A	1	12/18/2013	13:51
		IP131218-2MB	1	12/18/2013	14:03
		IP131218-2LCS	1	12/18/2013	14:04
		ZZZZZZ	1	12/18/2013	14:06
		1312216-1	1	12/18/2013	14:09
		1312216-1DUP	1	12/18/2013	14:10
		1312216-1SER	5	12/18/2013	14:12
		CCV4	1	12/18/2013	14:15
		CCB4	1	12/18/2013	14:16
		1312216-1MS	1	12/18/2013	14:19
		1312216-1MSD	1	12/18/2013	14:21
		1312216-4	1	12/18/2013	14:22
		IP131218-2	1	12/18/2013	14:24
		EX131217-3MB	1	12/18/2013	14:26
		IP131218-1LCS	1	12/18/2013	14:27
- Na		1312210-1	1	12/18/2013	14:29
- Na		1312210-1DUP	1	12/18/2013	14:30
- Na		1312210-1SER	5	12/18/2013	14:32
- Na		1312210-1MS	1	12/18/2013	14:33
		CCV5	1	12/18/2013	14:35
		CCB5	1	12/18/2013	14:37
- Na		1312210-1MSD	1	12/18/2013	14:38
		1312149-2	1	12/18/2013	14:40
- Li,Na		1312232-1	100	12/18/2013	15:26
- Li,Na		1312232-2	100	12/18/2013	15:28
Ag,Al,As,B,Ba,Be,Bi,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Ni,P,Pb,S,Sb,Se,Sn,Sr,Ti,Tl,U,V,Zn,Zr		1312232-1	1000	12/18/2013	15:29
Ag,Al,As,B,Ba,Be,Bi,Ca,Cd,Co,Cr,Cu,Fe,K,Mg,Mn,Mo,Ni,P,Pb,S,Sb,Se,Sn,Sr,Ti,Tl,U,V,Zn,Zr		1312232-2	1000	12/18/2013	15:31
		CRI2	1	12/18/2013	15:33
		ICSA2	1	12/18/2013	15:34
		ICSAB2	1	12/18/2013	15:36
		CCV6	1	12/18/2013	15:38
		CCB6	1	12/18/2013	15:39

Data Package ID:

Sample Id1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
MIXAHIGH	-0.0004	507.1739	0.0077	-0.0077	0.0002	0.0009	0.0047	510.1436	0.0013	0.0059	-0.0011	-0.0042
MIXBHIGH	2.0030	0.0813	5.0283	9.9948	10.0704	0.9764	0.0066	-0.0113	4.9558	4.9779	9.9141	10.0933
MIXCHIGH	0.0083	-0.1359	-0.0063	0.0158	-0.0008	0.0010	5.0469	0.0274	-0.0007	0.0046	-0.0124	0.0128
ICV	0.1003	25.2104	0.2507	0.4907	0.4863	0.2520	0.2515	25.1677	0.2491	0.2437	0.5112	0.4907
ICB	0.0003	0.0219	0.0031	-0.0047	-0.0003	0.0001	-0.0044	-0.0358	0.0000	-0.0004	-0.0004	-0.0019
CRI	0.0212	0.4429	0.0108	0.3997	0.4176	0.0127	0.0453	5.1464	0.0116	0.1015	0.0232	0.0511
ICSA	-0.0009	268.7994	-0.0026	-0.0063	-0.0002	0.0010	0.0018	262.6217	0.0005	0.0030	-0.0006	-0.0043
IC SAB	0.2052	268.7646	0.0999	0.9433	0.4722	0.4808	0.5130	263.6528	1.0095	0.4701	0.4808	0.5212
CCV	0.2012	50.8178	0.4904	0.9863	0.9687	0.4918	0.5013	50.3390	0.5024	0.4840	1.0002	0.9875
CCB	-0.0003	0.0538	0.0007	-0.0045	-0.0001	0.0005	-0.0037	-0.0244	-0.0005	-0.0004	0.0004	-0.0013
IP131217-6MB	-0.0004	0.0305	-0.0005	-0.0059	-0.0007	0.0002	-0.0056	-0.0474	-0.0005	-0.0008	0.0000	-0.0019
IP131217-6LCS	0.0002	2.0418	1.0496	1.0271	1.0008	0.0524	-0.0036	39.3040	0.0521	0.5066	0.2022	0.2515
1312153-1	-0.0009	0.0235	0.0030	0.0510	0.1361	0.0002	-0.0006	30.2236	-0.0005	-0.0008	0.0002	-0.0016
1312153-1D	-0.0006	0.0244	0.0080	0.0522	0.1399	0.0001	-0.0036	31.0201	-0.0004	-0.0011	0.0005	-0.0016
Z	-0.0003	0.0190	0.0017	0.0050	0.0271	0.0001	-0.0041	6.1293	-0.0005	-0.0010	0.0001	-0.0021
1312153-1MS	-0.0007	2.0170	1.0273	1.0762	1.1196	0.0512	-0.0033	69.4684	0.0525	0.4961	0.1963	0.2503
1312153-1MSD	-0.0004	2.0174	1.0301	1.0804	1.1247	0.0511	0.0000	69.5932	0.0522	0.4927	0.1949	0.2511
1312153-2	-0.0004	0.0398	0.0028	0.1118	0.0850	0.0004	-0.0008	29.2443	-0.0002	-0.0009	0.0008	0.0045
1312157-1	-0.0007	0.0352	-0.0017	0.0074	0.0519	0.0005	-0.0052	52.5926	-0.0004	-0.0013	0.0002	-0.0005
1312190-1	-0.0008	0.0672	-0.0033	2.5045	6.8918	0.0004	-0.0021	4.7724	-0.0001	0.0015	0.0000	0.1062
CCV	0.2004	49.8494	0.4972	0.9776	0.9601	0.4814	0.5003	49.5437	0.4982	0.4784	0.9851	0.9808
CCB	-0.0001	0.0427	-0.0029	-0.0035	-0.0003	0.0004	-0.0019	-0.0310	0.0001	-0.0006	0.0005	-0.0018
FP131217-5MB	-0.0002	0.0333	-0.0008	-0.0040	-0.0006	0.0003	-0.0062	-0.0517	-0.0005	-0.0005	-0.0001	-0.0017
FP131217-5LCS	-0.0006	2.0038	1.0448	1.0181	0.9967	0.0486	-0.0034	40.1354	0.0530	0.5048	0.2007	0.2495
1312134-1	-0.0006	51.3866	0.0004	0.0133	1.3884	0.0067	0.0032	66.1945	0.0010	0.0350	0.0707	0.1162
1312134-1D	-0.0006	67.8067	0.0063	0.0108	1.9324	0.0088	0.0056	81.3189	0.0009	0.0491	0.0938	0.1668
1312134-1L 5X	0.0001	10.3253	-0.0053	-0.0022	0.2870	0.0015	0.0018	13.1394	0.0001	0.0073	0.0148	0.0224
1312134-1MS	-0.0004	82.7049	0.9470	0.9339	3.0162	0.0538	0.0051	130.3122	0.0527	0.5203	0.2892	0.4475
1312134-1MSD	-0.0002	99.3641	0.9450	0.9359	3.2505	0.0568	0.0056	152.9413	0.0534	0.5412	0.3165	0.5056
1312158-1	-0.0006	0.0238	-0.0001	0.3268	0.1610	0.0002	-0.0016	2.9490	-0.0001	-0.0008	-0.0003	-0.0013
1312153-1L 5X	-0.0007	-0.0181	-0.0008	0.0049	0.0271	-0.0001	0.0004	5.9293	-0.0003	-0.0007	0.0000	-0.0019
1312190-1 10X	-0.0004	-0.0044	-0.0087	0.2407	0.7368	0.0000	-0.0023	0.5031	-0.0007	-0.0002	0.0002	0.0091
CCV	0.2008	49.3934	0.5026	0.9804	0.9700	0.4791	0.5098	49.3278	0.5007	0.4790	0.9798	0.9942
CCB	-0.0003	0.0137	-0.0015	-0.0058	-0.0001	0.0003	0.0008	-0.0276	-0.0002	-0.0004	0.0003	-0.0021
1312134-1MS 5X	-0.0007	15.6341	0.1843	0.1847	0.6193	0.0121	0.0008	26.0858	0.0105	0.1085	0.0617	0.0862
1312134-1MSD 5X	-0.0012	19.0265	0.1884	0.1885	0.6759	0.0129	-0.0005	30.6834	0.0109	0.1134	0.0678	0.0981
1312158-1 5X	-0.0002	0.0124	-0.0060	0.0604	0.0329	0.0003	-0.0003	0.6096	-0.0007	-0.0007	0.0004	-0.0026
1312134-1A	-0.0011	50.5268	1.0497	1.0299	2.3220	0.0524	0.0043	96.9128	0.0542	0.5188	0.2539	0.3706
IP131218-2MB	-0.0010	0.0101	-0.0010	-0.0061	-0.0007	0.0004	-0.0033	-0.0555	-0.0005	-0.0003	-0.0004	-0.0033
Z	-0.0010	-0.3260	0.0039	-0.0081	-0.0008	-0.0037	-0.0057	-0.0611	-0.0003	-0.0017	-0.0006	-0.0146
Z	-0.0026	-0.3519	0.0027	-0.0087	-0.0009	-0.0043	-0.0127	-0.0650	-0.0007	-0.0044	-0.0028	-0.0162
1312216-1	0.0015	0.1770	-0.0032	0.0073	0.0473	0.0006	-0.0008	27.2803	0.0009	-0.0003	0.0039	0.1631
1312216-1D	0.0013	0.2055	-0.0064	0.0076	0.0486	0.0008	-0.0012	27.6459	0.0012	-0.0003	0.0041	0.1689
1312216-1L 5X	0.0002	0.0448	-0.0120	-0.0044	0.0089	0.0006	0.0008	5.3405	0.0004	-0.0004	0.0013	0.0296

Sample Id1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu
CCV	0.2010	48.3905	0.4931	0.9778	0.9630	0.4738	0.5130	49.8474	0.5133	0.4794	0.9803	0.9888
CCB	-0.0005	0.0286	-0.0028	-0.0048	-0.0001	0.0006	-0.0054	-0.0272	-0.0002	-0.0006	0.0003	-0.0032
1312216-1MS	0.0016	2.3234	1.0696	1.0559	1.0773	0.0494	-0.0017	27.7513	0.0550	0.5153	0.2060	0.4287
1312216-1MSD	0.0018	2.3109	1.0728	1.0484	1.0761	0.0490	-0.0003	27.5158	0.0543	0.5082	0.2024	0.4299
1312216-4	-0.0008	0.0834	-0.0033	0.0088	0.0170	0.0007	-0.0027	10.8163	0.0002	0.0001	0.0000	0.1417
IP131218-2RVS	0.0097	1.0530	0.0521	0.0455	0.0504	0.0104	0.0988	4.8270	0.0206	0.0198	0.0506	0.0497
EX131217-3MB	-0.0002	0.0460	-0.0045	-0.0036	0.0006	0.0006	-0.0067	0.0036	-0.0002	-0.0012	0.0002	-0.0032
IP131218-1LCS	0.0960	1.9531	0.9906	0.9569	1.0471	0.0501	-0.0047	-0.0433	0.0510	0.4982	0.2019	0.2621
1312210-1	-2.7056	-7.3060	0.5254	0.2833	0.3596	0.1574	-0.1302	60.1594	-0.0228	-0.0182	0.0304	-0.0380
1312210-1D	-2.8006	-7.3930	0.5246	0.2874	0.3671	0.1602	-0.1345	62.2185	-0.0239	-0.0214	0.0303	-0.0421
1312210-1L 5X	-0.6510	-1.7653	0.1245	0.0580	0.0816	0.0377	-0.0318	14.6078	-0.0061	-0.0057	0.0067	-0.0124
1312210-1MS	-2.5776	-5.2685	1.4645	1.2116	1.2169	0.1943	-0.1275	60.0548	0.0286	0.4071	0.1915	0.2094
CCV	0.2033	51.6780	0.5133	0.9920	0.9774	0.4822	0.5290	50.9959	0.5236	0.4866	0.9995	1.0058
CCB	-0.0010	0.0615	-0.0043	-0.0045	-0.0001	0.0008	-0.0010	-0.0250	-0.0002	-0.0009	0.0001	-0.0031
1312210-1MSD	-2.5617	-5.1985	1.4499	1.1932	1.1960	0.1916	-0.1246	58.6166	0.0276	0.3993	0.1869	0.2063
1312149-2	-0.0041	7.8183	-0.0019	0.0006	0.0081	0.0008	-0.0072	28.9101	-0.0005	0.0016	0.1541	0.0568
1312232-1 100X	-0.0006	-0.0059	0.0119	7.2653	-0.0006	0.0001	-0.0017	4.0817	-0.0002	-0.0006	0.0006	-0.0032
1312232-2 100X	-0.0005	0.0020	0.0457	6.8900	-0.0005	0.0002	0.0008	7.2573	-0.0003	-0.0006	-0.0001	-0.0035
1312232-1 1000X	-0.0002	0.0032	0.0030	0.7042	-0.0001	0.0003	-0.0047	0.4119	-0.0002	-0.0001	0.0005	-0.0034
1312232-2 1000X	-0.0004	0.0088	-0.0045	0.6538	-0.0001	0.0003	0.0000	0.7317	-0.0004	-0.0006	0.0000	-0.0036
CRI	0.0212	0.4291	0.0114	0.4094	0.4237	0.0124	0.0480	5.1551	0.0126	0.1003	0.0224	0.0503
ICSA	-0.0005	266.0007	-0.0068	-0.0025	-0.0001	0.0009	-0.0010	270.6454	0.0004	0.0028	0.0001	-0.0069
ICSAB	0.2110	267.6529	0.1048	0.9671	0.4824	0.4703	0.5549	270.1679	1.0751	0.4753	0.4835	0.5368
CCV	0.2015	50.3796	0.5052	0.9872	0.9740	0.4688	0.5331	49.9066	0.5208	0.4790	0.9761	1.0055
CCB	-0.0006	0.0301	-0.0011	-0.0038	0.0001	0.0004	-0.0047	-0.0156	-0.0003	-0.0005	0.0003	-0.0038
IP131218-2LCS	-0.0002	1.9764	1.0943	1.0373	1.0653	0.0492	-0.0027	-0.0497	0.0544	0.5187	0.2083	0.2628
CRI	0.0213	0.4207	0.0108	0.4077	0.4268	0.0124	0.0593	5.1796	0.0125	0.1016	0.0226	0.0507
ICSA	-0.0004	262.3623	0.0024	-0.0073	-0.0001	0.0013	0.0011	266.8382	0.0005	0.0027	0.0004	-0.0072
ICSAB	0.2096	263.1006	0.1107	0.9635	0.4840	0.4648	0.5506	266.2068	1.0682	0.4732	0.4775	0.5399
CCV	0.2039	49.7211	0.5171	0.9961	0.9797	0.4694	0.5370	50.2300	0.5275	0.4829	0.9796	1.0165
CCB	-0.0002	0.0429	-0.0017	-0.0048	0.0000	0.0008	-0.0015	-0.0145	0.0003	-0.0002	0.0008	-0.0042

Sample Id1	Fe	Li	K	Mg	Mn	Mo	Na	Ni	P	Pb	Pb I	Pb II
MIXAHIGH	204.1774	9.9295	249.3133	505.1647	0.0048	-0.0017	152.7850	0.0036	0.0122	-0.0001	0.0076	-0.0040
MIXBHGH	0.0035	0.0454	0.5968	0.0228	9.8830	10.0199	0.6553	10.0790	50.1560	9.9595	9.9683	9.9551
MIXCHIGH	-0.0112	0.0451	0.5974	-0.4904	0.0058	0.0034	0.6416	0.0024	0.0430	0.0080	-0.0361	0.0300
ICV	9.9425	0.2492	24.2345	24.8783	0.5037	0.4833	24.1866	0.4929	2.5503	0.4971	0.4871	0.5021
ICB	0.0043	0.0030	0.0057	0.0456	-0.0001	-0.0011	0.0475	-0.0006	-0.0052	-0.0003	-0.0008	-0.0001
CRI	0.1969	0.0206	4.1686	5.2041	0.0336	0.0203	4.1012	0.0841	0.2026	0.0081	0.0071	0.0086
ICSA	112.0552	0.0033	-0.0355	264.4104	0.0025	-0.0020	0.0702	0.0012	-0.0001	0.0018	-0.0006	0.0031
IC SAB	112.6488	1.1549	-0.0292	264.6410	0.4768	0.9327	0.0560	0.9378	1.0179	0.0540	0.0482	0.0569
CCV	20.1413	0.5462	51.4570	49.5726	0.9816	0.9672	52.8151	0.9822	5.0907	0.9935	0.9725	1.0040
CCB	0.0097	0.0030	-0.0111	0.0568	0.0002	-0.0001	0.0597	-0.0008	-0.0076	0.0008	0.0010	0.0008
IP131217-6MB	-0.0049	0.0029	-0.0267	0.0289	-0.0003	-0.0023	0.0399	-0.0011	-0.0096	-0.0010	0.0003	-0.0016
IP131217-6LCS	0.9369	0.5447	39.5454	39.3941	0.5070	1.0284	39.5177	0.5054	-0.0035	0.5222	0.5181	0.5242
1312153-1	0.0034	0.0151	2.1386	27.6569	0.0006	0.0078	37.5561	-0.0004	0.0077	0.0009	-0.0012	0.0020
1312153-1D	0.0020	0.0155	2.1932	28.3784	0.0006	0.0063	38.5656	0.0010	0.0084	-0.0012	0.0020	-0.0028
Z	-0.0041	0.0048	0.3468	5.5650	-0.0001	0.0011	6.2781	0.0002	-0.0072	0.0006	0.0016	0.0001
1312153-1MS	0.9167	0.5936	45.4677	67.2633	0.4937	1.0256	83.2071	0.4923	0.0094	0.5194	0.5138	0.5222
1312153-1MSD	0.9102	0.6001	45.6867	67.9017	0.4899	1.0203	83.5915	0.4895	0.0179	0.5204	0.5106	0.5253
1312153-2	-0.0031	0.0169	1.7197	31.4295	-0.0003	0.0063	72.4516	0.0001	0.0033	0.0016	0.0028	0.0009
1312157-1	0.0004	0.0064	1.0445	12.6490	-0.0002	0.0002	7.9439	0.0008	0.0259	0.0005	-0.0009	0.0012
1312190-1	0.0468	0.4256	10.7361	1.2665	0.0203	-0.0014	381.1082	-0.0007	-0.2691	-0.0007	-0.0013	-0.0004
CCV	19.7491	0.5387	50.8335	48.8462	0.9638	0.9564	49.6186	0.9752	5.0004	0.9740	0.9613	0.9803
CCB	0.0064	0.0030	0.0091	0.0487	0.0000	-0.0012	0.0873	-0.0005	-0.0144	0.0002	-0.0010	0.0008
FP131217-5MB	-0.0037	0.0026	-0.0060	0.0389	-0.0001	-0.0015	0.0569	0.0002	-0.0059	0.0001	-0.0007	0.0005
FP131217-5LCS	0.9361	0.5093	42.6071	40.2089	0.5034	1.0357	40.6071	0.5044	-0.0089	0.5251	0.5164	0.5294
1312134-1	103.4546	0.0799	14.6155	20.4511	1.5576	0.0154	142.6407	0.0786	0.4695	0.0520	0.0551	0.0504
1312134-1D	143.2252	0.1036	17.6461	26.5579	2.1102	0.0128	148.2425	0.1068	0.6718	0.0705	0.0682	0.0716
1312134-1L 5X	18.1391	0.0152	2.0119	4.2231	0.3209	0.0018	27.6869	0.0156	0.0956	0.0089	0.0144	0.0062
1312134-1MS	173.0118	0.7121	68.3141	67.2799	2.9762	0.8728	183.3215	0.5843	0.8188	0.5688	0.5691	0.5687
1312134-1MSD	217.0606	0.7443	70.0372	74.3830	3.6249	0.8596	187.6130	0.6255	1.0047	0.5928	0.5951	0.5916
1312158-1	2.5236	0.0406	2.3944	0.3371	0.0423	0.0000	297.2845	0.0060	-0.0637	0.0051	0.0045	0.0054
1312153-1L 5X	-0.0013	0.0050	0.3163	5.5030	0.0000	-0.0004	7.2712	-0.0001	-0.0132	-0.0007	0.0010	-0.0016
1312190-1 10X	0.0008	0.0349	0.7512	0.1866	0.0022	-0.0011	90.4409	-0.0013	-0.0548	0.0013	0.0028	0.0005
CCV	19.6564	0.5108	50.8791	48.9140	0.9568	0.9631	51.3995	0.9895	4.9243	0.9602	0.9572	0.9617
CCB	0.0069	0.0031	-0.0076	0.0519	-0.0001	-0.0014	0.0812	-0.0011	-0.0055	0.0010	0.0021	0.0004
1312134-1MS 5X	30.5756	0.1272	12.7374	13.6494	0.6281	0.1817	37.6254	0.1242	0.1406	0.1189	0.1210	0.1178
1312134-1MSD 5X	38.9565	0.1342	13.1975	15.2772	0.7715	0.1808	37.1117	0.1357	0.1934	0.1255	0.1277	0.1244
1312158-1 5X	0.5156	0.0099	0.3847	0.1051	0.0089	-0.0023	79.9746	0.0011	-0.0191	0.0012	0.0040	-0.0002
1312134-1A	96.4243	0.5833	56.6177	52.2342	1.9176	1.0240	170.7675	0.5694	0.4456	0.5530	0.5500	0.5545
IP131218-2MB	-0.0084	0.0025	-0.0456	0.0266	-0.0005	-0.0018	0.0385	-0.0018	-0.0030	0.0021	0.0029	0.0016
Z	-0.0105	0.0037	0.8018	0.0289	-0.0005	-0.0039	0.0475	-0.0004	-0.0472	0.0066	0.0018	0.0090
Z	-0.0111	0.0035	0.7250	0.0188	-0.0007	-0.0041	0.0430	-0.0020	-0.0567	0.0048	-0.0104	0.0124
1312216-1	0.6366	0.0075	4.7512	3.2626	0.0121	-0.0001	54.5760	0.0540	3.1297	0.0027	0.0027	0.0027
1312216-1D	0.6520	0.0076	4.8853	3.3475	0.0123	-0.0007	55.6083	0.0580	3.1932	0.0032	0.0049	0.0023
1312216-1L 5X	0.1221	0.0035	0.6596	0.6734	0.0023	-0.0020	8.7295	0.0118	0.6174	0.0000	0.0031	-0.0015

Sample Id1	Fe	Li	K	Mg	Mn	Mo	Na	Ni	P	Pb	Pb I	Pb II
CCV	19.5745	0.5026	50.3018	48.3932	0.9493	0.9707	51.8876	1.0107	4.8547	0.9558	0.9598	0.9537
CCB	0.0078	0.0030	-0.0015	0.0556	0.0000	-0.0005	0.0796	-0.0004	-0.0018	-0.0012	-0.0006	-0.0015
1312216-1MS	1.6099	0.0076	4.8203	3.3140	0.5431	1.0673	55.5625	0.5865	3.1966	0.5481	0.5496	0.5474
1312216-1MSD	1.6007	0.0077	4.8304	3.3024	0.5343	1.0506	55.3237	0.5828	3.1989	0.5474	0.5480	0.5471
1312216-4	0.0040	0.0044	1.5795	1.4749	0.0049	0.0018	14.5649	0.0073	0.2318	0.0017	0.0023	0.0015
IP131218-2RVS	0.9410	0.0416	8.9543	4.8960	0.0523	0.0974	8.4136	0.0507	0.9923	0.0533	0.0500	0.0550
EX131217-3MB	-0.0044	0.0030	-0.0012	0.0349	-0.0003	-0.0020	148.3264	0.0007	-0.0062	0.0012	0.0019	0.0009
IP131218-1LCS	0.9523	0.0031	-0.0715	0.0283	0.5293	1.0507	0.1023	0.5269	-0.0023	0.5071	0.5107	0.5052
1312210-1	-0.0102	0.0270	4.7303	6.7875	2.4473	0.2772	423.3377	-0.1892	-0.0152	0.3490	0.4741	0.2866
1312210-1D	-0.0151	0.0271	4.9023	6.9017	2.5281	0.2870	408.5165	-0.1994	-0.0390	0.3597	0.4665	0.3064
1312210-1L 5X	-0.0081	0.0084	0.7973	1.6155	0.5875	0.0652	238.1218	-0.0477	-0.0171	0.0864	0.1024	0.0783
1312210-1MS	0.7454	0.0275	4.6405	6.7351	2.8653	1.2017	418.4187	0.2344	-0.0307	0.8268	0.9551	0.7628
CCV	19.9680	0.5122	51.1176	49.0890	1.0200	0.9902	48.0461	1.0320	4.9919	1.0244	1.0181	1.0276
CCB	0.0078	0.0032	-0.0240	0.0542	0.0002	-0.0003	0.1496	-0.0006	-0.0098	0.0015	0.0024	0.0010
1312210-1MSD	0.7109	0.0268	4.6213	6.6504	2.8056	1.1836	408.8693	0.2321	-0.0254	0.8055	0.9251	0.7458
1312149-2	14.8347	0.0046	0.1212	2.7083	0.4141	0.0047	139.0755	0.0860	0.0315	0.0039	-0.0005	0.0060
1312232-1 100X	0.0309	7.5359	96.6916	21.9472	0.0107	-0.0024	354.1043	-0.0005	-0.0256	0.0003	0.0038	-0.0015
1312232-2 100X	0.1826	7.1089	90.9974	20.7351	0.0128	-0.0021	333.1144	-0.0007	-0.0259	-0.0012	0.0038	-0.0038
1312232-1 1000X	0.0015	0.6591	8.6669	2.3009	0.0014	-0.0020	54.1790	-0.0007	-0.0183	0.0006	0.0029	-0.0005
1312232-2 1000X	0.0166	0.6159	7.9420	2.1579	0.0016	-0.0028	51.8246	-0.0008	-0.0115	0.0006	0.0022	-0.0002
CRI	0.1917	0.0196	4.1277	5.0875	0.0336	0.0210	4.0921	0.0908	0.2070	0.0085	0.0095	0.0081
ICSA	111.3516	0.0035	-0.0159	262.7743	0.0011	-0.0012	0.1034	0.0015	-0.0004	-0.0009	0.0079	-0.0052
ICSAB	111.7265	1.0813	-0.0252	263.5381	0.4923	0.9713	0.0813	1.0087	0.9818	0.0572	0.0555	0.0580
CCV	19.5191	0.5069	50.7807	48.4757	0.9921	0.9854	52.4107	1.0290	4.8542	0.9984	0.9926	1.0013
CCB	0.0107	0.0029	-0.0166	0.0614	0.0002	-0.0013	0.1286	-0.0007	-0.0154	0.0017	0.0002	0.0025
IP131218-2LCS	0.9771	0.0025	-0.0403	0.0280	0.5431	1.0870	0.0414	0.5562	-0.0047	0.5279	0.5378	0.5229
CRI	0.1934	0.0192	4.1115	5.1228	0.0340	0.0217	4.1464	0.0902	0.1931	0.0074	0.0102	0.0060
ICSA	109.3095	0.0031	-0.0411	260.2236	0.0007	-0.0010	0.0788	0.0021	0.0098	0.0034	0.0127	-0.0013
ICSAB	109.6275	1.0917	-0.0486	260.8703	0.4839	0.9682	0.0623	1.0225	0.9771	0.0561	0.0560	0.0562
CCV	19.5276	0.5094	50.7930	48.4876	0.9888	0.9905	53.1716	1.0594	4.8301	0.9884	1.0024	0.9814
CCB	0.0111	0.0028	-0.0162	0.0674	0.0004	-0.0001	0.1160	-0.0006	-0.0040	-0.0006	0.0032	-0.0024

Sample Id1	S	Sb	Se	Se I	Se II	Si	Sn	Sr	Ti	Tl	U	V
MIXAHIGH	0.0058	0.0064	-0.0041	0.0248	-0.0186	-0.0238	-0.0087	0.0018	0.0009	-0.0162	0.1148	-0.0032
MIXBHIGH	0.0269	2.0150	4.9875	4.9992	4.9817	49.6701	9.9763	10.0440	9.8909	5.0349	-0.0676	4.9834
MIXCHIGH	50.3039	0.0054	-0.0023	-0.0155	0.0043	0.0445	0.0142	0.0000	0.0096	0.0125	50.2895	-0.0114
ICV	2.5165	0.2572	0.4951	0.5006	0.4924	2.5241	0.4963	0.2472	0.2505	0.2476	2.4699	0.2530
ICB	-0.0153	-0.0054	0.0004	-0.0007	0.0009	-0.0139	-0.0038	-0.0021	-0.0021	-0.0017	-0.0198	-0.0001
CRI	0.1814	0.1231	0.0109	0.0060	0.0133	0.0992	0.1007	0.0208	0.0202	0.0223	0.1896	0.1092
ICSA	-0.0223	0.0019	-0.0025	0.0084	-0.0080	-0.0166	0.0011	0.0001	-0.0005	-0.0163	0.0409	-0.0029
IC SAB	1.0212	0.6125	0.0448	0.0416	0.0465	0.9502	1.0223	0.9438	0.9560	0.0982	9.4555	0.4857
CCV	5.0590	0.5107	0.9996	1.0037	0.9975	4.9520	1.0112	0.4953	0.4912	0.5074	4.8729	0.4979
CCB	-0.0047	-0.0014	0.0005	-0.0063	0.0039	-0.0093	0.0020	-0.0020	-0.0020	0.0039	-0.0198	-0.0004
IP131217-6MB	-0.0188	-0.0025	-0.0046	-0.0088	-0.0025	-0.0095	-0.0009	-0.0023	-0.0023	-0.0038	-0.0222	-0.0003
IP131217-6LCS	-0.0012	0.4651	2.0919	2.1278	2.0739	1.0945	0.5092	0.5266	0.4881	2.1008	-0.0220	0.5354
1312153-1	7.4813	-0.0029	0.0038	0.0000	0.0057	12.8115	-0.0150	0.6367	-0.0022	0.0103	-0.0195	0.0066
1312153-1D	7.6655	-0.0044	0.0005	0.0037	-0.0011	13.1374	-0.0082	0.6548	-0.0021	-0.0031	-0.0174	0.0073
Z	1.4994	-0.0015	0.0011	-0.0001	0.0017	2.5730	-0.0053	0.1271	-0.0020	0.0049	-0.0168	0.0012
1312153-1MS	7.5840	0.4605	2.0738	2.1177	2.0519	13.8690	0.5111	1.1583	0.4783	2.1087	-0.0231	0.5305
1312153-1MSD	7.7647	0.4587	2.0892	2.1103	2.0787	14.1071	0.4936	1.1709	0.4759	2.1165	-0.0246	0.5277
1312153-2	11.1218	-0.0034	0.0004	-0.0069	0.0041	14.0967	-0.0028	0.6427	-0.0021	0.0034	-0.0195	0.0079
1312157-1	3.5629	0.0012	0.0003	0.0018	-0.0004	14.8156	-0.0023	0.3173	-0.0023	0.0009	-0.0183	0.0059
1312190-1	4.1766	-0.0044	-0.0030	-0.0046	-0.0023	14.0289	-0.0106	0.8162	-0.0017	0.0039	-0.0213	-0.0004
CCV	4.9566	0.5049	0.9829	0.9776	0.9856	4.8705	1.0005	0.4909	0.4809	0.4943	4.8293	0.4914
CCB	-0.0223	-0.0031	0.0011	-0.0010	0.0021	-0.0152	0.0020	-0.0021	-0.0021	0.0015	-0.0201	-0.0003
FP131217-5MB	-0.0047	-0.0039	-0.0024	-0.0001	-0.0035	-0.0110	-0.0062	-0.0023	-0.0022	0.0032	-0.0162	-0.0004
FP131217-5LCS	-0.0153	0.4655	2.0957	2.1264	2.0804	1.0991	0.5072	0.5266	0.4850	2.1127	-0.0347	0.5348
1312134-1	84.9206	-0.0003	0.0067	0.0049	0.0076	42.3181	-0.0020	0.8804	0.1471	0.0030	0.0127	0.0881
1312134-1D	89.4329	-0.0012	0.0018	0.0010	0.0022	47.6551	0.0009	1.0558	0.1556	0.0047	0.0267	0.1137
1312134-1L 5X	16.6138	0.0018	-0.0009	0.0029	-0.0027	8.3466	-0.0053	0.1782	0.0191	-0.0019	-0.0098	0.0174
1312134-1MS	87.5011	0.2288	1.8822	1.9123	1.8672	51.6437	0.2822	1.6443	0.3818	1.9221	0.0413	0.6108
1312134-1MSD	92.3602	0.2195	1.8098	1.8670	1.7812	57.0254	0.2574	1.8625	0.3822	1.9363	0.0412	0.6433
1312158-1	0.1392	-0.0035	0.0023	-0.0058	0.0064	9.5442	-0.0091	0.5318	-0.0020	0.0042	-0.0242	-0.0005
1312153-1L 5X	1.4642	-0.0002	-0.0018	-0.0039	-0.0008	2.5295	-0.0048	0.1267	-0.0022	0.0003	-0.0189	0.0011
1312190-1 10X	0.4062	-0.0025	-0.0028	-0.0067	-0.0009	1.4247	-0.0077	0.0879	-0.0019	-0.0039	-0.0189	-0.0001
CCV	4.9495	0.5021	0.9727	0.9949	0.9616	4.8605	1.0107	0.4950	0.4761	0.4857	4.8597	0.4912
CCB	-0.0083	-0.0020	0.0011	-0.0018	0.0026	-0.0129	0.0001	-0.0021	-0.0021	0.0016	-0.0133	-0.0005
1312134-1MS 5X	17.1719	0.0430	0.3625	0.3766	0.3555	10.2411	0.0520	0.3394	0.0793	0.3937	-0.0069	0.1269
1312134-1MSD 5X	18.2965	0.0473	0.3609	0.3687	0.3570	11.3381	0.0423	0.3891	0.0764	0.3874	-0.0085	0.1344
1312158-1 5X	0.0409	-0.0013	-0.0006	-0.0012	-0.0002	1.9086	-0.0019	0.1100	-0.0017	0.0056	-0.0180	-0.0001
1312134-1A	80.2752	0.4614	2.1034	2.1682	2.0710	40.1839	0.5164	1.3699	0.5796	2.1182	0.0084	0.5893
IP131218-2MB	-0.0258	-0.0053	-0.0053	-0.0089	-0.0035	-0.0139	-0.0009	-0.0024	-0.0024	0.0008	-0.0222	-0.0007
Z	-0.0363	-0.0062	-0.0011	-0.0051	0.0009	-0.1447	-0.0106	-0.0024	-0.0032	-0.0086	-0.0349	-0.0012
Z	-0.0434	-0.0105	0.0005	-0.0171	0.0093	-0.1531	-0.0160	-0.0025	-0.0034	-0.0162	-0.0575	-0.0023
1512216-1	21.1750	-0.0005	0.0000	-0.0034	0.0018	5.9572	0.0064	0.1392	0.0051	-0.0023	-0.0249	0.0007
1512216-1D	21.5346	-0.0021	0.0003	-0.0027	0.0019	6.1356	-0.0019	0.1422	0.0050	0.0011	-0.0240	0.0012
1512216-1L 5X	4.1201	-0.0032	0.0016	0.0003	0.0022	1.1486	-0.0048	0.0257	-0.0013	-0.0027	-0.0173	0.0003

Sample Id1	S	Sb	Se	Se I	Se II	Si	Sn	Sr	Ti	Tl	U	V
CCV	4.8471	0.5130	0.9673	1.0062	0.9479	4.7713	1.0161	0.4951	0.4654	0.4919	4.7872	0.4895
CCB	-0.0188	-0.0002	-0.0001	-0.0031	0.0013	-0.0232	0.0035	-0.0020	-0.0022	-0.0031	-0.0186	-0.0006
1312216-1MS	21.3548	0.4742	2.2057	2.1889	2.2142	7.2770	0.5233	0.6877	0.5067	2.1459	-0.0289	0.5390
1312216-1MSD	21.3584	0.4765	2.1926	2.2010	2.1883	7.2408	0.5179	0.6859	0.4997	2.1619	-0.0301	0.5325
1312216-4	6.7628	-0.0021	0.0008	0.0004	0.0011	3.6799	0.0035	0.0522	0.0040	0.0038	-0.0219	0.0001
IP131218-2RVS	0.9333	0.1036	0.0500	0.0448	0.0526	0.2548	0.0963	0.0495	0.0489	0.1014	4.8330	0.0498
EX131217-3MB	-0.0188	-0.0020	0.0022	-0.0027	0.0047	0.0017	0.0001	-0.0020	-0.0026	-0.0052	-0.0216	0.0000
IP131218-1LCS	-0.0328	0.4430	1.8506	1.8341	1.8588	1.0172	0.4907	0.5486	0.4940	1.9670	-0.0232	0.5353
1312210-1	5.3522	0.0684	-0.3267	-0.9138	-0.0335	4.9209	-0.0145	3.4976	-0.0104	-2.9150	-5.8816	-0.3178
1312210-1D	5.4758	0.0609	-0.3473	-0.9871	-0.0279	5.0485	-0.0116	3.5820	-0.0103	-3.0575	-6.0603	-0.3356
1312210-1L 5X	1.1196	0.0094	-0.0800	-0.2303	-0.0050	1.0844	-0.0077	0.8074	-0.0042	-0.7268	-1.4093	-0.0861
1312210-1MS	5.2285	0.5040	1.4872	0.8830	1.7888	5.8078	0.4782	3.9336	0.4020	-0.9609	-5.7864	0.1251
CCV	4.9954	0.5152	1.0204	1.0144	1.0234	4.8258	1.0365	0.5034	0.4939	0.5072	4.8564	0.4974
CCB	-0.0258	0.0001	0.0009	-0.0027	0.0026	-0.0195	0.0050	-0.0020	-0.0021	0.0013	-0.0216	-0.0004
1312210-1MSD	5.1932	0.4958	1.4931	0.8913	1.7935	5.7407	0.4548	3.8770	0.3937	-0.9864	-5.7695	0.1207
1312149-2	0.0585	-0.0009	0.0054	0.0003	0.0079	5.7232	0.0036	0.1438	1.1835	-0.0134	-0.0286	0.0119
1312232-1 100X	27.0351	-0.0012	-0.0002	-0.0026	0.0009	0.0750	-0.0096	0.0948	-0.0022	0.0016	-0.0189	-0.0002
1312232-2 100X	25.4519	-0.0011	0.0011	-0.0027	0.0030	0.0914	-0.0106	0.1808	-0.0024	0.0028	-0.0239	-0.0003
1312232-1 1000X	2.5693	-0.0031	0.0006	-0.0030	0.0024	-0.0053	-0.0130	0.0111	-0.0019	0.0043	-0.0216	0.0001
1312232-2 1000X	2.3932	-0.0018	-0.0011	-0.0022	-0.0005	-0.0057	-0.0126	0.0196	-0.0019	0.0033	-0.0186	-0.0004
CRI	0.1814	0.1295	0.0060	-0.0031	0.0106	0.0779	0.1041	0.0213	0.0192	0.0215	0.1840	0.1081
ICSA	-0.0083	0.0008	0.0011	0.0004	0.0014	-0.0309	-0.0004	0.0003	-0.0008	-0.0087	0.0369	0.0000
ICSAB	0.9825	0.6277	0.0450	0.0521	0.0415	0.9077	1.0627	0.9715	0.9474	0.1070	9.4672	0.4887
CCV	4.8083	0.5077	0.9972	0.9966	0.9975	4.7260	1.0200	0.5006	0.4764	0.5079	4.8114	0.4876
CCB	-0.0258	0.0015	0.0016	0.0000	0.0023	-0.0236	0.0020	-0.0018	-0.0020	-0.0012	-0.0210	-0.0002
IP131218-2LCS	-0.0258	0.4822	2.1309	2.1599	2.1164	1.0955	0.5194	0.5614	0.4925	2.0335	-0.0297	0.5467
CRI	0.1954	0.1342	0.0136	0.0158	0.0125	0.0830	0.1051	0.0215	0.0194	0.0225	0.1858	0.1094
ICSA	-0.0083	0.0086	0.0051	0.0198	-0.0022	-0.0254	0.0030	0.0003	-0.0009	-0.0074	0.0443	0.0007
ICSAB	0.9509	0.6286	0.0485	0.0587	0.0434	0.8964	1.0462	0.9739	0.9242	0.0879	9.4652	0.4861
CCV	4.8118	0.5181	1.0048	1.0173	0.9985	4.7133	1.0297	0.5048	0.4692	0.5158	4.8176	0.4895
CCB	-0.0012	-0.0018	-0.0044	-0.0146	0.0007	-0.0236	0.0020	-0.0018	-0.0021	0.0079	-0.0127	-0.0001

Sample Id1	Zn	Zr
MIXAHIGH	-0.0079	0.0059
MIXBHIGH	9.7863	-0.0134
MIXCHIGH	-0.0029	5.0405
ICV	0.4931	0.5077
ICB	-0.0029	0.0006
CRI	0.0399	0.0552
ICSA	-0.0057	0.0028
ICSAB	0.8834	0.4831
CCV	0.9784	1.0035
CCB	-0.0041	0.0009
IP131217-6MB	-0.0013	0.0004
IP131217-6LCS	0.5026	0.0020
1312153-1	-0.0025	-0.0024
1312153-1D	-0.0021	-0.0025
Z	-0.0029	-0.0005
1312153-1MS	0.4871	-0.0023
1312153-1MSD	0.4824	-0.0026
1312153-2	0.0039	-0.0027
1312157-1	-0.0021	-0.0028
1312190-1	0.0046	-0.0020
CCV	0.9458	0.9909
CCB	-0.0017	0.0009
FP131217-5MB	0.0371	0.0002
FP131217-5LCS	0.4979	0.0012
1312134-1	0.2115	-0.0007
1312134-1D	0.2853	-0.0002
1312134-1L 5X	0.0514	0.0004
1312134-1MS	0.7896	0.0014
1312134-1MSD	0.8695	0.0015
1312158-1	0.0027	-0.0009
1312153-1L 5X	-0.0017	-0.0005
1312190-1 10X	0.0011	-0.0001
CCV	0.9311	0.9949
CCB	-0.0017	0.0008
1312134-1MS 5X	0.1675	0.0016
1312134-1MSD 5X	0.1846	0.0007
1312158-1 5X	-0.0005	0.0005
1312134-1A	0.6574	-0.0001
IP131218-2MB	-0.0025	-0.0001
Z	-0.0033	-0.0001
Z	-0.0037	-0.0007
1312216-1	0.3233	-0.0003
1312216-1D	0.3221	-0.0001
1312216-1L 5X	0.0629	0.0000

Sample Id1	Zn	Zr
CCV	0.9255	0.9942
CCB	-0.0037	0.0008
1312216-1MS	0.8477	0.0008
1312216-1MSD	0.8324	-0.0005
1312216-4	0.2073	-0.0007
IP131218-2RVS	0.0436	0.0492
EX131217-3MB	-0.0041	0.0007
IP131218-1LCS	0.4781	0.0018
1312210-1	0.0066	0.0368
1312210-1D	0.0120	0.0411
1312210-1L 5X	-0.0012	0.0079
1312210-1MS	0.4184	0.0426
CCV	0.9825	1.0135
CCB	-0.0037	0.0008
1312210-1MSD	0.4090	0.0465
1312149-2	0.0218	0.0296
1312232-1 100X	-0.0024	0.0004
1312232-2 100X	0.0004	0.0005
1312232-1 1000X	-0.0008	0.0002
1312232-2 1000X	0.0000	0.0001
CRI	0.0354	0.0538
ICSA	-0.0078	0.0026
ICSAB	0.8774	0.4909
CCV	0.9367	1.0012
CCB	-0.0033	0.0008
IP131218-2LCS	0.5045	0.0015
CRI	0.0399	0.0537
ICSA	-0.0074	0.0027
ICSAB	0.8592	0.4897
CCV	0.9380	1.0064
CCB	-0.0024	0.0009

Method : Paragon2
SampleId1 : BLANK
Analysis commenced : 12/18/2013 11:52:05
Dilution ratio : 1.00000 to 1.00000 Tray :

File : 131218A
SampleId2 :
[STD]
Printed : 12/18/2013 15:41:51
Position : TUBE1

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	39.700	106.500	76.300	27.500	9.700	281.100	65.400	19.200	55.800
#2	39.900	105.700	76.000	27.400	9.700	280.500	65.600	19.100	54.300
Mean	39.800	106.100	76.150	27.450	9.700	280.800	65.500	19.150	55.050
%RSD	0.355	0.533	0.279	0.258	0.000	0.151	0.216	0.369	1.927

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	46.900	78.500	35.100	19.000	313.900	50.200	44.800	5.200	34.800
#2	47.500	78.600	35.200	19.000	314.800	50.400	45.200	5.200	35.700
Mean	47.200	78.550	35.150	19.000	314.350	50.300	45.000	5.200	35.250
%RSD	0.899	0.090	0.201	0.000	0.202	0.281	0.629	0.000	1.805

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	64.900	92.700	44.500	933.900	298.400	5.400	66.200	175.100	109.700
#2	64.800	93.000	45.400	934.100	299.600	5.600	66.400	174.400	111.700
Mean	64.850	92.850	44.950	934.000	299.000	5.500	66.300	174.750	110.700
%RSD	0.109	0.228	1.416	0.015	0.284	2.571	0.213	0.283	1.278

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	185.500	30.900	15.300	76.600	79.900	67.400	56.100	10.200	97.600
#2	185.400	32.100	15.300	76.700	82.100	67.600	56.900	10.400	97.200
Mean	185.450	31.500	15.300	76.650	81.000	67.500	56.500	10.300	97.400
%RSD	0.038	2.694	0.000	0.092	1.921	0.210	1.001	1.373	0.290

	Pb	Se
	Reading	Reading

#1		
#2		
Mean	0.000	0.000
%RSD	0.000	0.000

Method : Paragon2
SampleId1 : RL
Analysis commenced : 12/18/2013 11:53:42
Dilution ratio : 1.00000 to 1.00000 Tray :

File : 131218A
SampleId2 :
[STD]
Printed : 12/18/2013 15:41:51
Position : TUBE2

Raw intensities

#1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
	43.500	129.300	78.500	87.500	18.200	339.400	69.000	80.600	60.600
	#2	129.000	78.600	86.800	18.200	340.500	69.400	80.200	59.900
Mean	43.450	129.150	78.550	87.150	18.200	339.950	69.200	80.400	60.250
	%RSD	0.164	0.090	0.568	0.000	0.229	0.409	0.352	0.822
#1	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
	49.300	84.800	37.600	57.800	490.800	303.600	93.600	7.400	46.500
	#2	85.200	37.900	58.100	489.500	303.800	94.300	7.400	46.600
Mean	49.400	85.000	37.750	57.950	490.150	303.700	93.950	7.400	46.550
	%RSD	0.286	0.562	0.366	0.188	0.047	0.527	0.000	0.152
#1	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
	899.100	107.400	58.200	950.900	301.900	6.500	70.200	175.900	115.600
	#2	105.500	58.100	951.300	303.400	6.500	68.600	174.900	115.200
Mean	898.700	106.450	58.150	951.100	302.650	6.500	69.400	175.400	115.400
	%RSD	0.063	0.122	0.030	0.350	0.000	1.630	0.403	0.245
#1	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
	224.600	33.300	153.100	171.800	82.900	89.000	61.200	10.100	131.300
	#2	32.900	153.300	172.400	85.000	88.100	61.200	10.000	132.400
Mean	224.700	33.100	153.200	172.100	83.950	88.550	61.200	10.050	131.850
	%RSD	0.063	0.092	0.247	1.769	0.719	0.000	0.704	0.590
#1	Pb	Se							
	Reading	Reading							
Mean	0.000	0.000							
	%RSD	0.000							

Method : Paragon2 File : 131218A Printed : 12/18/2013 15:41:52
SampleId1 : RL2 **sampleId2 :**
Analysis commenced : 12/18/2013 11:55:18
Dilution ratio : 1.00000 to 1.00000 Tray :
Position : TUBE3

Raw intensities

#1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
	51.400	179.500	83.700	214.300	35.700	460.000	75.100	210.700	72.400
	#2	178.500	83.600	214.400	35.800	459.500	74.000	210.400	70.700
Mean	51.200	179.000	83.650	214.350	35.750	459.750	74.550	210.550	71.550
	%RSD	0.552	0.085	0.033	0.198	0.077	1.043	0.101	1.680
#1	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
	51.400	179.500	83.700	214.300	35.700	460.000	75.100	210.700	72.400
	#2	178.500	83.600	214.400	35.800	459.500	74.000	210.400	70.700
Mean	51.200	179.000	83.650	214.350	35.750	459.750	74.550	210.550	71.550
	%RSD	0.552	0.085	0.033	0.198	0.077	1.043	0.101	1.680

	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	55.400	100.600	43.100	142.800	877.600	864.400	194.600
#2	55.200	100.400	43.100	142.300	875.200	867.300	195.000
Mean	55.300	100.500	43.100	142.550	876.400	865.850	194.800
%RSD	0.256	0.141	0.000	0.248	0.194	0.237	0.145

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	2701.800	136.800	86.100	982.400	322.300	8.300	78.800	187.700	124.200
#2	2709.800	135.200	84.200	980.900	319.400	8.400	79.700	185.400	123.300
Mean	2705.800	136.000	85.150	981.650	320.850	8.350	79.250	186.550	123.750
%RSD	0.209	0.832	1.578	0.108	0.639	0.847	0.803	0.872	0.514

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	309.000	35.600	439.600	366.800	89.500	135.100	73.500	12.200	215.200
#2	307.000	35.700	440.200	367.300	88.600	134.900	72.400	12.400	215.600
Mean	308.000	35.650	439.900	367.050	89.050	135.000	72.950	12.300	215.400
%RSD	0.459	0.198	0.096	0.096	0.715	0.105	1.066	1.150	0.131

	Pb	Se
	Reading	Reading
#1		
#2		
Mean	0.000	0.000
%RSD	0.000	0.000

Method : Paragon2 File : 131218A
SampleId1 : B3 SampleId2 :
Analysis commenced : 12/18/2013 11:56:54
Dilution ratio : 1.00000 to 1.00000 Tray :
Printed : 12/18/2013 15:41:52
[STD]
Position : TUBE4

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	65.700	107.000	93.000	133.500	340.400	671.600	65.600	19.700	248.000
#2	65.600	106.800	94.500	134.200	340.600	672.500	65.400	19.400	242.600
Mean	65.650	106.900	93.750	133.850	340.500	672.050	65.500	19.550	245.300
%RSD	0.108	0.132	1.131	0.370	0.042	0.095	0.216	1.085	1.557

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	94.500	303.100	125.300	19.700	313.400	51.000	44.700	86.800	129.200
#2	94.600	305.900	124.700	19.400	313.600	50.800	44.700	87.600	129.400
Mean	94.550	304.500	125.000	19.550	313.500	50.900	44.700	87.200	129.300
%RSD	0.075	0.650	0.339	1.085	0.045	0.278	0.000	0.649	0.109

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1									
#2									
Mean									
%RSD									

#1	62.900	317.700	155.300	1208.000	451.200	5.700	75.000	196.700	144.100
#2	62.600	317.500	154.900	1211.800	452.100	5.700	74.800	193.500	142.800
Mean	62.750	317.600	155.100	1209.900	451.650	5.700	74.900	195.100	143.450
%RSD	0.338	0.045	0.182	0.222	0.141	0.000	0.189	1.160	0.641

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	497.300	41.600	1122.600	848.500	98.200	67.300	150.900	23.100	108.500
#2	498.600	42.900	1124.100	848.000	98.100	67.700	152.900	23.400	106.000
Mean	497.950	42.250	1123.350	848.250	98.150	67.500	151.900	23.250	107.250
%RSD	0.185	2.176	0.094	0.042	0.072	0.419	0.931	0.912	1.648

	Pb	Se
	Reading	Reading
#1		
#2		
Mean	0.000	0.000
%RSD	0.000	0.000

Method : Paragon2
 File : 131218A
 SampleId1 : B2
 SampleId2 :
 Analysis commenced : 12/18/2013 11:58:31
 Dilution ratio : 1.00000 to 1.00000 Tray :
 Printed : 12/18/2013 15:41:52
 [STD]
 Position : TUBE5

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	303.100	112.400	277.500	1104.400	3282.500	4230.900	70.800	22.800	1968.400
#2	303.500	111.900	276.600	1105.700	3288.600	4228.100	69.200	22.800	1972.000
Mean	303.300	112.150	277.050	1105.050	3285.550	4229.500	70.000	22.800	1970.200
%RSD	0.093	0.315	0.230	0.083	0.131	0.047	1.616	0.000	0.129

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	530.700	2373.900	941.500	21.600	323.300	53.400	46.300	830.800	974.100
#2	532.800	2374.600	944.300	21.800	323.500	53.500	46.600	832.600	973.900
Mean	531.750	2374.250	942.900	21.700	323.400	53.450	46.450	831.700	974.000
%RSD	0.279	0.021	0.210	0.652	0.044	0.132	0.457	0.153	0.015

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	81.700	2357.700	1148.500	3653.700	1851.800	5.800	155.700	387.000	451.200
#2	81.800	2365.400	1144.500	3674.700	1850.300	5.700	154.300	382.900	452.800
Mean	81.750	2361.550	1146.500	3664.200	1851.050	5.750	155.000	384.950	452.000
%RSD	0.086	0.231	0.247	0.405	0.057	1.230	0.639	0.753	0.250

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	3332.700	139.700	11070.300	7817.400	285.700	70.600	1028.000	153.300	117.100

#2	3330.700	140.100	11067.700	7838.200	280.800	70.500	1029.100	152.300	114.100
Mean	3331.700	139.900	11069.000	7827.800	283.250	70.550	1028.550	152.800	115.600
%RSD	0.042	0.202	0.017	0.188	1.223	0.100	0.076	0.463	1.835

	Pb	Se
#1	Reading	
#2		
Mean	0.000	0.000
%RSD	0.000	0.000

Method : Paragon2

File : 131218A

Printed : 12/18/2013 15:41:52

SampleId1 : B1

SampleId2 :

[STD]

Analysis commenced : 12/18/2013 12:00:07

Dilution ratio : 1.00000 to 1.00000 Tray :

Position : TUBE6

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	2652.200	157.200	2022.900	10572.000	30677.700	39129.700	102.800	26.900	18401.300
#2	2650.400	156.900	2026.700	10581.000	30664.000	39152.500	102.900	26.900	18397.200
Mean	2651.300	157.050	2024.800	10576.500	30670.850	39141.100	102.850	26.900	18399.250
%RSD	0.048	0.135	0.133	0.060	0.032	0.041	0.069	0.000	0.016

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	4861.800	22809.800	9079.100	40.200	332.600	66.300	55.400	7797.900	9209.500
#2	4859.900	22793.200	9078.500	40.000	331.600	66.300	55.600	7799.300	9212.500
Mean	4860.850	22801.500	9078.800	40.100	332.100	66.300	55.500	7798.600	9211.000
%RSD	0.028	0.051	0.005	0.353	0.213	0.000	0.255	0.013	0.023

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	96.200	22469.400	9738.600	27939.100	15480.700	7.000	963.600	2199.500	3357.700
#2	96.200	22427.200	9728.400	27903.600	15660.600	7.000	962.500	2211.400	3422.100
Mean	96.200	22448.300	9733.500	27921.350	15570.650	7.000	963.050	2205.450	3389.900
%RSD	0.000	0.133	0.074	0.090	0.817	0.000	0.081	0.382	1.343

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	30346.700	1110.500	98225.600	76283.100	2068.300	88.700	9742.400	1417.700	146.900
#2	30404.800	1110.800	98295.400	76342.500	2066.900	89.700	9732.500	1414.100	142.800
Mean	30375.750	1110.650	98260.500	76312.800	2067.600	89.200	9737.450	1415.900	144.850
%RSD	0.135	0.019	0.050	0.055	0.048	0.793	0.072	0.180	2.001

	Pb	Se
#1	Reading	
#2		

Mean 0.000 0.000User: STEVE WORKMAN
%RSD 0.000

Method : Paragon2 File : 131218A
SampleId1 : A5 SampleId2 :
Analysis commenced : 12/18/2013 12:01:43
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 15:41:52
[STD]

Position : TUBE7

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	41.000	1009.100	76.900	43.300	13.300	285.900	64.900	1223.800	56.300
#2	41.300	1005.700	75.900	40.800	12.000	281.600	66.400	1215.100	55.900
Mean	41.150	1007.400	76.400	42.050	12.650	283.750	65.650	1219.450	56.100
%RSD	0.516	0.239	0.926	4.204	7.267	1.072	1.616	0.504	0.504
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	48.200	85.400	35.600	1304.100	1038.700	2180.300	958.500	6.400	45.200
#2	47.400	84.800	35.600	1301.800	1037.800	2181.100	957.100	6.200	42.500
Mean	47.800	85.100	35.600	1302.950	1038.250	2180.700	957.800	6.300	43.850
%RSD	1.183	0.499	0.000	0.125	0.061	0.026	0.103	2.245	4.354

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	2100.600	97.200	46.100	966.100	309.900	5.400	67.700	177.900	115.300
#2	2100.000	96.300	46.000	956.200	308.200	5.500	67.500	176.500	112.500
Mean	2100.300	96.750	46.050	961.150	309.050	5.450	67.600	177.200	113.900
%RSD	0.020	0.658	0.154	0.728	0.389	1.297	0.209	0.559	1.738

	Si	Sn	Sr	Ti	Tl	V	Zn	Zr
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	211.900	31.300	27.300	99.400	81.000	74.700	9.500	101.100
#2	203.700	31.500	23.300	94.100	84.100	73.400	9.500	101.100
Mean	207.800	31.400	25.300	96.750	82.550	74.050	9.500	101.100
%RSD	2.790	0.450	11.180	3.874	2.655	1.241	0.000	0.000

Pb
Reading

#1
#2
Mean 0.000 0.000
%RSD 0.000

Method : Paragon2 File : 131218A
SampleId1 : A4 SampleId2 :
Analysis commenced : 12/18/2013 12:03:19
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 15:41:52
[STD]

Position : TUBE8

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	44.600	9203.400	86.600	40.200	11.400	289.300	66.500	11588.400	59.600
#2	44.200	9187.700	87.000	39.300	11.100	287.900	65.200	11514.000	57.200
Mean	44.400	9195.550	86.800	39.750	11.250	288.600	65.850	11551.200	58.400
%RSD	0.637	0.121	0.326	1.601	1.886	0.343	1.396	0.455	2.906
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	50.100	95.100	36.500	11920.000	9313.300	28189.500	8820.500	8.500	48.000
#2	50.100	94.400	36.400	11900.200	9317.800	28192.200	8811.200	8.500	45.800
Mean	50.100	94.750	36.450	11910.100	9315.550	28190.850	8815.850	8.500	46.900
%RSD	0.000	0.522	0.194	0.118	0.034	0.007	0.075	0.000	3.317
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	23977.800	98.400	50.400	1089.500	343.600	5.700	86.300	207.300	135.400
#2	23925.600	99.400	49.700	1086.400	347.000	5.800	84.900	203.600	136.700
Mean	23951.700	98.900	50.050	1087.950	345.300	5.750	85.600	205.450	136.050
%RSD	0.154	0.715	0.989	0.201	0.696	1.230	1.156	1.273	0.676
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	208.400	35.500	25.500	106.800	93.500	102.600	68.300	12.200	115.400
#2	207.100	35.400	24.500	106.800	92.600	103.100	67.600	12.200	115.400
Mean	207.750	35.450	25.000	106.800	93.050	102.850	67.950	12.200	115.400
%RSD	0.442	0.199	2.828	0.000	0.684	0.344	0.728	0.000	0.000
	Pb	Se							
	Reading	Reading							
#1									
#2									
Mean	0.000	0.000							
%RSD	0.000	0.000							

Printed : 12/18/2013 15:41:53

[STD]

File : 131218A

SampleId1 : A3 SampleId2 :

Analysis commenced : 12/18/2013 12:04:56

Dilution ratio : 1.00000 to 1.00000 Tray :

Position : TUBE9

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	46.400	18267.300	97.500	42.600	11.600	300.300	69.400	22488.900	60.700
#2	46.500	18179.400	96.400	42.300	11.600	295.300	69.800	22387.300	60.800
Mean	46.450	18223.350	96.950	42.450	11.600	297.800	69.600	22438.100	60.750
%RSD	0.152	0.341	0.802	0.500	0.000	1.187	0.406	0.320	0.116

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	53.200	102.800	37.200	22520.400	19042.000	61445.500	17238.300	11.200	55.700
#2	53.000	103.000	37.300	22497.200	18912.500	60998.200	17213.800	11.300	57.600
Mean	53.100	102.900	37.250	22508.800	18977.250	61221.850	17226.050	11.250	56.650
%RSD	0.266	0.137	0.190	0.073	0.483	0.517	0.101	0.629	2.372
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	47144.300	102.700	51.700	1231.800	389.000	6.100	104.800	240.000	159.900
#2	46710.600	102.600	53.400	1230.300	388.500	6.100	105.600	240.500	160.800
Mean	46927.450	102.650	52.550	1231.050	388.750	6.100	105.200	240.250	160.350
%RSD	0.654	0.069	2.288	0.086	0.091	0.000	0.538	0.147	0.397
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	216.000	40.500	30.900	116.700	107.000	124.300	76.100	14.600	121.700
#2	219.100	40.400	30.600	115.700	107.500	125.100	75.800	14.400	122.800
Mean	217.550	40.450	30.750	116.200	107.250	124.700	75.950	14.500	122.250
%RSD	1.008	0.175	0.690	0.609	0.330	0.454	0.279	0.975	0.636

#1

#2

Mean

%RSD

Mean

0.000

Mean

0.000

Method : Paragon2

File : 131218A

Printed : 12/18/2013 15:41:53

SampleId1 : A2

SampleId2 :

[STD]

Analysis commenced : 12/18/2013 12:06:32

Dilution ratio : 1.00000 to 1.00000 Tray :

Position : TUBE10

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	47.900	35248.500	115.800	49.600	12.900	311.800	73.000	41810.200	68.600
#2	48.200	35210.300	115.300	50.000	12.800	306.200	72.100	41604.500	68.600
Mean	48.050	35229.400	115.550	49.800	12.850	309.000	72.550	41707.350	68.600
%RSD	0.441	0.077	0.306	0.568	0.550	1.281	0.877	0.349	0.000
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	57.800	112.000	38.900	40250.200	37076.400	129750.200	32791.400	16.500	75.800
#2	58.000	110.700	39.300	40129.500	36984.400	129208.300	32731.200	16.500	75.600
Mean	57.900	111.350	39.100	40189.850	37030.400	129479.250	32761.300	16.500	75.700
%RSD	0.244	0.826	0.723	0.212	0.176	0.296	0.130	0.000	0.187

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	85161.500	109.300	60.700	1501.600	475.000	6.600	142.800	307.100	204.300
#2	84627.800	109.400	58.300	1497.800	478.500	6.600	141.300	301.600	207.900
Mean	84894.650	109.350	59.500	1499.700	476.750	6.600	142.050	304.350	206.100
%RSD	0.445	0.065	2.852	0.179	0.519	0.000	0.747	1.278	1.235

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	229.600	47.900	42.900	133.600	133.900	161.900	87.600	19.300	132.100
#2	231.100	48.400	42.900	132.600	130.000	162.000	87.500	19.300	133.000
Mean	230.350	48.150	42.900	133.100	131.950	161.950	87.550	19.300	132.550
%RSD	0.460	0.734	0.000	0.531	2.090	0.044	0.081	0.000	0.480

	Pb	Se
	Reading	Reading

#1
#2

Mean	0.000	0.000
%RSD	0.000	0.000

Method : Paragon2
File : 131218A
SampleId1 : A1
SampleId2 :
Analysis commenced : 12/18/2013 12:08:08
Dilution ratio : 1.00000 to 1.00000 Tray :
Printed : 12/18/2013 15:41:53
[STD]
Position : TUBE11

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	53.200	78765.600	174.600	73.300	16.900	337.800	81.400	89984.700	86.100
#2	52.800	79015.700	172.700	73.000	16.900	335.000	82.100	89812.200	88.000
Mean	53.000	78890.650	173.650	73.150	16.900	336.400	81.750	89898.450	87.050
%RSD	0.534	0.224	0.774	0.290	0.000	0.589	0.605	0.136	1.543

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	73.200	136.600	43.600	77495.800	82019.000	324681.400	73240.800	31.000	134.000
#2	73.400	137.100	43.800	77552.200	82031.500	324949.100	73485.400	31.100	133.900
Mean	73.300	136.850	43.700	77524.000	82025.250	324815.250	73363.100	31.050	133.950
%RSD	0.193	0.258	0.324	0.051	0.011	0.058	0.236	0.228	0.053

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	156742.000	131.600	75.200	2281.800	719.700	8.100	253.000	489.100	334.400
#2	155686.500	131.800	72.000	2295.200	725.400	7.900	255.500	494.900	342.000
Mean	156214.250	131.700	73.600	2288.500	722.550	8.000	254.250	492.000	338.200
%RSD	0.478	0.107	3.074	0.414	0.558	1.768	0.695	0.834	1.589

	Si	Sr	Tl	Ti	V	Zn	Zr
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	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	262.500	73.700	75.000	177.100	206.900	270.300	122.600	33.800	157.800
#2	263.600	74.000	75.000	176.300	200.800	272.300	120.900	34.500	158.700
Mean	263.050	73.850	75.000	176.700	203.850	271.300	121.750	34.150	158.250
%RSD	0.296	0.287	0.000	0.320	2.116	0.521	0.987	1.449	0.402

	Pb	Se
	Reading	Reading
#1		
#2		
Mean	0.000	0.000
%RSD	0.000	0.000

Method : Paragon2 File : 131218A
SampleId1 : C3 **SampleId2 :**
Analysis commenced : 12/18/2013 12:09:44
Dilution ratio : 1.00000 to 1.00000 Tray :
Printed : 12/18/2013 15:41:53
[STD]
Position : TUBE12

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	42.700	116.100	75.600	30.500	10.000	287.600	88.600	30.900	54.400
#2	42.500	113.100	76.400	30.600	9.800	286.600	86.000	27.200	55.500
Mean	42.600	114.600	76.000	30.550	9.900	287.100	87.300	29.050	54.950
%RSD	0.332	1.851	0.744	0.231	1.428	0.246	2.106	9.006	1.416

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	47.300	83.100	35.300	33.300	329.000	67.800	56.200	5.400	35.700
#2	47.600	83.200	35.700	28.900	324.800	62.800	53.300	5.400	36.200
Mean	47.450	83.150	35.500	31.100	326.900	65.300	54.750	5.400	35.950
%RSD	0.447	0.085	0.797	10.004	0.908	5.414	3.745	0.000	0.983

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	114.400	95.200	46.400	952.200	301.800	12.800	67.500	173.400	112.400
#2	102.800	95.300	44.800	946.800	303.700	13.300	67.000	176.000	109.900
Mean	108.600	95.250	45.600	949.500	302.750	13.050	67.250	174.700	111.150
%RSD	7.553	0.074	2.481	0.402	0.444	2.709	0.526	1.052	1.590

	Si	Sn	Ti	Tl	V	Zn	Zr
	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	188.400	31.200	80.400	81.700	155.100	9.200	359.700
#2	187.900	31.700	79.600	80.800	154.600	9.200	367.000
Mean	188.150	31.450	80.000	81.250	154.850	9.200	363.350
%RSD	0.188	1.124	0.707	0.783	0.228	0.000	1.421

	Pb	Se
	Reading	Reading
#1		
#2		
Mean		
%RSD		

User: STEVE WORKMAN

#1
#2
Mean 0.000
%RSD 0.000

Method : Paragon2
File : 131218A
SampleId1 : C2
SampleId2 :
Analysis commenced : 12/18/2013 12:11:21
Dilution ratio : 1.00000 to 1.00000 Tray :
Position : TUBE13

Printed : 12/18/2013 15:41:53
[STD]

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	59.700	122.400	74.900	34.300	10.100	316.700	289.400	28.600	57.700
#2	59.800	119.900	76.500	34.000	10.100	311.000	287.200	28.600	56.400
Mean	59.750	121.150	75.700	34.150	10.100	313.850	288.300	28.600	57.050
%RSD	0.118	1.459	1.495	0.621	0.000	1.284	0.540	0.000	1.611
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	48.900	118.000	40.700	25.400	318.800	54.900	77.500	6.600	36.700
#2	48.800	118.600	41.000	25.100	320.300	55.100	76.400	6.500	36.600
Mean	48.850	118.300	40.850	25.250	319.550	55.000	76.950	6.550	36.650
%RSD	0.145	0.359	0.519	0.840	0.332	0.257	1.011	1.080	0.193
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	76.400	98.900	47.000	995.600	317.000	78.900	67.900	174.900	113.600
#2	74.700	97.700	47.700	984.100	317.800	78.100	67.800	175.500	111.900
Mean	75.550	98.300	47.350	989.850	317.400	78.500	67.850	175.200	112.750
%RSD	1.591	0.863	1.045	0.822	0.178	0.721	0.104	0.242	1.066
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	213.400	32.100	18.200	100.600	81.500	954.700	69.500	9.400	3106.900
#2	213.600	32.200	18.300	101.500	81.400	949.700	68.400	9.400	3097.600
Mean	213.500	32.150	18.250	101.050	81.450	952.200	68.950	9.400	3102.250
%RSD	0.066	0.220	0.387	0.630	0.087	0.371	1.128	0.000	0.212
	Pb	Se							
	Reading	Reading							

Method : Paragon2
File : 131218A
SampleId1 : C1
SampleId2 :
Analysis commenced : 12/18/2013 12:12:58

Printed : 12/18/2013 15:41:53
[STD]

Dilution ratio : 1.00000 to 1.00000 Tray :

Position : TUBE14

Raw intensities

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	231.700	228.000	83.600	70.500	12.500	534.000	2253.400	87.600	67.800
#2	233.600	226.800	81.500	70.400	12.600	532.900	2260.200	87.800	66.300
Mean	232.650	227.400	82.550	70.450	12.550	533.450	2256.800	87.700	67.050
%RSD	0.577	0.373	1.799	0.100	0.563	0.146	0.213	0.161	1.582

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	66.500	464.800	93.600	65.700	329.100	63.100	353.200	17.700	39.900
#2	66.200	463.200	93.400	65.300	328.500	62.800	352.400	17.700	39.800
Mean	66.350	464.000	93.500	65.500	328.800	62.950	352.800	17.700	39.850
%RSD	0.320	0.244	0.151	0.432	0.129	0.337	0.160	0.000	0.177

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	88.400	136.100	58.500	1338.500	454.400	717.600	75.000	193.300	120.200
#2	87.900	134.900	60.500	1336.000	459.600	715.800	75.200	196.300	123.600
Mean	88.150	135.500	59.500	1337.250	457.000	716.700	75.100	194.800	121.900
%RSD	0.401	0.626	2.377	0.132	0.805	0.178	0.188	1.089	1.972

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading	Reading
#1	467.600	35.700	44.000	307.000	92.800	8806.200	177.200	10.300	30144.800
#2	467.200	36.500	44.200	308.400	94.300	8815.600	179.600	10.300	30129.800
Mean	467.400	36.100	44.100	307.700	93.550	8810.900	178.400	10.300	30137.300
%RSD	0.061	1.567	0.321	0.322	1.134	0.075	0.951	0.000	0.035

	Pb	Se
	Reading	Reading
#1		
#2		
Mean	0.000	0.000
%RSD	0.000	0.000

Line calibration information

Analyte	Reporting name	C0	C1	C2	C3	Correlation coefficient	Low limit	High limit	Date of last regression
Ag 328.068	Ag	-0.0003283	0.0008041	0.0	0	1.0000	-0.050	2473.350	12/18/2013 12:16:09
Al 308.215	Al	-0.3929389	0.0053913	0.0000000	0	0.99738	68.600	73867.500	12/18/2013 12:16:09
As 189.042/2	As	0.0088386	0.0028045	0.0000001	0	1.0000	-3.400	1722.900	12/18/2013 12:16:09
B 249.678/2	B	-0.0076354	0.0010757	0.0	0	1.0000	1.200	9127.350	12/18/2013 12:16:09
Ba 493.409	Ba	-0.0007757	0.0003513	0.0	0	1.0000	0.100	26461.700	12/18/2013 12:16:09
Be 313.042	Be	-0.0076396	0.0000254	0.0	0	1.0000	280.800	39141.100	12/18/2013 12:16:09
Bi 223.061	Bi	-0.0016324	0.0027389	0.0000000	0	1.0000	0.450	1802.500	12/18/2013 12:16:10
Ca 317.933	Ca	-0.0598471	0.0042985	0.0000000	0	1.0000	2.250	86269.150	12/18/2013 12:16:10
Cd 226.502/2	Cd	-0.0010569	0.0003136	0.0	0	1.0000	2.200	15219.350	12/18/2013 12:16:10
Co 228.616	Co	0.0005584	0.0010639	0.0	0	1.0000	-0.850	4671.350	12/18/2013 12:16:10
Cr 267.716	Cr	-0.0002212	0.000443	0.0	0	1.0000	0.050	22323.200	12/18/2013 12:16:10
Cu 324.753	Cu	-0.0177234	0.0012089	0.0	0	1.0000	14.200	8260.700	12/18/2013 12:16:10
Fe 259.94	Fe	-0.0096867	0.0014549	0.0000000	0	0.99824	1.650	75961.500	12/18/2013 12:16:10
K 766.491	K	-0.2381023	0.0024792	0.0	0	0.99995	314.350	82025.250	12/18/2013 12:16:10
Li 670.784	Li	0.0428829	0.0000307	0.0	0	0.99988	50.300	324815.250	12/18/2013 12:16:11
Mg 279.078	Mg	0.033475	0.0057554	0.0000000	0	1.0000	-0.700	71336.600	12/18/2013 12:16:11
Mn 257.610	Mn	-0.0005354	0.0012225	0.0000000	0	1.0000	0.150	7663.000	12/18/2013 12:16:11
Mo 202.030/2	Mo	-0.0028659	0.0012076	0.0	0	1.0000	0.600	8092.800	12/18/2013 12:16:11
Na 588.995	Na	0.5980853	0.0004481	0.0	0	0.99974	64.850	156214.250	12/18/2013 12:16:11
Ni 231.604	Ni	-0.002912	0.0005482	0.0	0	1.0000	3.700	18022.650	12/18/2013 12:16:11
P 178.287/2	P	-0.0105578	0.0045585	0.0000001	0	1.0000	0.100	9484.400	12/18/2013 12:16:11
Pb 220.351	Pb I	0.0043256	0.0003836	0.0	0	1.0000	-13.400	25854.250	12/18/2013 12:16:12
Pb 220.352/2	Pb II	-0.003624	0.0006693	0.0	0	1.0000	3.700	14684.350	12/18/2013 12:16:12
S 182.04/2	S	-0.0960284	0.0702188	0.0000028	0	1.0000	1.050	694.200	12/18/2013 12:16:12
Sb 206.838/2	Sb	-0.004426	0.0027428	-0.0000001	0	0.99999	1.400	750.700	12/18/2013 12:16:12
Se 196.021	Se I	0.0007825	0.00248	0.0000000	0	1.0000	-0.800	1945.050	12/18/2013 12:16:12
Se 196.021/2	Se II	-0.0027964	0.0014975	0.0000000	0	1.0000	1.250	3198.400	12/18/2013 12:16:12
Si 288.158	Si	-0.1867511	0.0016117	0.0	0	1.0000	108.050	56968.550	12/18/2013 12:16:12
Sn 189.989	Sn	-0.0023427	0.0097253	0.0000000	0	1.0000	-0.200	9709.750	12/18/2013 12:16:13
Sr 421.552	Sr	-0.0023892	0.0001044	0.0	0	1.0000	0.400	170730.050	12/18/2013 12:16:13

Method report Paragon2

Ti 334.941	Ti	-0.0014371	0.000133	0.0	0	1.0000	-6.950	102281.250	12/18/2013 12:16:13
Tl 190.864/2	Tl	0.0108313	0.0028959	0.0000000	0	1.0000	-1.900	1704.250	12/18/2013 12:16:13
U 385.958	U	-0.0189128	0.0059383	0.0	0	1.0000	0.300	8349.150	12/18/2013 12:16:13
V 292.402	V	-0.0006378	0.000529	0.0	0	1.0000	0.750	9423.050	12/18/2013 12:16:13
Zn 206.2	Zn	-0.0036722	0.0076228	0.0000001	0	1.0000	0.800	1289.750	12/18/2013 12:16:13
Zr 339.198	Zr	-0.0003049	0.0001724	0.0	0	1.0000	2.750	29027.500	12/18/2013 12:16:15

Method : Paragon2
SampleId1 : MIXAHIGH
File : 131218A
SampleId2 :
Analysis commenced : 12/18/2013 12:17:46
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:18
[CV]
Position : TUBE11

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00044	506.43413	0.01164	-0.00785	0.00028	0.00089	0.00524	0.00159
#2	-0.00043	507.91366	0.00379	-0.00753	0.00014	0.00082	0.00414	0.00092
Mean	-0.00043	507.17390	0.00772	-0.00769	0.00021	0.00086	0.00469	0.00126
%RSD	1.31443	0.20628	71.95361	2.96762	47.78359	5.99682	16.57097	37.52415
	Co	Cr	Cu	Fe	K	Li	Mg	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00662	-0.00132	-0.00422	203.72976	249.34100	9.92955	504.37742	-0.00214
#2	0.00524	-0.00096	-0.00421	204.62499	249.28567	9.92937	505.95204	-0.00130
Mean	0.00593	-0.00114	-0.00422	204.17738	249.31333	9.92946	505.16473	-0.00172
%RSD	16.49294	22.41328	0.04916	0.31004	0.01569	0.00131	0.22041	34.77582
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	153.29129	0.00438	0.00631	0.01706	-0.00427	-0.00474	0.01120	-0.02050
#2	152.27878	0.00284	0.01816	-0.00184	-0.00368	0.01633	0.00160	-0.01662
Mean	152.78504	0.00361	0.01224	0.00761	-0.00397	0.00579	0.00640	-0.01856
%RSD	0.46860	30.05455	68.49977	175.54426	10.45521	257.08181	105.99078	14.75410
	Pb	Se	Sn	Ti	Tl	U	V	Zr
	calc	calc	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00283	-0.00100	-0.00721	0.00092	-0.01893	0.12002	-0.00187	0.00601
#2	-0.00307	-0.00725	-0.01012	0.00081	-0.01341	0.10959	-0.00461	0.00582
Mean	-0.002375	-0.00867	-0.00867	0.00086	-0.01617	0.11480	-0.00324	0.00591
%RSD	4.34001	23.80748	0.81178	8.70675	24.15733	6.42363	59.87866	2.27044

Method : Paragon2
SampleId1 : MIXBHGH
File : 131218A
SampleId2 :
Analysis commenced : 12/18/2013 12:19:23
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:18
[CV]
Position : TUBE6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.00486	0.09154	5.04904	10.00131	10.07411	0.97436	0.00842	-0.00654	4.97474
#2	2.00112	0.07104	5.00747	9.98835	10.06678	0.97835	0.00469	-0.01600	4.93696
Mean	2.00299	0.08129	5.02825	9.99483	10.07045	0.97635	0.00656	-0.01127	4.95585
%RSD	0.13197	17.83035	0.58454	0.09169	0.05146	0.28916	40.17893	59.33203	0.53909

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.97812	9.91312	10.09393	0.00603	0.59919	0.04545	0.02427	9.86287	10.03617
#2	4.97765	9.91503	10.09272	0.00093	0.59447	0.04530	0.02139	9.90306	10.00367
Mean	4.97788	9.91407	10.09332	0.00348	0.59683	0.04538	0.02283	9.88297	10.01992
%RSD	0.00670	0.01358	0.00852	103.44375	0.55915	0.22965	8.91378	0.28753	0.22935

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.65720	10.12208	50.02813	9.96616	9.87974	0.03037	2.01706	4.99397	4.91021
#2	0.65343	10.03593	50.28396	9.97040	10.03050	0.02335	2.01297	5.00435	5.05319
Mean	0.65532	10.07901	50.15605	9.96828	9.95512	0.02686	2.01501	4.99916	4.98170
%RSD	0.40692	0.60441	0.36067	0.03010	1.07085	18.48602	0.14337	0.14674	2.02949

	Si	Sn	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.53775	9.97632	9.85794	5.01391	-0.06643	4.97856	9.78508	-0.01318
#2	49.80243	9.97624	9.92377	5.05596	-0.06880	4.98830	9.78744	-0.01370
Mean	49.67009	9.97628	9.89086	5.03494	-0.06761	4.98343	9.78626	-0.01344
%RSD	0.37680	0.00054	0.47064	0.59051	2.47870	0.13826	0.01709	2.71591

	Pb	Se
	calc	calc
#1	9.90852	4.93810
#2	10.01049	5.03692
Mean	9.95950	4.98751
%RSD	0.72398	1.40107

Method : Paragon2
File : 131218A
sampleId1 : MIXCHIGH
sampleId2 :
Analysis commenced : 12/18/2013 12:21:00
Dilution ratio : 1.00000 to 1.00000 Tray :
Position : TUBE14

Printed : 12/18/2013 16:48:18
[CV]

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00802	-0.13502	-0.00378	0.01711	-0.00088	0.00103	5.06247	0.03043	-0.00069
#2	0.00849	-0.13674	-0.00883	0.01452	-0.00078	0.00099	5.03131	0.02441	-0.00062
Mean	0.00825	-0.13588	-0.00630	0.01582	-0.00083	0.00101	5.04689	0.02742	-0.00065
%RSD	4.02457	0.89119	56.61028	11.54348	8.99592	3.10493	0.43664	15.52145	7.13848

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#2	0.00469	-0.01175	0.01253	-0.01114	0.60018	0.04510	0.00594
	0.00447	-0.01300	0.01310	-0.01129	0.59472	0.04509	0.00570
Mean	0.00458	-0.01238	0.01282	-0.01121	0.59745	0.04509	0.00582
%RSD	3.27341	7.15978	3.10190	0.91735	0.64676	0.01444	2.96987

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
#1	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#2	0.64172	0.00317	0.04370	-0.03693	0.03080	50.31132	0.00332	-0.00986	0.00483
	0.64149	0.00153	0.04233	-0.03537	0.02922	50.29649	0.00742	-0.02117	0.00378
Mean	0.64161	0.00235	0.04301	-0.03615	0.03001	50.30390	0.00537	-0.01551	0.00430
%RSD	0.02473	49.47452	2.24894	3.05641	3.72704	0.02084	54.03658	51.56540	17.25807

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
#1	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#2	0.05280	0.01515	-0.00004	0.00974	0.00880	50.21427	-0.01076	-0.00367	5.04197
	0.03613	0.01321	0.00008	0.00944	0.01613	50.36477	-0.01208	-0.00215	5.03898
Mean	0.04447	0.01418	0.00002	0.00959	0.01247	50.28952	-0.01142	-0.00291	5.04047
%RSD	26.50157	9.69825	453.33871	2.15773	41.56851	0.21161	8.19750	37.04689	0.04197

	Pb	Se
	calc	calc
#1	0.00825	-0.00006
#2	0.00771	-0.00453
Mean	0.00798	-0.00229
%RSD	4.73859	137.71425

Method : Paragon2
 File : 131218A
 SampleId1 : ICV
 SampleId2 :
 Analysis commenced : 12/18/2013 12:30:20
 Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:18
 [CV]

Position : STD5

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
#1	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#2	0.10077	25.14587	0.24902	0.49078	0.48729	0.25146	0.25428	25.19315	0.25014
	0.09989	25.27498	0.25239	0.49067	0.48530	0.25258	0.24879	25.14233	0.24810
Mean	0.10033	25.21043	0.25070	0.49073	0.48630	0.25202	0.25154	25.16774	0.24912
%RSD	0.62245	0.36211	0.95233	0.01553	0.28830	0.31369	1.54243	0.14280	0.57906

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
#1	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#2	0.24335	0.51045	0.49159	9.94099	24.22858	0.24907	24.83931	0.50245	0.48532
	0.24408	0.51192	0.48989	9.94391	24.24032	0.24927	24.91725	0.50505	0.48132
Mean	0.24371	0.51118	0.49074	9.94245	24.23445	0.24917	24.87828	0.50375	0.48332
%RSD	0.21374	0.20309	0.24392	0.02076	0.03425	0.05562	0.22154	0.36521	0.58437

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	24.22443	0.49794	2.53673	0.48654	0.49734	2.49886	0.25929	0.49660	0.48495
#2	24.14884	0.48795	2.56388	0.48774	0.50695	2.53407	0.25518	0.50459	0.49976
Mean	24.18663	0.49294	2.55030	0.48714	0.50214	2.51647	0.25724	0.50059	0.49236
%RSD	0.22099	1.43291	0.75291	0.17471	1.35291	0.98947	1.13079	1.12934	2.12696

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.51298	0.49050	0.24771	0.24919	0.24475	2.47017	0.25241	0.49270	0.50791
#2	2.53523	0.50217	0.24669	0.25189	0.25055	2.46957	0.25353	0.49349	0.50754
Mean	2.52411	0.49633	0.24720	0.25054	0.24765	2.46987	0.25297	0.49310	0.50772
%RSD	0.62313	1.66258	0.29251	0.76276	1.65518	0.01710	0.31337	0.11380	0.05099

	Pb	Se
	calc	calc
#1	0.49374	0.48883
#2	0.50055	0.50137
Mean	0.49715	0.49510
%RSD	0.96847	1.79107

Method : Paragon2
File : 131218A
SampleId1 : ICB
SampleId2 :
Analysis commenced : 12/18/2013 12:33:42
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:18
[CB]

Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00016	0.02219	0.00479	-0.00430	-0.00028	0.00010	-0.00086	-0.03492	-0.00018
#2	0.00041	0.02169	0.00143	-0.00505	-0.00032	0.00001	-0.00791	-0.03663	0.00022
Mean	0.00029	0.02194	0.00311	-0.00468	-0.00030	0.00006	-0.00439	-0.03577	0.00002
%RSD	61.36610	1.61148	76.55745	11.38354	8.24060	105.12260	113.60717	3.39867	1461.88765

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00014	-0.00031	-0.00188	0.00465	0.00685	0.00295	0.04383	-0.00015	-0.00166
#2	-0.00093	-0.00044	-0.00188	0.00389	0.00451	0.00296	0.04729	-0.00015	-0.00057
Mean	-0.00039	-0.00037	-0.00188	0.00427	0.00568	0.00296	0.04556	-0.00015	-0.00111
%RSD	190.49033	25.73421	0.09409	12.63590	29.17941	0.08371	5.35942	0.00000	68.92427

	Na	Ni	P	Pb	Pb	S	Sb	Se	Se
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.04756	-0.00055	-0.00667	-0.00009	-0.00033	-0.01878	-0.00251	-0.00493	0.00170
#2	0.04746	-0.00066	-0.00376	-0.00142	0.00017	-0.01176	-0.00827	0.00350	0.00020
Mean	0.04751	-0.00061	-0.00521	-0.00076	-0.00008	-0.01527	-0.00539	-0.00072	0.00095
%RSD	0.15348	12.71446	39.54009	125.26778	448.06015	32.51260	75.46179	830.97960	111.66091

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01468	-0.00429	-0.00210	-0.00217	-0.00020	-0.01535	-0.00002	-0.00209	0.00071

#2	-0.01315	-0.00331	-0.00211	-0.00213	-0.00323	-0.02426	-0.00019	-0.00367	0.00046
Mean	-0.01392	-0.00380	-0.00211	-0.00215	-0.00171	-0.01981	-0.00011	-0.00288	0.00059
%RSD	7.77573	18.10077	0.37039	1.31327	125.22668	31.79528	111.83464	38.90607	31.26025

	Pb	Se
	calc	calc
#1	-0.00025	-0.00051
#2	-0.00036	0.00130
Mean	-0.00030	0.00039
%RSD	26.67968	324.51675

Method : Paragon2

File : 131218A

Printed : 12/18/2013 16:48:19

SampleId1 : CRI

SampleId2 :

[CV]

Analysis commenced : 12/18/2013 12:35:19

Dilution ratio : 1.00000 to 1.00000

Tray :

Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.02176	0.45030	0.00451	0.40069	0.41828	0.01274	0.04790	5.14988	0.01086
#2	0.02071	0.43545	0.01713	0.39875	0.41690	0.01259	0.04269	5.14293	0.01241
Mean	0.02124	0.44288	0.01082	0.39972	0.41759	0.01266	0.04530	5.14641	0.01163
%RSD	3.49572	2.37009	82.47354	0.34306	0.23356	0.79352	8.14339	0.09542	9.38839

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.10207	0.02316	0.05089	0.19615	4.17192	0.02055	5.19106	0.03346	0.01984
#2	0.10101	0.02325	0.05137	0.19768	4.16535	0.02057	5.21710	0.03372	0.02068
Mean	0.10154	0.02321	0.05113	0.19692	4.16863	0.02056	5.20408	0.03359	0.02026
%RSD	0.74270	0.27973	0.66713	0.54909	0.11135	0.09630	0.35383	0.54434	2.95052

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.10796	0.08491	0.19898	0.00933	0.00726	0.17787	0.12485	0.00858	0.01370
#2	4.09442	0.08327	0.20628	0.00481	0.00991	0.18489	0.12130	0.00338	0.01296
Mean	4.10119	0.08409	0.20263	0.00707	0.00858	0.18138	0.12308	0.00598	0.01333
%RSD	0.23346	1.38313	2.54659	45.26859	21.85805	2.73834	2.03924	61.57654	3.97209

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09769	0.09781	0.02081	0.02009	0.02688	0.18755	0.10935	0.04070	0.05499
#2	0.10074	0.10364	0.02072	0.02031	0.01779	0.19170	0.10901	0.03911	0.05539
Mean	0.09922	0.10072	0.02077	0.02020	0.02233	0.18962	0.10918	0.03991	0.05519
%RSD	2.17254	4.09643	0.30089	0.79167	28.77910	1.54961	0.21692	2.80811	0.50722

	Pb	Se
	calc	calc
#1	0.00795	0.01200
#2	0.00821	0.00977

Mean 0.00808 0.01088User: STEVE WORKMAN
%RSD 2.30259 14.51025

Method : Paragon2 File : 131218A
SampleId1 : ICSA SampleId2 :
Analysis commenced : 12/18/2013 12:36:57
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:19
[ICSAB]
Position : STD3

Final concentrations

	Ag ppm	Al ppm	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca ppm	Cd ppm
#1	-0.00036	268.03139	-0.00502	-0.00634	-0.00021	0.00110	0.00410	262.96680	0.00029
#2	-0.00134	269.56736	-0.00026	-0.00624	-0.00021	0.00085	-0.00059	262.27654	0.00073
Mean	-0.00085	268.79938	-0.00264	-0.00629	-0.00021	0.00097	0.00176	262.62167	0.00051
%RSD	80.91083	0.40405	127.65940	1.20910	0.00000	18.06207	188.85264	0.18585	60.28805

	Co ppm	Cr ppm	Cu ppm	Fe ppm	K ppm	Li ppm	Mg ppm	Mn ppm	Mo ppm
#1	0.00301	-0.00048	-0.00419	111.75038	-0.03507	0.00332	263.83596	0.00244	-0.00130
#2	0.00301	-0.00068	-0.00432	112.36001	-0.03585	0.00334	264.98493	0.00257	-0.00262
Mean	0.00301	-0.00058	-0.00426	112.05519	-0.03546	0.00333	264.41045	0.00250	-0.00196
%RSD	0.01449	23.89844	2.05586	0.38470	1.55756	0.52061	0.30727	3.65287	47.91489

	Na ppm	Ni ppm	P ppm	Pb I ppm	Pb II ppm	S ppm	Sb ppm	Se I ppm	Se II ppm
#1	0.07061	0.00169	-0.00133	0.00072	0.00613	-0.03283	-0.00224	0.01345	-0.00802
#2	0.06984	0.00065	0.00110	-0.00196	-0.00003	-0.01176	0.00598	0.00329	-0.00793
Mean	0.07023	0.00117	-0.00011	-0.00062	0.00305	-0.02230	0.00187	0.00837	-0.00798
%RSD	0.77914	62.84773	1538.54160	304.99866	142.69506	66.81569	310.41748	85.84870	0.79563

	Si ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	U ppm	V ppm	Zn ppm	Zr ppm
#1	-0.01808	0.00252	0.00015	-0.00037	-0.01514	0.03586	-0.00283	-0.00446	0.00268
#2	-0.01504	-0.00040	0.00012	-0.00067	-0.01755	0.04592	-0.00296	-0.00684	0.00294
Mean	-0.01656	0.00106	0.00013	-0.00052	-0.01634	0.04089	-0.00290	-0.00565	0.00281
%RSD	12.96871	194.28360	17.53955	39.85838	10.44269	17.39430	3.19923	29.73123	6.49338

	Pb calc	Se calc
#1	0.00433	-0.00087
#2	-0.00067	-0.00420
Mean	0.00183	-0.00253
%RSD	193.28365	92.77552

Method : Paragon2 File : 131218A
SampleId1 : ICSAB SampleId2 :
Analysis commenced : 12/18/2013 12:38:34
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:19
[ICSAB]
Position : STD4

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.20513	267.69641	0.10497	0.94504	0.47277	0.47840	0.51181	264.26490	1.01723
#2	0.20537	269.83273	0.09486	0.94158	0.47160	0.48320	0.51419	263.04076	1.00185
Mean	0.20525	268.76457	0.09992	0.94331	0.47219	0.48080	0.51300	263.65283	1.00954
%RSD	0.08253	0.56206	7.15369	0.25899	0.17493	0.70605	0.32834	0.32831	1.07730

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.46950	0.48085	0.52119	112.49304	-0.02752	1.15468	263.77919	0.47448	0.93353
#2	0.47064	0.48069	0.52131	112.80458	-0.03090	1.15515	265.50291	0.47916	0.93183
Mean	0.47007	0.48077	0.52125	112.64881	-0.02921	1.15492	264.64105	0.47682	0.93268
%RSD	0.17175	0.02233	0.01585	0.19556	8.19334	0.02871	0.46057	0.69425	0.12875

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.05602	0.94990	1.01892	0.04733	0.05651	1.00710	0.61657	0.04702	0.04406
#2	0.05607	0.92562	1.01696	0.04909	0.05735	1.03522	0.60846	0.03611	0.04890
Mean	0.05604	0.93776	1.01794	0.04821	0.05693	1.02116	0.61251	0.04157	0.04648
%RSD	0.06507	1.83130	0.13588	2.59119	1.04835	1.94740	0.93583	18.55758	7.36386

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.94397	1.02866	0.94671	0.94933	0.10613	9.44825	0.48571	0.87703	0.48412
#2	0.95649	1.01599	0.94093	0.96271	0.09020	9.46282	0.48573	0.88975	0.48201
Mean	0.95023	1.02233	0.94382	0.95602	0.09816	9.45553	0.48572	0.88339	0.48307
%RSD	0.93158	0.87597	0.43344	0.98994	11.47612	0.10899	0.00289	1.01765	0.30819

	Pb	Se
	calc	calc
#1	0.05345	0.04505
#2	0.05460	0.04464
Mean	0.05402	0.04485
%RSD	1.50683	0.63717

Method : Paragon2 File : 131218A
SampleId1 : CCV SampleId2 :
Analysis commenced : 12/18/2013 12:40:12
Dilution ratio : 1.00000 to 1.00000 Tray :
Position : STD1

Printed : 12/18/2013 16:48:19

[CV]

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.20154	50.84194	0.49521	0.99082	0.97146	0.49166	0.50323	50.40952	0.50613
#2	0.20091	50.79360	0.48562	0.98175	0.96586	0.49193	0.49929	50.26841	0.49869
Mean	0.20122	50.81777	0.49041	0.98628	0.96866	0.49179	0.50126	50.33896	0.50241
%RSD	0.22035	0.06727	1.38384	0.65033	0.40891	0.03899	0.55606	0.19822	1.04730

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48490	1.00193	0.99116	20.16313	51.55770	0.54715	49.63887	0.98210	0.96871
#2	0.48308	0.99856	0.98390	20.11940	51.35629	0.54524	49.50637	0.98118	0.96567
Mean	0.48399	1.00024	0.98753	20.14126	51.45700	0.54619	49.57262	0.98164	0.96719
%RSD	0.26587	0.23814	0.51981	0.15354	0.27677	0.24740	0.18900	0.06599	0.22174

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	52.97402	0.98656	5.07010	0.97897	1.00033	5.03075	0.51479	1.00081	0.97633
#2	52.65617	0.97782	5.11122	0.96603	1.00776	5.08725	0.50666	1.00660	1.01872
Mean	52.81510	0.98219	5.09066	0.97250	1.00404	5.05900	0.51072	1.00370	0.99753
%RSD	0.42556	0.62904	0.57112	0.94143	0.52346	0.78976	1.12489	0.40809	3.00475

	Si	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.94811	1.01070	0.49684	0.49433	4.87017	0.49825	0.97637	1.00617
#2	4.95595	1.01168	0.49379	0.52053	4.87557	0.49756	0.98035	1.00084
Mean	4.95203	1.01119	0.49531	0.50743	4.87287	0.49791	0.97836	1.00350
%RSD	0.11186	0.06799	0.43608	3.65121	0.07835	0.09750	0.28723	0.37533

	Pb	Se
	calc	calc
#1	0.99322	0.98448
#2	0.99386	1.01469
Mean	0.99354	0.99959
%RSD	0.04598	2.13650

Method : Paragon2 File : 131218A
SampleId1 : CCB SampleId2 :
Analysis commenced : 12/18/2013 12:41:49
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:19

[CB]

Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00047	0.06782	0.00703	-0.00452	-0.00007	0.00068	-0.00452	-0.02245	-0.00057
#2	-0.00008	0.03984	-0.00558	-0.00441	-0.00011	0.00025	-0.00295	-0.02632	-0.00033
Mean	-0.00028	0.05383	0.00072	-0.00446	-0.00009	0.00047	-0.00373	-0.02438	-0.00045
%RSD	100.52005	36.74436	1231.09792	1.70463	27.39928	64.93976	29.75170	11.21992	38.18662

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00050	0.00069	-0.00176	0.01014	-0.01424	0.00295	0.05707	0.00011	-0.00009
#2	-0.00040	0.00012	-0.00091	0.00922	-0.00799	0.00296	0.05650	0.00024	-0.00021
Mean	-0.00045	0.00041	-0.00134	0.00968	-0.01111	0.00295	0.05678	0.00018	-0.00015
%RSD	16.73790	99.64778	44.63060	6.68377	39.75249	0.33502	0.71670	52.07475	57.33696

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.06138	-0.00088	-0.00813	0.00133	0.00087	0.00931	-0.00086	-0.00692	0.00215
#2	0.05808	-0.00072	-0.00716	0.00068	0.00065	-0.01878	-0.00196	-0.00567	0.00574
Mean	0.05973	-0.00080	-0.00764	0.00101	0.00076	-0.00474	-0.00141	-0.00630	0.00394
%RSD	3.90755	14.50686	8.99044	45.76127	20.22722	419.12664	54.90244	13.98203	64.43107

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01230	-0.00526	-0.00200	-0.00206	0.00339	-0.02427	-0.00041	-0.00367	0.00071
#2	-0.00621	0.00933	-0.00198	-0.00194	0.00449	-0.01536	-0.00047	-0.00446	0.00101
Mean	-0.00926	0.00204	-0.00199	-0.00200	0.00394	-0.01981	-0.00044	-0.00407	0.00086
%RSD	46.50382	506.63324	0.78389	4.22772	19.85922	31.79248	9.16388	13.77044	23.98848

	Pb	Se
	calc	calc
#1	0.00103	-0.00087
#2	0.00066	0.00194
Mean	0.00084	0.00053
%RSD	30.36283	372.27879

Method : Paragon2
File : 131218A
SampleId1 : IP131217-6MB
SampleId2 :
Analysis commenced : 12/18/2013 12:43:27
Dilution ratio : 1.00000 to 1.00000 Tray :
Position : TUBE1

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00016	0.03816	-0.00110	-0.00538	-0.00071	0.00042	-0.00243	-0.04781	-0.00001
#2	-0.00055	0.02285	0.00002	-0.00634	-0.00078	0.00008	-0.00869	-0.04695	-0.00106
Mean	-0.00035	0.03051	-0.00054	-0.00586	-0.00074	0.00025	-0.00556	-0.04738	-0.00054
%RSD	78.74085	35.47576	147.59940	11.68088	6.70851	98.31064	79.61786	1.28304	137.57220

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00018	-0.00011	-0.00236	-0.00465	-0.02101	0.00286	0.02945	-0.00041	-0.00214
#2	-0.00146	0.00013	-0.00140	-0.00511	-0.03246	0.00285	0.02830	-0.00028	-0.00238
Mean	-0.00082	0.00001	-0.00188	-0.00488	-0.02674	0.00286	0.02887	-0.00034	-0.00226
%RSD	109.99117	2610.71635	36.46749	6.62495	30.29686	0.25972	2.81921	26.76270	7.54918

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.04014	-0.00105	-0.00570	0.00010	-0.00123	-0.01878	-0.00307	-0.01088	-0.00220
#2	0.03962	-0.00121	-0.01347	0.00053	-0.00207	-0.01878	-0.00197	-0.00667	-0.00280
Mean	0.03988	-0.00113	-0.00959	0.00032	-0.00165	-0.01878	-0.00252	-0.00878	-0.00250
%RSD	0.91404	10.28624	57.34176	95.18583	35.76644	0.00000	30.73620	33.91519	16.95855

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
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	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01282	-0.00429	-0.00233	-0.00232	-0.00379	-0.01772	-0.00042	-0.00130	0.00051
#2	-0.00622	0.00233	-0.00233	-0.00235	-0.00379	-0.02663	-0.00019	-0.00130	0.00023
Mean	-0.00952	-0.00088	-0.00233	-0.00235	-0.00379	-0.02217	-0.00030	-0.00130	0.00037
%RSD	49.03752	546.28207	0.00000	1.20853	0.11287	28.40382	52.12740	0.00000	53.05203

	pb	se
	calc	calc
#1	-0.00079	-0.00509
#2	-0.00120	-0.00409
Mean	-0.00099	-0.00459
%RSD	29.46445	15.44810

Method : Paragon2 File : 131218A
SampleId1 : IP131217-6LCs **SampleId2** :
Analysis commenced : 12/18/2013 12:44:58
Dilution ratio : 1.00000 to 1.00000 Tray :
Position : TUBE2
Printed : 12/18/2013 16:48:20
[SAMPLE]

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00064	2.03489	1.04888	1.03229	1.00069	0.05241	-0.00143	39.40417	0.05288
#2	-0.00032	2.04863	1.05030	1.02181	1.00084	0.05249	-0.00586	39.20382	0.05139
Mean	0.00016	2.04176	1.04959	1.02705	1.00077	0.05245	-0.00365	39.30399	0.05214
%RSD	418.89962	0.47586	0.09580	0.72128	0.01009	0.11739	85.82935	0.36044	2.01449

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.50711	0.20190	0.25177	0.93728	39.46978	0.54338	39.30487	0.50583	1.03168
#2	0.50614	0.20247	0.25129	0.93651	39.62106	0.54603	39.48340	0.50817	1.02513
Mean	0.50662	0.20218	0.25153	0.93689	39.54542	0.54470	39.39414	0.50700	1.02840
%RSD	0.13529	0.19957	0.13564	0.05827	0.27050	0.34349	0.32044	0.32659	0.45058

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	39.53712	0.51056	-0.00473	0.51841	0.51713	0.00228	0.46714	2.12413	2.03395
#2	39.49825	0.50019	-0.00230	0.51778	0.53136	-0.00474	0.46304	2.13155	2.11384
Mean	39.51768	0.50537	-0.00351	0.51809	0.52424	-0.00123	0.46509	2.12784	2.07390
%RSD	0.06955	1.45146	48.90170	0.08571	1.91878	404.40402	0.62385	0.24647	2.72379

	Si	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.08917	0.52676	0.48549	2.08366	-0.01988	0.53484	0.50143	0.00267
#2	1.09982	0.52648	0.49067	2.11790	-0.02404	0.53601	0.50381	0.00139
Mean	1.09450	0.50919	0.48808	2.10078	-0.02196	0.53542	0.50262	0.00203
%RSD	0.68809	0.40443	0.75088	1.15245	13.38178	0.15521	0.33494	44.49174

Se
calc

#1 0.51756 2.06398 User: STEVE WORKMAN
#2 0.52684 2.11973
Mean 0.52220 2.09186
%RSD 1.25652 1.88465

Method : Paragon2 File : 131218A
SampleId1 : 1312153-1 SampleId2 :
Analysis commenced : 12/18/2013 12:46:30
Dilution ratio : 1.00000 to 1.00000 Tray :
Position : TUBE3

Final concentrations

#1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00047	0.02836	-0.00222	0.05175	0.13616	0.00033	0.00070	30.25039	-0.00023
#2	-0.00143	0.01870	0.00816	0.05024	0.13613	0.00009	-0.00191	30.19686	-0.00077
Mean	-0.00095	0.02353	0.00297	0.05100	0.13615	0.00021	-0.00060	30.22363	-0.00050
%RSD	71.81896	29.02589	247.18983	2.08863	0.01829	80.34735	306.47289	0.12524	77.01438
#1	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00074	0.00026	-0.00164	0.00358	2.13898	0.01516	27.61489	0.00063	0.00752
#2	-0.00084	0.00008	-0.00164	0.00328	2.13819	0.01514	27.69898	0.00063	0.00812
Mean	-0.00079	0.00017	-0.00164	0.00343	2.13858	0.01515	27.65694	0.00063	0.00782
%RSD	9.49869	78.21499	0.01439	6.29089	0.02594	0.06535	0.21498	0.00000	5.45897

#1	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	37.62442	0.00027	0.01519	0.00173	-0.00004	7.44237	-0.00576	-0.00072	0.00439
#2	37.48772	-0.00099	0.00013	-0.00421	0.00409	7.52028	0.00001	0.00077	0.00694
Mean	37.55607	-0.00036	0.00766	-0.00124	0.00202	7.48133	-0.00287	0.00003	0.00567
%RSD	0.25738	245.56555	138.99848	338.95622	144.27979	0.73631	141.78523	3896.66599	31.77570

#1	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	12.76112	-0.01693	0.63816	-0.00206	0.00998	-0.01892	0.00708	-0.00367	-0.00233
#2	12.86188	-0.01304	0.63531	-0.00228	0.01053	-0.02010	0.00607	-0.00130	-0.00249
Mean	12.81150	-0.01498	0.63674	-0.00217	0.01026	-0.01951	0.00657	-0.00248	-0.00241
%RSD	0.55613	18.36002	0.31680	6.93967	3.81167	4.30331	10.82593	67.66707	4.60088

#1	Pb	Se
	calc	calc
#1	0.00055	0.00269
#2	0.00132	0.00488
Mean	0.00094	0.00379
%RSD	58.39657	40.94521

Method : Paragon2 File : 131218A
SampleId1 : 1312153-1D SampleId2 :
Analysis commenced : 12/18/2013 12:48:01

Printed : 12/18/2013 16:48:20
[SAMPLE]

Dilution ratio : 1.00000 to 1.00000 Tray :

Position : TUBE4

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
#1	-0.00055	0.02892	0.01236	0.05336	0.14021	0.00026	-0.00347	30.99491	0.00014
#2	-0.00071	0.01982	0.00367	0.05100	0.13961	0.00003	-0.00373	31.04533	-0.00093
Mean	-0.00063	0.02437	0.00802	0.05218	0.13991	0.00015	-0.00360	31.02012	-0.00039
%RSD	18.06360	26.39811	76.69107	3.20770	0.30249	111.26652	5.12109	0.11494	193.58171

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
#1	-0.00084	0.00064	-0.00164	0.00206	2.19416	0.01547	28.33518	0.00063	0.00667
#2	-0.00137	0.00041	-0.00152	0.00190	2.19233	0.01544	28.42170	0.00063	0.00583
Mean	-0.00110	0.00052	-0.00158	0.00198	2.19324	0.01545	28.37844	0.00063	0.00625
%RSD	34.14442	31.88017	5.42043	5.44738	0.05902	0.16015	0.21557	0.00000	9.56178

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
#1	38.68791	0.00065	0.00791	0.00138	-0.00200	7.66194	-0.00329	0.00127	-0.00085
#2	38.44336	0.00125	0.00888	0.00261	-0.00354	7.66902	-0.00549	0.00623	-0.00130
Mean	38.56564	0.00095	0.00839	0.00200	-0.00277	7.66548	-0.00439	0.00375	-0.00107
%RSD	0.44839	44.76102	8.18897	43.43802	39.29068	0.06534	35.38413	93.56627	29.58692

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
#1	13.10493	-0.00720	0.65647	-0.00206	-0.00353	-0.01713	0.00752	-0.00050	-0.00246
#2	13.16995	-0.00915	0.65309	-0.00213	-0.00270	-0.01773	0.00702	-0.00367	-0.00244
Mean	13.13744	-0.00818	0.65478	-0.00210	-0.00311	-0.01743	0.00727	-0.00209	-0.00245
%RSD	0.34993	16.82241	0.36524	2.24436	18.80384	2.40841	4.89476	107.34349	0.64682

	Pb	Se
	calc	calc
#1	-0.00087	-0.00014
#2	-0.00149	0.00121
Mean	-0.00118	0.00053
%RSD	36.95556	179.69334

Method : Paragon2

File : 131218A

SampleId1 : Z

SampleId2 :

Analysis commenced : 12/18/2013 12:49:33

Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:20

[SAMPLE]

Position : TUBE5

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
#1	-0.00031	0.02618	-0.00082	0.00527	0.02726	0.00024	-0.00608	6.13736	-0.00027
#2	-0.00032	0.01192	0.00423	0.00474	0.02691	-0.00002	-0.00217	6.12127	-0.00080

Mean	-0.00031	0.01905	0.00171	0.00500	0.02709	0.00011	-0.00412	6.12931	-0.00054
%RSD	0.52392	52.93617	209.21016	7.60031	0.91743	169.57144	67.10066	0.18561	70.81405
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00078	0.00003	-0.00212	-0.00389	0.34545	0.00478	5.57307	-0.00015	0.00148
#2	-0.00121	0.00021	-0.00200	-0.00435	0.34806	0.00476	5.55686	-0.00002	0.00076
Mean	-0.00100	0.00012	-0.00206	-0.00412	0.34675	0.00477	5.56496	-0.00008	0.00112
%RSD	30.21108	109.19875	4.11510	7.85096	0.53132	0.20748	0.20596	110.11893	45.78358
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	6.32201	0.00043	-0.00910	-0.00035	-0.00151	1.47828	-0.00113	0.00176	0.00409
#2	6.23419	-0.00001	-0.00521	0.00364	0.00170	1.52049	-0.00195	-0.00195	-0.00070
Mean	6.27810	0.00021	-0.00716	0.00165	0.00010	1.49938	-0.00154	-0.00010	0.00170
%RSD	0.98917	145.90289	38.40332	171.45072	2377.24284	1.99050	37.98329	2755.60175	199.81992
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.56455	0.00544	0.12777	-0.00182	0.00310	-0.01831	0.00109	-0.00288	-0.00057
#2	2.58137	-0.01596	0.12638	-0.00222	0.00668	-0.01535	0.00126	-0.00288	-0.00051
Mean	2.57296	-0.00526	0.12707	-0.00202	0.00489	-0.01683	0.00118	-0.00288	-0.00054
%RSD	0.46230	287.73112	0.77679	13.95334	51.82860	12.47677	10.07477	0.00000	8.60536

	Pb	Se
	calc	calc
#1	-0.00112	0.00332
#2	0.00235	-0.00112
Mean	0.00061	0.00110
%RSD	401.32726	285.22988

Method : Paragon2
File : 131218A
SampleId1 : 1312153-1MS
SampleId2 :
Analysis commenced : 12/18/2013 12:51:05
Dilution ratio : 1.00000 to 1.00000 Tray :
Printed : 12/18/2013 16:48:20
[SAMPLE]
Position : TUBE6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00095	2.01842	1.03210	1.07571	1.12000	0.05129	-0.00354	69.61681	0.05299
#2	-0.00054	2.01560	1.02244	1.07668	1.11929	0.05115	-0.00301	69.31990	0.05199
Mean	-0.00075	2.01701	1.02727	1.07620	1.11964	0.05122	-0.00328	69.46836	0.05249
%RSD	38.28428	0.09874	0.66540	0.06388	0.04517	0.18806	11.45652	0.30222	1.34869
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.49686	0.19698	0.24960	0.91566	45.40266	0.59236	67.15532	0.49256	1.02840
#2	0.49536	0.19556	0.25093	0.91782	45.53283	0.59479	67.37126	0.49490	1.02282
Mean	0.49611	0.19627	0.25026	0.91674	45.46774	0.59358	67.26329	0.49373	1.02561

%RSD	0.21376	0.51100	0.37594	0.16670	0.20243	0.28977	0.22700	0.33531	0.38487
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	83.39335	0.49689	0.01034	0.51465	0.51369	7.53444	0.46009	2.11338	2.02044
#2	83.02087	0.48767	0.00839	0.51299	0.53079	7.63360	0.46088	2.12208	2.08336
Mean	83.20711	0.49228	0.00936	0.51382	0.52224	7.58402	0.46049	2.11773	2.05190
%RSD	0.31655	1.32445	14.67817	0.22856	2.31448	0.92454	0.12076	0.29036	2.16838
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	13.81469	0.51844	1.15943	0.47652	2.10674	-0.02224	0.53068	0.48715	-0.00224
#2	13.92339	0.50385	1.15723	0.48012	2.11064	-0.02402	0.53029	0.48715	-0.00233
Mean	13.86904	0.51114	1.15833	0.47832	2.10869	-0.02313	0.53049	0.48715	-0.00229
%RSD	0.55417	2.01913	0.13413	0.53179	0.13088	5.45359	0.05238	0.00000	2.75743
	Pb	Se							
	calc	calc							
#1	0.51401	2.05139							
#2	0.52486	2.09625							
Mean	0.51944	2.07382							
%RSD	1.47680	1.52976							

Method : Paragon2 File : 131218A
SampleId1 : 1312153-1MSD SampleId2 :
Analysis commenced : 12/18/2013 12:52:36
Dilution ratio : 1.00000 to 1.00000 Tray :
Printed : 12/18/2013 16:48:21
[SAMPLE]
Position : TUBE7

Final concentrations

	Al	As	B	Ba	Be	Bi	Ca	Cd	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
#1	-0.00039	2.02017	1.08381	1.12486	0.05097	0.00063	69.74141	0.05180	
#2	-0.00038	2.01456	1.07690	1.12461	0.05118	-0.00067	69.44493	0.05265	
Mean	-0.00038	2.01736	1.08036	1.12474	0.05107	-0.00002	69.59317	0.05222	
%RSD	1.87584	0.19666	0.45251	0.01574	0.28224	4904.99325	0.30124	1.14746	
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.49389	0.19565	0.25117	0.90841	45.67408	0.59983	67.81803	0.48840	1.02367
#2	0.49153	0.19424	0.25105	0.91196	45.69933	0.60045	67.98546	0.49139	1.01700
Mean	0.49271	0.19495	0.25111	0.91018	45.68671	0.60014	67.90175	0.48989	1.02033
%RSD	0.33762	0.51171	0.03301	0.27582	0.03908	0.07299	0.17436	0.43179	0.46254
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	83.82495	0.48855	0.02248	0.51241	0.52301	7.75403	0.45682	2.10827	2.06020
#2	83.35799	0.49036	0.01325	0.50876	0.52757	7.77528	0.46058	2.11236	2.09720
Mean	83.59147	0.48946	0.01787	0.51059	0.52529	7.76465	0.45870	2.11031	2.07870
%RSD	0.39501	0.26166	36.53977	0.50627	0.61415	0.19355	0.57986	0.13686	1.25843

	Si	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	14.06694	0.49802	1.17185	2.12901	-0.01807	0.52654	0.48080	-0.00243
#2	14.14727	0.48926	1.16999	2.10395	-0.03114	0.52883	0.48397	-0.00268
Mean	14.10711	0.49364	1.17092	2.11648	-0.02461	0.52769	0.48238	-0.00256
%RSD	0.40266	1.25478	0.11210	0.83735	37.55448	0.30716	0.46529	7.09158

	Pb	Se
	calc	calc
#1	0.51948	2.07621
#2	0.52130	2.10224
Mean	0.52039	2.08923
%RSD	0.24808	0.88118

Method : Paragon2 File : 131218A
 SampleId1 : 1312153-2 SampleId2 :
 Analysis commenced : 12/18/2013 12:54:08
 Dilution ratio : 1.00000 to 1.00000 Tray :
 Printed : 12/18/2013 16:48:21
 [SAMPLE]
 Position : TUBE8

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00071	0.04146	0.00563	0.11233	0.08503	0.00046	-0.00267	29.26988	-0.00003
#2	-0.00006	0.03804	0.00002	0.11136	0.08493	0.00031	0.00098	29.21871	-0.00030
Mean	-0.00038	0.03975	0.00283	0.11185	0.08498	0.00039	-0.00085	29.24430	-0.00017
%RSD	118.11452	6.08869	140.24735	0.61234	0.08781	28.13824	305.32695	0.12375	116.56848

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00113	0.00088	0.00404	-0.00313	1.72467	0.01691	31.42836	-0.00028	0.00559
#2	-0.00059	0.00074	0.00489	-0.00313	1.71474	0.01685	31.43074	-0.00028	0.00704
Mean	-0.00086	0.00081	0.00447	-0.00313	1.71970	0.01688	31.42955	-0.00028	0.00631
%RSD	43.68468	12.40478	13.39886	0.00000	0.40825	0.24930	0.00535	0.00000	16.23481

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	72.61478	0.00016	0.00548	0.00338	0.00353	11.04004	-0.00330	-0.01188	0.00679
#2	72.28847	-0.00001	0.00110	0.00231	-0.00165	11.20359	-0.00357	-0.00196	0.00140
Mean	72.45163	0.00008	0.00329	0.00284	0.00094	11.12181	-0.00343	-0.00692	0.00409
%RSD	0.31848	154.03848	94.00025	26.66336	389.37309	1.03982	5.47162	101.40683	93.16073

	Si	Sn	Sr	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	14.09302	-0.00234	0.64388	0.00143	-0.01950	0.00780	0.00504	-0.00283
#2	14.10030	-0.00331	0.64162	0.00528	-0.01950	0.00792	0.00267	-0.00259
Mean	14.09666	-0.00283	0.64275	0.00336	-0.01950	0.00786	0.00385	-0.00271
%RSD	0.03652	24.32898	0.24839	81.30817	0.00000	1.00409	43.60331	6.25192

SeUser: STEVE WORKMAN

Pb
calc
#1 0.00348
#2 -0.00033
Mean 0.00157
%RSD 171.20261

Method : Paragon2
File : 131218A
SampleId1 : 1312157-1
SampleId2 :
Analysis commenced : 12/18/2013 12:55:39
Dilution ratio : 1.00000 to 1.00000 Tray :
Position : TUBE9

Printed : 12/18/2013 16:48:21
[SAMPLE]

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00054	0.04552	0.00030	0.00710	0.05204	0.00067	-0.00399	52.63961	-0.00065
#2	-0.00087	0.02495	-0.00362	0.00775	0.05169	0.00028	-0.00634	52.54551	-0.00012
Mean	-0.00071	0.03523	-0.00166	0.00742	0.05187	0.00047	-0.00516	52.59256	-0.00039
%RSD	32.87502	41.28267	167.32690	6.14717	0.47930	58.49853	32.09492	0.12651	96.57741

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00192	0.00008	-0.00079	0.00038	1.04866	0.00639	12.61871	-0.00015	-0.00057
#2	-0.00064	0.00031	-0.00019	0.00038	1.04031	0.00638	12.67936	-0.00028	0.00100
Mean	-0.00128	0.00019	-0.00049	0.00038	1.04449	0.00638	12.64904	-0.00021	0.00021
%RSD	70.55111	84.52159	86.72114	0.00000	0.56526	0.11632	0.33905	43.06029	520.29519

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.98022	0.00038	0.02297	-0.00093	0.00143	3.54882	0.00133	-0.00245	0.00140
#2	7.90760	0.00114	0.02880	-0.00093	0.00100	3.57703	0.00106	0.00598	-0.00220
Mean	7.94391	0.00076	0.02589	-0.00093	0.00122	3.56292	0.00120	0.00176	-0.00040
%RSD	0.64640	71.33678	15.93006	0.21377	24.81602	0.55974	15.72845	338.23534	635.32960

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	14.72891	-0.00720	0.31818	-0.00234	0.00006	-0.02248	0.00596	-0.00130	-0.00295
#2	14.90230	0.00252	0.31634	-0.00233	0.00171	-0.01416	0.00579	-0.00288	-0.00267
Mean	14.81560	-0.00234	0.31726	-0.00233	0.00088	-0.01832	0.00587	-0.00209	-0.00281
%RSD	0.82753	293.88243	0.40953	0.40284	132.62004	32.08985	2.01457	53.67166	6.99024

Pb
calc
#1 0.00064
#2 0.00036
Mean 0.00050
%RSD 39.95678

Method : Paragon2

File : 131218A

Printed : 12/18/2013 16:48:21

SampleId1 : 1312190-1 SampleId2 :
 Analysis commenced : 12/18/2013 12:57:11
 Dilution ratio : 1.00000 to 1.00000 Tray :

[SAMPLE]

Position : TUBE10

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00031	0.07061	-0.00502	2.50723	6.88806	0.00054	-0.00214	4.78888	0.00017
#2	-0.00127	0.06385	-0.00166	2.50169	6.89561	0.00031	-0.00214	4.75591	-0.00036
Mean	-0.00079	0.06723	-0.00334	2.50446	6.89184	0.00043	-0.00214	4.77239	-0.00009
%RSD	85.92722	7.10429	71.20622	0.15641	0.07739	37.84689	0.12488	0.48842	397.76626

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00191	0.00026	0.10644	0.04676	10.70831	0.42422	1.26535	0.02015	-0.00154
#2	0.00107	-0.00030	0.10596	0.04691	10.76392	0.42703	1.26765	0.02041	-0.00130
Mean	0.00149	-0.00002	0.10620	0.04683	10.73611	0.42562	1.26650	0.02028	-0.00142
%RSD	39.95018	2248.88327	0.32021	0.23041	0.36620	0.46692	0.12870	0.90171	12.05300

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	385.46485	-0.00039	-0.22467	-0.00151	-0.00060	4.20480	-0.00608	-0.00592	-0.00563
#2	376.75152	-0.00105	-0.31343	-0.00109	-0.00018	4.14835	-0.00279	-0.00320	0.00110
Mean	381.10819	-0.00072	-0.26905	-0.00130	-0.00039	4.17657	-0.00443	-0.00456	-0.00226
%RSD	1.61667	64.66024	23.32828	23.18664	76.88616	0.95567	52.53919	42.19506	210.38430

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	13.97160	-0.00818	0.81666	-0.00169	0.00621	-0.01659	-0.00023	0.00584	-0.00193
#2	14.08624	-0.01304	0.81582	-0.00168	0.00152	-0.02609	-0.00057	0.00346	-0.00211
Mean	14.02892	-0.01061	0.81624	-0.00168	0.00387	-0.02134	-0.00040	0.00465	-0.00202
%RSD	0.57782	32.41569	0.07234	0.55885	85.73705	31.48846	59.00468	36.16896	6.17322

	Pb	Se
	calc	calc
#1	-0.00091	-0.00573
#2	-0.00048	-0.00033
Mean	-0.00069	-0.00303
%RSD	43.40221	126.05730

Method : Paragon2 File : 131218A
 SampleId1 : CCV SampleId2 :
 Analysis commenced : 12/18/2013 12:59:01
 Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:21
 [CV]

Position : STD1

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	0.20065	49.89518	0.49719	0.98380	0.96387	0.48054	0.49534	49.49777	0.49873
#2	0.20011	49.80354	0.49719	0.97138	0.95627	0.48225	0.50526	49.58954	0.49759
Mean	0.20038	49.84936	0.49719	0.97759	0.96007	0.48140	0.50030	49.54365	0.49816
%RSD	0.19292	0.12999	0.00000	0.89822	0.55966	0.25081	1.40304	0.13098	0.16184

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47842	0.98489	0.98391	19.73030	50.99719	0.54057	48.84957	0.96155	0.95900
#2	0.47830	0.98537	0.97763	19.76785	50.66979	0.53676	48.84292	0.96613	0.95378
Mean	0.47836	0.98513	0.98077	19.74907	50.83349	0.53866	48.84625	0.96384	0.95639
%RSD	0.01790	0.03439	0.45336	0.13444	0.45543	0.49988	0.00963	0.33598	0.38568

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	49.66076	0.97985	5.00644	0.96270	0.97105	4.90363	0.50667	0.97084	0.96728
#2	49.57645	0.97062	4.99442	0.95990	0.98956	5.00956	0.50312	0.98442	1.00388
Mean	49.61861	0.97524	5.00043	0.96130	0.98030	4.95659	0.50489	0.97763	0.98558
%RSD	0.12015	0.66937	0.17008	0.20597	1.33559	1.51121	0.49712	0.98243	2.62574

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.86245	1.00099	0.49291	0.47995	0.49027	4.83314	0.49090	0.93663	0.99234
#2	4.87847	1.00001	0.48892	0.48181	0.49832	4.82537	0.49186	0.95491	0.98941
Mean	4.87046	1.00050	0.49092	0.48088	0.49430	4.82926	0.49138	0.94577	0.99088
%RSD	0.23253	0.06892	0.57529	0.27428	1.15112	0.11380	0.13824	1.36666	0.20928

	Pb	Se
	calc	calc
#1	0.96827	0.96846
#2	0.97969	0.99740
Mean	0.97398	0.98293
%RSD	0.82893	2.08147

Method : Paragon2
 File : 131218A
 SampleId1 : CCB
 SampleId2 :
 Analysis commenced : 12/18/2013 13:00:39
 Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:21
 [CB]

Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00009	0.04673	-0.00502	-0.00376	-0.00032	0.00053	-0.00295	-0.03019	0.00017
#2	-0.00024	0.03873	-0.00082	-0.00333	-0.00021	0.00024	-0.00086	-0.03191	0.00005
Mean	-0.00008	0.04273	-0.00292	-0.00355	-0.00027	0.00038	-0.00191	-0.03105	0.00011
%RSD	299.13518	13.22572	101.82611	8.57581	27.98294	54.11016	77.46857	3.91635	80.71626

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00029	0.00050	-0.00212	0.00739	0.01336	0.00301	0.05074	-0.00002	-0.00154

#2	-0.00082	0.00045	-0.00152	0.00541	0.00477	0.00299	0.04671	-0.00002	-0.00093
Mean	-0.00055	0.00048	-0.00182	0.00640	0.00906	0.00300	0.04873	-0.00002	-0.00124
%RSD	67.80658	7.23123	23.45505	21.89754	67.03467	0.49549	5.84648	0.00000	34.54938
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09033	-0.00099	-0.01056	0.00068	-0.00018	-0.01176	-0.00361	-0.00270	0.00529
#2	0.08429	-0.00006	-0.01833	-0.00277	0.00178	-0.03283	-0.00251	0.00077	-0.00100
Mean	0.08731	-0.00053	-0.01444	-0.00105	0.00080	-0.02230	-0.00306	-0.00097	0.00215
%RSD	4.89048	124.91930	38.05347	233.29873	173.42578	66.81569	25.40634	254.42199	207.18524
	Si	Sn	Sr	Ti	Tl	V	Zn	Zr	
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
#1	-0.01823	0.00252	-0.00210	-0.00212	0.00697	-0.00030	-0.00130	0.00085	
#2	-0.01214	0.00155	-0.00211	-0.00212	-0.00405	-0.00036	-0.00209	0.00089	
Mean	-0.01518	0.00204	-0.00211	-0.00212	0.00146	-0.02011	-0.00033	0.00087	
%RSD	28.37599	33.77390	0.37039	0.00000	534.94054	8.36056	12.16420	33.12079	2.70958
	Pb	Se							
	calc	calc							
#1	0.00011	0.00263							
#2	0.00026	-0.00041							
Mean	0.00018	0.00111							
%RSD	59.84657	193.51162							

Method : Paragon2

File : 131218A

Printed : 12/18/2013 16:48:22

SampleId1 : FP131217-5MB

[SAMPLE]

SampleId2 :

Analysis commenced : 12/18/2013 13:02:13

Dilution ratio : 1.00000 to 1.00000

Position : TUBE11

Final concentrations

#1	-0.00008	0.03868	-0.00194	-0.00387	-0.00060	0.00037	-0.00451	-0.05039	0.00009
#2	-0.00023	0.02793	0.00030	-0.00419	-0.00067	0.00020	-0.00791	-0.05297	-0.00103
Mean	-0.00016	0.03331	-0.00082	-0.00403	-0.00064	0.00029	-0.00621	-0.05168	-0.00047
%RSD	69.64731	22.82850	193.97549	5.65964	7.82161	40.83750	38.62861	3.52892	167.00888
	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00008	0.03868	-0.00194	-0.00387	-0.00060	0.00037	-0.00451	-0.05039	0.00009
#2	-0.00023	0.02793	0.00030	-0.00419	-0.00067	0.00020	-0.00791	-0.05297	-0.00103
Mean	-0.00016	0.03331	-0.00082	-0.00403	-0.00064	0.00029	-0.00621	-0.05168	-0.00047
%RSD	69.64731	22.82850	193.97549	5.65964	7.82161	40.83750	38.62861	3.52892	167.00888
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00050	0.00007	-0.00188	-0.00313	0.00034	0.00265	0.04153	-0.00015	-0.00033
#2	-0.00050	-0.00035	-0.00152	-0.00420	-0.01242	0.00263	0.03635	-0.00015	-0.00275
Mean	-0.00050	-0.00014	-0.00170	-0.00366	-0.00604	0.00264	0.03894	-0.00015	-0.00154
%RSD	0.02955	213.40825	15.17139	20.60702	149.40960	0.56175	9.40541	0.00000	111.06448
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.05963	0.00038	-0.00570	-0.00293	0.00058	-0.00474	-0.00278	0.00921	-0.00175
#2	0.05411	0.00005	-0.00619	0.00152	0.00038	-0.00474	-0.00499	-0.00940	-0.00534

Mean	0.05687	0.00021	-0.00594	-0.00070	0.00048	-0.00474	-0.00389	-0.00009	-0.00355
%RSD	6.86126	109.42718	5.78172	448.91429	30.31940	0.00000	40.15018	13930.19192	71.67855
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01468	-0.00526	-0.00230	-0.00216	-0.00296	-0.01238	-0.00047	0.03832	0.00028
#2	-0.00724	-0.00720	-0.00233	-0.00230	0.00944	-0.02010	-0.00025	0.03594	0.00002
Mean	-0.01096	-0.00623	-0.00232	-0.00223	0.00324	-0.01624	-0.00036	0.03713	0.00015
%RSD	48.00579	22.07369	1.01058	4.64286	270.46803	33.61493	43.82196	4.52672	119.33179
	Pb	Se							
	calc	calc							
#1	-0.00059	0.00190							
#2	0.00076	-0.00669							
Mean	0.00009	-0.00240							
%RSD	1095.85631	253.55290							

Method : Paragon2

File : 131218A

Printed : 12/18/2013 16:48:22

SampleId1 : FP131217-5LCS

SampleId2 :

[SAMPLE]

Analysis commenced : 12/18/2013 13:04:03

Dilution ratio : 1.00000 to 1.00000 Tray :

Position : TUBE12

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00055	2.00104	1.04803	1.01760	0.99805	0.04858	-0.00093	40.12734	0.05260
#2	-0.00063	2.00664	1.04149	1.01857	0.99545	0.04872	-0.00587	40.14348	0.05343
Mean	-0.00059	2.00384	1.04476	1.01809	0.99675	0.04865	-0.00340	40.13541	0.05302
%RSD	10.61370	0.19760	0.44269	0.06751	0.18486	0.19688	102.80625	0.02844	1.10661
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.50455	0.20021	0.24948	0.93481	42.63366	0.50925	40.11388	0.50154	1.03908
#2	0.50497	0.20110	0.24948	0.93743	42.58061	0.50928	40.30393	0.50531	1.03229
Mean	0.50476	0.20065	0.24948	0.93612	42.60713	0.50927	40.20891	0.50342	1.03568
%RSD	0.05789	0.31373	0.00104	0.19829	0.08804	0.00458	0.33423	0.52989	0.46400
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	40.67055	0.50727	-0.01153	0.51436	0.53094	-0.02581	0.46638	2.11977	2.05026
#2	40.54356	0.50156	-0.00619	0.51842	0.52785	-0.00474	0.46471	2.13308	2.11057
Mean	40.60705	0.50441	-0.00886	0.51639	0.52940	-0.01527	0.46554	2.12642	2.08042
%RSD	0.22114	0.80021	42.66625	0.55484	0.41287	97.53814	0.25318	0.44263	2.04989
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.09294	0.49898	0.52748	0.48277	2.10229	-0.04126	0.53371	0.49826	0.00131
#2	1.10528	0.51551	0.52571	0.48713	2.12318	-0.02820	0.53590	0.49746	0.00106
Mean	1.09911	0.50725	0.52660	0.48495	2.11274	-0.03473	0.53481	0.49786	0.00119

%RSD	0.79391	2.30457	0.23759	0.63527	0.69916	26.59540	0.28868	0.11271	14.54099
	Pb		Se						
	calc	calc							
#1	0.52542	2.07341							
#2	0.52471	2.11807							
Mean	0.52507	2.09574							
%RSD	0.09595	1.50683							

Method : Paragon2 File : 131218A
SampleId1 : 1312134-1 **SampleId2 :**
Analysis commenced : 12/18/2013 13:05:35
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:22
[SAMPLE]
Position : TUBE13

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00098	51.29502	0.00115	0.01313	1.38830	0.00679	0.00624	66.32248	0.00110
#2	-0.00017	51.47820	-0.00026	0.01356	1.38841	0.00656	0.00024	66.06642	0.00098
Mean	-0.00058	51.38661	0.00044	0.01334	1.38835	0.00668	0.00324	66.19445	0.00104
%RSD	99.52798	0.25208	223.24234	2.28070	0.00549	2.41399	130.87531	0.27353	7.86754
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.03507	0.07058	0.11574	103.47842	14.61554	0.07984	20.43410	1.55543	0.01525
#2	0.03485	0.07082	0.11659	103.43068	14.61554	0.07993	20.46820	1.55978	0.01561
Mean	0.03496	0.07070	0.11617	103.45455	14.61554	0.07988	20.45115	1.55760	0.01543
%RSD	0.43869	0.24093	0.51626	0.03263	0.00000	0.07595	0.11789	0.19748	1.66037
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	143.09503	0.07971	0.47458	0.05703	0.05113	84.74417	0.00146	0.00550	0.00992
#2	142.18636	0.07746	0.46435	0.05321	0.04962	85.09701	-0.00210	0.00426	0.00527
Mean	142.64069	0.07858	0.46947	0.05512	0.05037	84.92059	-0.00032	0.00488	0.00760
%RSD	0.45045	2.02279	1.54145	4.90152	2.12498	0.29380	782.94305	18.01630	43.27301
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	42.23079	-0.00543	0.88084	0.14607	0.00711	0.01592	0.08883	0.20873	-0.00053
#2	42.40532	0.00138	0.88006	0.14809	-0.00120	0.00943	0.08742	0.21428	-0.00092
Mean	42.31806	-0.00203	0.88045	0.14708	0.00296	0.01268	0.08812	0.21151	-0.00072
%RSD	0.29162	237.33903	0.06264	0.97256	198.67572	36.16676	1.13050	1.85542	38.49581

	Pb	Se
	calc	calc
#1	0.05309	0.00845
#2	0.05081	0.00494
Mean	0.05195	0.00669
%RSD	3.10586	37.13768

ted: 12/18/2013 16:48:33 **User: STEVE WORKMAN**
 Method : Paragon2 File : 131218A
SampleId1 : 1312134-1D **SampleId2 :**
Analysis commenced : 12/18/2013 13:07:07
 Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:22
[SAMPLE]
 Position : TUBE14

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00058	67.63423	0.00451	0.01044	1.93492	0.00892	0.00561	81.41025	0.00158
#2	-0.00059	67.97918	0.00816	0.01119	1.92995	0.00868	0.00562	81.22751	0.00030
Mean	-0.00059	67.80670	0.00633	0.01081	1.93243	0.00880	0.00561	81.31888	0.00094
%RSD	1.14521	0.35973	40.70523	4.92431	0.18157	1.86284	0.09454	0.15890	96.44339

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.04859	0.09371	0.16713	143.03745	17.65281	0.10359	26.49758	2.10380	0.01175
#2	0.04953	0.09384	0.16652	143.41288	17.63933	0.10358	26.61825	2.11654	0.01380
Mean	0.04906	0.09378	0.16682	143.22516	17.64607	0.10358	26.55791	2.11017	0.01277
%RSD	1.36021	0.10028	0.25782	0.18535	0.05402	0.00225	0.32128	0.42695	11.36575

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	148.64663	0.10750	0.67257	0.06582	0.07201	88.89364	-0.00467	-0.00218	0.00198
#2	147.83836	0.10608	0.67111	0.07067	0.07123	89.97209	0.00220	0.00427	0.00249
Mean	148.24249	0.10679	0.67184	0.06824	0.07162	89.43286	-0.00124	0.00105	0.00223
%RSD	0.38554	0.94396	0.15407	5.03167	0.77069	0.85269	392.94707	436.31387	15.96727

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	47.45377	-0.00349	1.05713	0.15394	0.00164	0.02011	0.11355	0.28644	-0.00027
#2	47.85640	0.00525	1.05453	0.15724	0.00782	0.03338	0.11381	0.28406	-0.00021
Mean	47.65508	0.00088	1.05583	0.15559	0.00473	0.02674	0.11368	0.28525	-0.00024
%RSD	0.59743	702.86528	0.17414	1.50011	92.45531	35.08910	0.16141	0.58975	18.47840

	Pb	Se
	calc	calc
#1	0.06995	0.00059
#2	0.07104	0.00308
Mean	0.07050	0.00184
%RSD	1.09979	95.64814

Method : Paragon2 File : 131218A
SampleId1 : 1312134-1L 5X **SampleId2 :**
Analysis commenced : 12/18/2013 13:10:26
 Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:22
[SAMPLE]
 Position : TUBE15

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00064	10.20013	-0.00699	-0.00183	0.28622	0.00161	0.00472	13.19022	0.00028
#2	-0.00048	10.45049	-0.00362	-0.00258	0.28784	0.00131	-0.00102	13.08849	0.00000
Mean	0.00008	10.32531	-0.00530	-0.00220	0.28703	0.00146	0.00185	13.13936	0.00014
%RSD	997.69430	1.71453	44.85555	24.16714	0.39994	14.30062	219.42420	0.54747	138.68250

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00784	0.01530	0.02217	18.12131	2.00824	0.01511	4.21071	0.32002	0.00305
#2	0.00677	0.01436	0.02266	18.15684	2.01556	0.01522	4.23557	0.32184	0.00052
Mean	0.00730	0.01483	0.02242	18.13907	2.01190	0.01517	4.22314	0.32093	0.00178
%RSD	10.29922	4.47722	1.53494	0.13849	0.25728	0.50771	0.41621	0.40034	100.55883

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	27.62024	0.01616	0.09831	0.01865	0.00784	16.51718	0.00157	0.00450	-0.00252
#2	27.75362	0.01507	0.09296	0.01005	0.00450	16.71034	0.00211	0.00127	-0.00296
Mean	27.68693	0.01562	0.09564	0.01435	0.00617	16.61376	0.00184	0.00288	-0.00274
%RSD	0.34064	4.96439	3.95413	42.33061	38.18293	0.82211	20.61815	79.18325	11.44815

	Pb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	calc	calc	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01144	-0.00018	-0.00723	0.17787	0.01854	0.00178	-0.00441	0.01778	0.04625	0.00050
#2	0.00635	-0.00155	-0.00334	0.17863	0.01957	-0.00562	-0.01514	0.01701	0.05655	0.00020
Mean	0.00889	-0.00087	-0.00528	0.17825	0.01906	-0.00192	-0.00978	0.01739	0.05140	0.00035
%RSD	40.41140	111.77090	52.05685	0.29927	3.80105	272.90961	77.57786	3.15185	14.17274	59.29873

Method : Paragon2
File : 131218A
SampleId1 : 1312134-1MS **SampleId2 :**
Analysis commenced : 12/18/2013 13:13:26
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:23
[SAMPLE]
Position : TUBE16

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00035	82.48012	0.94458	0.93489	3.01621	0.05380	0.00285	130.44807	0.05293
#2	-0.00045	82.92971	0.94941	0.93284	3.01618	0.05385	0.00728	130.17626	0.05249
Mean	-0.00040	82.70491	0.94699	0.93386	3.01619	0.05383	0.00506	130.31217	0.05271
%RSD	16.88442	0.38439	0.36052	0.15532	0.00086	0.06825	61.92427	0.14749	0.59185

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	ppm	0.52016	ppm	0.28903	ppm	172.83473	ppm	68.48140	ppm	67.05075	ppm	2.96735	ppm	0.87094
#2		0.52038		0.28945		173.18886		68.14678		67.50908		2.98505		0.87458
Mean		0.52027		0.28924		173.01179		68.31409		67.27992		2.97620		0.87276
%RSD		0.02982		0.10067		0.13470		0.34635		0.48170		0.42062		0.29474

	Na	ppm	Ni	ppm	P	Pb I	Pb II	S	Sb	Se I	Se II
#1	183.86065		0.58950		0.82880	0.57290	0.56324	87.03204	0.22948	1.89430	1.84521
#2	182.78228		0.57918		0.80877	0.56531	0.57409	87.97012	0.22814	1.93027	1.88923
Mean	183.32147		0.58434		0.81879	0.56911	0.56867	87.50108	0.22881	1.91228	1.86722
%RSD	0.41595		1.24893		1.72937	0.94319	1.34924	0.75807	0.41541	1.33023	1.66681

	Si	ppm	Sn	ppm	Sr	Ti	Tl	U	V	Zn	Zr
#1	51.44941		0.28510		1.64582	0.38330	1.93333	0.03084	0.61057	0.79044	0.00127
#2	51.83806		0.27927		1.64275	0.38025	1.91093	0.05185	0.61111	0.78885	0.00156
Mean	51.64373		0.28218		1.64428	0.38178	1.92213	0.04135	0.61084	0.78964	0.00142
%RSD	0.53213		1.46151		0.13234	0.56492	0.82404	35.93814	0.06187	0.14226	14.46692

	Pb	calc	Se	calc
#1	0.56646		1.86156	
#2	0.57117		1.90290	
Mean	0.56881		1.88223	
%RSD	0.58546		1.55294	

Method : Paragon2
File : 131218A
SampleId1 : 1312134-1MSD SampleId2 :
Analysis commenced : 12/18/2013 13:14:58
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:23
[SAMPLE]
Position : TUBE17

Final concentrations

	Ag	ppm	Al	ppm	As	B	Ba	Be	Bi	Ca	Cd
#1	-0.00004		99.20175		0.95850	0.93759	3.25359	0.05683	0.00457	153.01221	0.05350
#2	-0.00028		99.52638		0.93151	0.93413	3.24742	0.05685	0.00665	152.87032	0.05340
Mean	-0.00016		99.36407		0.94500	0.93586	3.25050	0.05684	0.00561	152.94126	0.05345
%RSD	104.57959		0.23102		2.01885	0.26104	0.13422	0.02788	26.29042	0.06560	0.12928

	Co	ppm	Cr	ppm	Cu	Fe	K	Li	Mg	Mn	Mo
#1	0.54063		0.31610		0.50654	216.66793	70.09778	0.74481	74.28174	3.61489	0.86039
#2	0.54178		0.31695		0.50473	217.45324	69.97668	0.74388	74.48423	3.63489	0.85882
Mean	0.54121		0.31653		0.50563	217.06059	70.03723	0.74435	74.38298	3.62489	0.85961
%RSD	0.15118		0.19089		0.25353	0.25583	0.12226	0.08809	0.19250	0.39020	0.12967

	Na	ppm	Ni	ppm	P	Pb I	Pb II	S	Sb	Se I	Se II
#1											
#2											
Mean											
%RSD											

#1	188.43428	0.62655	1.00376	0.59559	0.58675	92.03190	0.22225	1.86702	1.75041
#2	186.79167	0.62452	1.00571	0.59468	0.59653	92.68849	0.21678	1.86702	1.81204
Mean	187.61298	0.62554	1.00474	0.59513	0.59164	92.36019	0.21951	1.86702	1.78123
%RSD	0.61909	0.22963	0.13765	0.10746	1.16800	0.50268	1.76074	0.00008	2.44643

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	56.84401	0.25592	1.86490	0.38082	1.92878	0.04308	0.64295	0.87068	0.00139
#2	57.20680	0.25884	1.86014	0.38367	1.94376	0.03930	0.64359	0.86829	0.00163
Mean	57.02540	0.25738	1.86252	0.38225	1.93627	0.04119	0.64327	0.86949	0.00151
%RSD	0.44986	0.80074	0.18083	0.52727	0.54707	6.49345	0.07039	0.19385	11.35129

	Pb	Se
	calc	calc
#1	0.58969	1.78925
#2	0.59591	1.83035
Mean	0.59280	1.80980
%RSD	0.74160	1.60598

Method : Paragon2 File : 131218A
SampleId1 : 1312158-1 SampleId2 :
Analysis commenced : 12/18/2013 13:16:29
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:23
[SAMPLE]
Position : TUBE18

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00063	0.03205	-0.00250	0.32755	0.16099	0.00027	-0.00138	2.95029	0.00006
#2	-0.00055	0.01554	0.00227	0.32604	0.16092	0.00011	-0.00191	2.94769	-0.00019
Mean	-0.00059	0.02380	-0.00012	0.32680	0.16095	0.00019	-0.00165	2.94899	-0.00007
%RSD	9.77415	49.04182	2888.58388	0.32628	0.03095	62.00156	22.44645	0.06219	260.89293

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00060	-0.00011	-0.00128	2.52639	2.39663	0.04062	0.33107	0.04239	0.00100
#2	-0.00091	-0.00049	-0.00140	2.52088	2.39218	0.04059	0.34316	0.04226	-0.00105
Mean	-0.00075	-0.00030	-0.00134	2.52363	2.39440	0.04060	0.33712	0.04232	-0.00003
%RSD	29.89552	89.23922	6.39186	0.15455	0.13135	0.05747	2.53591	0.21606	5154.14092

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	298.58720	0.00652	-0.04651	0.00509	0.00485	0.15680	-0.00360	-0.00965	0.00477
#2	295.98179	0.00553	-0.08099	0.00383	0.00597	0.12168	-0.00333	-0.00196	0.00806
Mean	297.28449	0.00602	-0.06375	0.00446	0.00541	0.13924	-0.00347	-0.00580	0.00641
%RSD	0.61971	11.58386	38.24978	20.08263	14.61521	17.83497	5.38723	93.66081	36.32753

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	9.52672	-0.01012	0.53169	-0.00198	0.00073	-0.02390	-0.00058	0.00187	-0.00085

#2	9.56161	-0.00818	0.53195	-0.00210	0.00761	-0.02449	-0.00047	0.00346	-0.00101
Mean	9.54417	-0.00915	0.53182	-0.00204	0.00417	-0.02420	-0.00053	0.00267	-0.00093
%RSD	0.25850	15.03557	0.03425	4.14511	116.76570	1.71867	14.78877	42.02641	12.29006

	Pb	Se
	calc	calc
#1	0.00493	-0.00003
#2	0.00525	0.00472
Mean	0.00509	0.00234
%RSD	4.49522	143.48082

Method : Paragon2
File : 131218A
SampleId1 : 1312153-1L 5X
SampleId2 :
Analysis commenced : 12/18/2013 13:20:39
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:23
[SAMPLE]

Position : TUBE19

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00072	-0.01414	0.00002	0.00474	0.02719	-0.00001	0.00044	5.92172	0.00004
#2	-0.00063	-0.02210	-0.00166	0.00517	0.02705	-0.00020	0.00044	5.93693	-0.00064
Mean	-0.00067	-0.01812	-0.00082	0.00495	0.02712	-0.00011	0.00044	5.92933	-0.00030
%RSD	8.71811	31.04652	145.48095	6.14631	0.36650	132.63948	0.02617	0.18143	160.57009

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00014	-0.00007	-0.00200	-0.00130	0.31471	0.00501	5.50071	-0.00002	-0.00081
#2	-0.00131	-0.00002	-0.00176	-0.00130	0.31783	0.00504	5.50534	-0.00002	0.00003
Mean	-0.00073	-0.00004	-0.00188	-0.00130	0.31627	0.00502	5.50302	-0.00002	-0.00039
%RSD	113.58303	80.54548	9.11400	0.00000	0.69900	0.37154	0.05950	0.00000	153.08907

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.28652	0.00005	-0.01396	0.00096	-0.00215	1.45717	-0.00086	0.00226	-0.00085
#2	7.25587	-0.00028	-0.01250	0.00111	-0.00102	1.47124	0.00051	-0.01014	-0.00070
Mean	7.27120	-0.00012	-0.01323	0.00103	-0.00159	1.46421	-0.00018	-0.00394	-0.00077
%RSD	0.29809	199.85465	7.79011	10.69726	49.97259	0.67941	549.42500	222.53861	13.67231

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	2.52137	-0.00040	0.12694	-0.00226	-0.00572	-0.01772	0.00109	-0.00130	-0.00036
#2	2.53769	-0.00915	0.12650	-0.00218	0.00641	-0.02010	0.00104	-0.00209	-0.00066
Mean	2.52953	-0.00477	0.12672	-0.00222	0.00034	-0.01891	0.00107	-0.00169	-0.00051
%RSD	0.45617	129.71337	0.24729	2.54005	2490.95589	8.88147	3.70091	33.12079	41.28609

	Pb	Se
	calc	calc
#1	-0.00111	0.00019
#2	-0.00031	-0.00384

Mean -0.00071 -0.00183User: STEVE WORKMAN
%RSD 79.31103 155.79902

Method : Paragon2 File : 131218A
SampleId1 : 1312190-1 10X SampleId2 :
Analysis commenced : 12/18/2013 13:40:25
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:23
[SAMPLE]

Position : TUBE20

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00047	-0.00498	-0.01344	0.24118	0.73819	0.00006	-0.00162	0.50184	-0.00049
#2	-0.00032	-0.00389	-0.00390	0.24021	0.73541	0.00002	-0.00292	0.50442	-0.00094
Mean	-0.00040	-0.00443	-0.00867	0.24070	0.73680	0.00004	-0.00227	0.50313	-0.00072
%RSD	28.25257	17.38977	77.76043	0.28468	0.26610	65.34845	40.58419	0.36286	43.65357

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00043	0.00008	0.00888	0.00084	0.74686	0.03495	0.18428	0.00218	-0.00214
#2	0.00010	0.00031	0.00936	0.00084	0.75547	0.03483	0.18888	0.00231	0.00003
Mean	-0.00016	0.00019	0.00912	0.00084	0.75117	0.03489	0.18658	0.00224	-0.00105
%RSD	231.32091	85.51530	3.74148	0.00000	0.81006	0.22740	1.74523	4.07375	145.74102

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	90.72775	-0.00160	-0.05088	0.00291	0.00177	0.41672	-0.00362	-0.00345	-0.00145
#2	90.15412	-0.00094	-0.05865	0.00276	-0.00068	0.39564	-0.00141	-0.00989	-0.00040
Mean	90.44093	-0.00127	-0.05476	0.00283	0.00055	0.40618	-0.00251	-0.00667	-0.00092
%RSD	0.44849	36.69644	10.03438	3.77206	315.64834	3.66935	62.06503	68.34603	80.20632

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.42457	-0.01207	0.08797	-0.00201	0.00173	-0.02070	-0.00064	-0.00050	-0.00017
#2	1.42475	-0.00331	0.08780	-0.00184	-0.00957	-0.01713	0.00037	0.00267	-0.00005
Mean	1.42466	-0.00769	0.08789	-0.00192	-0.00392	-0.01891	-0.00013	0.00108	-0.00011
%RSD	0.00879	80.48747	0.14247	6.36022	203.87299	13.32065	530.08997	207.19933	75.87397

	Pb	Se
	calc	calc
#1	0.00215	-0.00211
#2	0.00047	-0.00356
Mean	0.00131	-0.00284
%RSD	90.90263	36.06914

Method : Paragon2 File : 131218A
SampleId1 : CCV SampleId2 :
Analysis commenced : 12/18/2013 13:42:09
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:24
[CV]

Position : STD1

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.20062	49.37019	0.50905	0.98024	0.97189	0.47779	0.51342	49.34749	0.50401
#2	0.20095	49.41669	0.49606	0.98056	0.96804	0.48047	0.50609	49.30818	0.49732
Mean	0.20078	49.39344	0.50255	0.98040	0.96997	0.47913	0.50975	49.32784	0.50066
%RSD	0.11846	0.06657	1.82733	0.02336	0.28092	0.39517	1.01614	0.05636	0.94475

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47972	0.97923	0.99467	19.62433	50.93536	0.51128	48.84897	0.95409	0.96312
#2	0.47832	0.98047	0.99383	19.68843	50.82288	0.51025	48.97896	0.95959	0.96300
Mean	0.47902	0.97985	0.99425	19.65638	50.87912	0.51077	48.91396	0.95684	0.96306
%RSD	0.20625	0.08936	0.06004	0.23059	0.15633	0.14162	0.18792	0.40609	0.00891

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	51.53070	0.99365	4.92177	0.95613	0.95562	4.89657	0.50671	0.99904	0.95035
#2	51.26831	0.98535	4.92678	0.95823	0.96777	5.00250	0.49750	0.99073	0.97291
Mean	51.39951	0.98950	4.92427	0.95718	0.96170	4.94953	0.50211	0.99489	0.96163
%RSD	0.36097	0.59299	0.07193	0.15563	0.89285	1.51336	1.29679	0.59068	1.65927

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.84915	1.01072	0.49607	0.47436	0.48576	4.86419	0.49081	0.92948	0.99593
#2	4.87184	1.01072	0.49392	0.47777	0.48554	4.85520	0.49156	0.93266	0.99386
Mean	4.86050	1.01072	0.49500	0.47607	0.48565	4.85969	0.49119	0.93107	0.99490
%RSD	0.33008	0.00028	0.30689	0.50660	0.03084	0.13080	0.10718	0.24142	0.14729

	Pb	Se
	calc	calc
#1	0.95579	0.96656
#2	0.96459	0.97885
Mean	0.96019	0.97270
%RSD	0.64812	0.89295

Method : Paragon2 File : 131218A
SampleId1 : CCB SampleId2 :
Analysis commenced : 12/18/2013 13:43:47
Dilution ratio : 1.00000 to 1.00000 Tray :
Position : STD2

Printed : 12/18/2013 16:48:24

[CB]

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00040	0.01943	-0.00166	-0.00559	-0.00014	0.00036	-0.00086	-0.02675	-0.00032
#2	-0.00024	0.00807	-0.00138	-0.00591	-0.00014	0.00016	0.00253	-0.02847	-0.00011
Mean	-0.00032	0.01375	-0.00152	-0.00575	-0.00014	0.00026	0.00083	-0.02761	-0.00022
%RSD	35.89461	58.45642	13.05506	3.96643	0.00000	56.30750	287.69410	4.40424	71.38494

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00003	0.00035	-0.00200	0.00785	-0.00070	0.00307	0.05419	-0.00015	-0.00226
#2	-0.00082	0.00021	-0.00224	0.00602	-0.01450	0.00304	0.04959	-0.00015	-0.00057
Mean	-0.00039	0.00028	-0.00212	0.00694	-0.00760	0.00305	0.05189	-0.00015	-0.00142
%RSD	152.41226	34.78662	8.01996	18.65767	128.38801	0.61119	6.27412	0.00000	84.37113
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08310	-0.00154	-0.00133	0.00429	0.00044	-0.00474	-0.00225	-0.00022	0.00320
#2	0.07928	-0.00061	-0.00959	-0.00008	0.00037	-0.01176	-0.00169	-0.00344	0.00200
Mean	0.08119	-0.00108	-0.00546	0.00210	0.00041	-0.00825	-0.00197	-0.00183	0.00260
%RSD	3.32560	61.25916	107.04303	146.99602	11.87996	60.18663	20.08040	124.68572	32.64033
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.01451	-0.00429	-0.00206	-0.00209	-0.00377	-0.01179	-0.00024	-0.00209	0.00094
#2	-0.01129	0.00447	-0.00206	-0.00217	0.00697	-0.01476	-0.00069	-0.00130	0.00075
Mean	-0.01290	0.00009	-0.00206	-0.00213	0.00160	-0.01328	-0.00047	-0.00169	0.00084
%RSD	17.66271	6794.08131	0.00000	2.65116	474.98503	15.80130	67.65796	33.12079	15.93789

	Pb	Se
	calc	calc
#1	0.00172	0.00206
#2	0.00022	0.00019
Mean	0.00097	0.00112
%RSD	109.32557	118.02550

Method : Paragon2 File : 131218A
SampleId1 : 1312134-1MS 5X SampleId2 :
Analysis commenced : 12/18/2013 13:45:19
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:24

[SAMPLE]

Position : TUBE21

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00041	15.64339	0.18589	0.18509	0.62123	0.01215	-0.00074	26.04344	0.01034
#2	-0.00105	15.62483	0.18280	0.18434	0.61733	0.01196	0.00239	26.12813	0.01058
Mean	-0.00073	15.63411	0.18435	0.18471	0.61928	0.01205	0.00082	26.08578	0.01046
%RSD	61.90599	0.08396	1.18613	0.28846	0.44565	1.09874	269.68944	0.22957	1.62745
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.10872	0.06170	0.08649	30.51248	12.79468	0.12767	13.64796	0.62573	0.18016
#2	0.10829	0.06166	0.08589	30.63866	12.68011	0.12677	13.65088	0.63055	0.18330
Mean	0.10851	0.06168	0.08619	30.57557	12.73739	0.12722	13.64942	0.62814	0.18173
%RSD	0.28154	0.05276	0.49550	0.29180	0.63605	0.49707	0.01512	0.54269	1.22271

	Na ppm	Ni ppm	P ppm	Pb I ppm	Pb II ppm	S ppm	Sb ppm	Se I ppm	Se II ppm
#1	37.81339	0.12478	0.13624	0.12202	0.11684	17.11825	0.04407	0.36709	0.35024
#2	37.43749	0.12368	0.14499	0.11991	0.11885	17.22563	0.04190	0.38605	0.36066
Mean	37.62544	0.12423	0.14061	0.12096	0.11785	17.17194	0.04299	0.37657	0.35545
%RSD	0.70645	0.62423	4.40198	1.23025	1.21142	0.44215	3.57567	3.55902	2.07267

	Si ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	U ppm	V ppm	Zn ppm	Zr ppm
#1	10.21299	0.04911	0.34028	0.07907	0.39713	-0.00596	0.12692	0.16751	0.00175
#2	10.26928	0.05494	0.33845	0.07951	0.39036	-0.00787	0.12689	0.16751	0.00139
Mean	10.24113	0.05203	0.33937	0.07929	0.39374	-0.00691	0.12691	0.16751	0.00157
%RSD	0.38868	7.93012	0.38075	0.39160	1.21577	19.56289	0.01403	0.00000	16.02406

	Pb calc	Se calc
#1	0.11856	0.35585
#2	0.11921	0.36912
Mean	0.11888	0.36249
%RSD	0.38412	2.58686

Method : Paragon2
File : 131218A
SampleId1 : 1312134-1MSD 5X SampleId2 :
Analysis commenced : 12/18/2013 13:48:35
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:24
[SAMPLE]

Position : TUBE22

Final concentrations

	Ag ppm	Al ppm	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca ppm	Cd ppm
#1	-0.00097	18.98541	0.19264	0.18800	0.67686	0.01307	-0.00568	30.71742	0.01080
#2	-0.00137	19.06759	0.18421	0.18907	0.67494	0.01275	0.00476	30.64932	0.01098
Mean	-0.00117	19.02650	0.18842	0.18854	0.67590	0.01291	-0.00046	30.68337	0.01089
%RSD	24.17785	0.30542	3.16509	0.40375	0.20063	1.73138	1614.26118	0.15694	1.19017

	Co ppm	Cr ppm	Cu ppm	Fe ppm	K ppm	Li ppm	Mg ppm	Mn ppm	Mo ppm
#1	0.11413	0.06781	0.09810	38.86387	13.23238	0.13435	15.23482	0.76775	0.18028
#2	0.11274	0.06771	0.09810	39.04911	13.16261	0.13400	15.31961	0.77519	0.18125
Mean	0.11344	0.06776	0.09810	38.95649	13.19750	0.13418	15.27721	0.77147	0.18076
%RSD	0.86605	0.09568	0.00088	0.33623	0.37381	0.18434	0.39246	0.68195	0.37823

	Na ppm	Ni ppm	P ppm	Pb I ppm	Pb II ppm	S ppm	Sb ppm	Se I ppm	Se II ppm
#1	37.28324	0.13574	0.20190	0.12611	0.12486	18.12808	0.04762	0.37233	0.35901
#2	36.94008	0.13563	0.18488	0.12928	0.12394	18.46493	0.04707	0.36509	0.35497
Mean	37.11166	0.13569	0.19339	0.12770	0.12440	18.29650	0.04735	0.36871	0.35699
%RSD	0.65384	0.05715	6.22570	1.75688	0.51979	1.30185	0.80964	1.38740	0.80069

	Si ppm	Sn ppm	Tl ppm	U ppm	V ppm	Zn ppm	Zr ppm
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#1	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#2	11.28819	0.04522	0.38963	0.07562	0.38523	-0.00629	0.13450	0.18653	0.00060
Mean	11.33811	0.04231	0.38911	0.07640	0.38739	-0.00846	0.13441	0.18455	0.00071
%RSD	0.62261	9.75638	0.18856	1.44088	0.79108	36.34882	0.09394	1.51874	22.21874

	Pb	Se
	calc	calc
#1	0.12527	0.36345
#2	0.12572	0.35834
Mean	0.12550	0.36089
%RSD	0.25162	1.00029

Method : Paragon2
 File : 131218A
 SampleId1 : 1312158-1 5X
 SampleId2 :
 Analysis commenced : 12/18/2013 13:50:19
 Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:24
 [SAMPLE]
 Position : TUBE23

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00032	0.02233	-0.00334	0.06057	0.03296	0.00053	-0.00243	0.61072	-0.00072
#2	-0.00008	0.00239	-0.00867	0.06025	0.03282	0.00015	0.00175	0.60856	-0.00062
Mean	-0.00020	0.01236	-0.00601	0.06041	0.03289	0.00034	-0.00034	0.60964	-0.00067
%RSD	85.93321	114.06809	62.73070	0.37783	0.30229	79.81245	862.19489	0.24960	10.45756

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00067	0.00026	-0.00285	0.51473	0.38401	0.00991	0.10427	0.00890	-0.00190
#2	-0.00067	0.00055	-0.00237	0.51642	0.38532	0.00991	0.10600	0.00890	-0.00275
Mean	-0.00067	0.00041	-0.00261	0.51558	0.38466	0.00991	0.10513	0.00890	-0.00232
%RSD	0.05042	49.24556	13.10409	0.23167	0.23950	0.02355	1.16139	0.00000	25.73523

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	80.40796	0.00208	-0.00861	0.00597	-0.00037	0.03740	-0.00252	-0.00146	0.00072
#2	79.54115	0.00016	-0.02950	0.00205	-0.00002	0.04442	-0.00006	-0.00096	-0.00122
Mean	79.97455	0.00112	-0.01906	0.00401	-0.00019	0.04091	-0.00129	-0.00121	-0.00025
%RSD	0.76640	121.45350	77.50305	68.97790	126.00046	12.13914	135.36560	28.99601	552.37249

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.90023	0.00252	0.11014	-0.00172	0.00253	-0.01885	0.00005	-0.00050	0.00048
#2	1.91703	-0.00623	0.10977	-0.00158	0.00859	-0.01707	-0.00023	-0.00050	0.00056
Mean	1.90863	-0.00185	0.10995	-0.00165	0.00556	-0.01796	-0.00009	-0.00050	0.00052
%RSD	0.62250	333.73864	0.23501	5.70112	77.12658	7.00639	213.68788	0.00000	11.25796

	Pb	Se
	calc	calc

#1 0.00174 0.000000 **User: STEVE WORKMAN**
 #2 0.00067 -0.00114
Mean 0.00121 -0.00057
%RSD 62.84601 140.57806

Method : Paragon2 File : 131218A
SampleId1 : 1312134-1A SampleId2 :
Analysis commenced : 12/18/2013 13:51:51
 Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:24
[SAMPLE]
 Position : TUBE24

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00138	50.27738	1.05258	1.02905	2.31824	0.05245	0.00635	97.14176	0.05471
#2	-0.00073	50.77621	1.04689	1.03067	2.32578	0.05236	0.00219	96.68382	0.05365
Mean	-0.00106	50.52679	1.04973	1.02986	2.32201	0.05241	0.00427	96.91279	0.05418
%RSD	43.54579	0.69810	0.38315	0.11124	0.22968	0.11821	68.87085	0.33413	1.38340

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.51899	0.25383	0.37063	96.22707	56.56233	0.58192	52.01944	1.90987	1.02852
#2	0.51866	0.25394	0.37051	96.62154	56.67301	0.58464	52.44888	1.92536	1.01954
Mean	0.51883	0.25389	0.37057	96.42430	56.61767	0.58328	52.23416	1.91762	1.02403
%RSD	0.04500	0.02866	0.02242	0.28928	0.13823	0.32925	0.58135	0.57125	0.62008

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	171.46087	0.57621	0.44778	0.55342	0.54871	79.54979	0.46289	2.15665	2.02937
#2	170.07417	0.56254	0.44340	0.54650	0.56022	81.00070	0.45986	2.17968	2.11271
Mean	170.76752	0.56938	0.44559	0.54996	0.55447	80.27524	0.46137	2.16816	2.07104
%RSD	0.57420	1.69756	0.69592	0.89023	1.46767	1.27803	0.46464	0.75111	2.84545

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	39.92382	0.52027	1.36954	0.57460	2.11479	0.01451	0.58803	0.65702	-0.00014
#2	40.44390	0.51248	1.37032	0.58466	2.12159	0.00223	0.59053	0.65781	0.00000
Mean	40.18386	0.51638	1.36993	0.57963	2.11819	0.00837	0.58928	0.65741	-0.00007
%RSD	0.91518	1.06726	0.04018	1.22755	0.22708	103.77338	0.30019	0.08540	141.26601

Pb

	calc
#1	0.55028
#2	0.55565
Mean	0.55296
%RSD	0.68675

Method : Paragon2 File : 131218A
SampleId1 : IP131218-2MB SampleId2 :
Analysis commenced : 12/18/2013 14:03:02

Printed : 12/18/2013 16:48:25
[SAMPLE]

Dilution ratio : 1.00000 to 1.00000 Tray :

Position : TUBE25

Final concentrations

	Ag ppm	Al ppm	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca ppm	Cd ppm
#1	-0.00080	0.02008	0.00058	-0.00634	-0.00071	0.00063	-0.00452	-0.05555	-0.00047
#2	-0.00128	0.00017	-0.00250	-0.00591	-0.00071	0.00014	-0.00217	-0.05555	-0.00054
Mean	-0.00104	0.01012	-0.00096	-0.00613	-0.00071	0.00038	-0.00335	-0.05555	-0.00050
%RSD	32.79889	139.07046	227.68156	4.96373	0.00000	90.05273	49.61885	0.00000	10.28283

	Co ppm	Cr ppm	Cu ppm	Fe ppm	K ppm	Li ppm	Mg ppm	Mn ppm	Mo ppm
#1	0.00014	-0.00002	-0.00357	-0.00801	-0.04496	0.00250	0.03002	-0.00041	-0.00142
#2	-0.00082	-0.00077	-0.00309	-0.00877	-0.04626	0.00250	0.02312	-0.00054	-0.00226
Mean	-0.00034	-0.00040	-0.00333	-0.00839	-0.04561	0.00250	0.02657	-0.00047	-0.00184
%RSD	198.02141	135.09774	10.27632	6.42565	2.01802	0.09340	18.38092	19.41459	32.49292

	Na ppm	Ni ppm	P ppm	Pb I ppm	Pb II ppm	S ppm	Sb ppm	Se I ppm	Se II ppm
#1	0.03864	-0.00149	-0.01299	0.00548	-0.00095	-0.03283	-0.00443	-0.00865	-0.00205
#2	0.03833	-0.00203	0.00693	0.00042	0.00422	-0.01878	-0.00608	-0.00915	-0.00504
Mean	0.03849	-0.00176	-0.00303	0.00295	0.00164	-0.02581	-0.00526	-0.00890	-0.00355
%RSD	0.56824	22.01252	465.40974	121.41450	223.57729	38.48302	22.16216	3.94764	59.72276

	Si ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	U ppm	V ppm	Zn ppm	Zr ppm
#1	-0.01552	-0.00137	-0.00238	-0.00234	0.00502	-0.02128	-0.00047	-0.00526	-0.00003
#2	-0.01231	-0.00039	-0.00239	-0.00242	-0.00352	-0.02306	-0.00098	0.00029	-0.00018
Mean	-0.01392	-0.00088	-0.00238	-0.00238	0.00075	-0.02217	-0.00072	-0.00248	-0.00010
%RSD	16.32154	78.05177	0.32750	2.36980	802.70500	5.67948	49.23782	157.89050	105.90315

	Pb calc	Se calc
#1	0.00119	-0.00425
#2	0.00296	-0.00641
Mean	0.00207	-0.00533
%RSD	60.21874	28.70022

Method : Paragon2

File : 131218A

SampleId1 : Z

SampleId2 :

Analysis commenced : 12/18/2013 14:04:34

Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:25

[SAMPLE]

Position : TUBE26

Final concentrations

	Ag ppm	Al ppm	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca ppm	Cd ppm
#1	-0.00143	-0.32481	0.00199	-0.00807	-0.00078	-0.00368	-0.00821	-0.06157	-0.00010
#2	-0.00063	-0.32710	0.00591	-0.00817	-0.00088	-0.00380	-0.00325	-0.06071	-0.00047

Mean	-0.00103	-0.32595	0.00395	-0.00812	-0.00083	-0.00374	-0.00573	-0.06114	-0.00028
%RSD	55.31329	0.49561	70.29180	0.93678	8.99592	2.11702	61.16023	0.99433	92.46610
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00156	-0.00133	-0.01445	-0.01075	0.80267	0.00374	0.02830	-0.00054	-0.00432
#2	-0.00178	0.00004	-0.01481	-0.01030	0.80085	0.00372	0.02945	-0.00041	-0.00347
Mean	-0.00167	-0.00065	-0.01463	-0.01053	0.80176	0.00373	0.02887	-0.00047	-0.00389
%RSD	9.03318	149.90404	1.75282	3.07331	0.16100	0.31259	2.81921	19.41459	15.35589
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.04772	0.00021	-0.04796	0.00441	0.00791	-0.03985	-0.00856	-0.00941	0.00170
#2	0.04735	-0.00094	-0.04651	-0.00084	0.01001	-0.03283	-0.00390	-0.00073	0.00005
Mean	0.04754	-0.00036	-0.04724	0.00179	0.00896	-0.03634	-0.00623	-0.00507	0.00087
%RSD	0.53688	224.21197	2.18143	208.06866	16.55775	13.66401	52.93801	121.15123	133.65152
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.14581	-0.01109	-0.00242	-0.00326	-0.00683	-0.03494	-0.00137	-0.00288	-0.00011
#2	-0.14361	-0.01012	-0.00241	-0.00305	-0.01042	-0.03494	-0.00098	-0.00367	0.00000
Mean	-0.14471	-0.01061	-0.00242	-0.00315	-0.00863	-0.03494	-0.00117	-0.00328	-0.00005
%RSD	1.07626	6.48251	0.32301	4.77311	29.37186	0.00096	23.72366	17.10074	135.31359
	Pb	Se							
	calc	calc							
#1	0.00675	-0.00200							
#2	0.00640	-0.00021							
Mean	0.00657	-0.00111							
%RSD	3.76841	114.57864							

Method : Paragon2

File : 131218A

Printed : 12/18/2013 16:48:25

SampleId1 : Z

SampleId2 :

[SAMPLE]

Analysis commenced : 12/18/2013 14:06:05

Dilution ratio : 1.00000 to 1.00000 Tray :

Position : TUBE27

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00254	-0.35081	0.00115	-0.00839	-0.00085	-0.00417	-0.01265	-0.06458	-0.00110
#2	-0.00270	-0.35307	0.00423	-0.00893	-0.00092	-0.00435	-0.01265	-0.06544	-0.00027
Mean	-0.00262	-0.35194	0.00269	-0.00866	-0.00088	-0.00426	-0.01265	-0.06501	-0.00068
%RSD	4.33126	0.45437	81.16134	4.39292	5.63860	2.96094	0.00707	0.93515	85.42205
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00433	-0.00274	-0.01601	-0.01091	0.72965	0.00354	0.01966	-0.00066	-0.00383
#2	-0.00444	-0.00288	-0.01638	-0.01121	0.72027	0.00350	0.01794	-0.00079	-0.00432
Mean	-0.00438	-0.00281	-0.01620	-0.01106	0.72496	0.00352	0.01880	-0.00073	-0.00407

%RSD	1.71850	3.55361	1.58196	1.94998	0.91560	0.72963	6.49440	12.53256	8.38460
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.04349	-0.00182	-0.05816	-0.01257	0.01275	-0.03985	-0.00691	-0.01611	0.01068
#2	0.04246	-0.00225	-0.05525	-0.00827	0.01198	-0.04687	-0.01404	-0.01810	0.00784
Mean	0.04297	-0.00203	-0.05671	-0.01042	0.01237	-0.04336	-0.01047	-0.01711	0.00926
%RSD	1.69663	15.23816	3.63392	29.14799	4.39568	11.45112	48.16413	8.20240	21.73409
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.15325	-0.01595	-0.00247	-0.00341	-0.01897	-0.05691	-0.00215	-0.00367	-0.00072
#2	-0.15291	-0.01595	-0.00247	-0.00339	-0.01346	-0.05809	-0.00249	-0.00367	-0.00064
Mean	-0.15308	-0.01595	-0.00247	-0.00340	-0.01621	-0.05750	-0.00232	-0.00367	-0.00068
%RSD	0.15556	0.00007	0.00000	0.27672	24.03298	1.46012	10.22437	0.00000	8.93686
	Pb	Se							
	calc	calc							
#1	0.00432	0.00176							
#2	0.00524	-0.00080							
Mean	0.00478	0.00048							
%RSD	13.58781	377.16130							

Method : Paragon2 File : 131218A
SampleId1 : 1312216-1 SampleId2 :
Analysis commenced : 12/18/2013 14:09:02
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:25

[SAMPLE]

Position : TUBE28

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00218	0.18577	-0.00054	0.00839	0.04712	0.00085	-0.00093	27.37785	0.00089
#2	0.00082	0.16820	-0.00586	0.00624	0.04740	0.00044	-0.00067	27.18284	0.00099
Mean	0.00150	0.17699	-0.00320	0.00732	0.04726	0.00065	-0.00080	27.28034	0.00094
%RSD	64.08025	7.01688	117.68221	20.79181	0.42077	44.40425	23.53382	0.50546	7.45885
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00013	0.00395	0.16230	0.63553	4.73837	0.00753	3.24754	0.01213	0.00076
#2	-0.00045	0.00377	0.16388	0.63768	4.76413	0.00755	3.27757	0.01213	-0.00105
Mean	-0.00029	0.00386	0.16309	0.63660	4.75125	0.00754	3.26256	0.01213	-0.00015
%RSD	78.67470	3.34580	0.68264	0.23918	0.38342	0.18571	0.65085	0.00000	860.06578
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	54.62757	0.05492	3.11884	0.00568	0.00314	21.00608	0.00187	-0.00047	0.00359
#2	54.52446	0.05317	3.14064	-0.00023	0.00223	21.34399	-0.00280	-0.00643	-0.00001
Mean	54.57601	0.05405	3.12974	0.00272	0.00269	21.17503	-0.00046	-0.00345	0.00179
%RSD	0.13359	2.29531	0.49257	153.39255	23.78885	1.12840	713.61883	122.16899	141.92507

ted: 12/18/2013 16:48:33 User: STEVE WORKMAN

	Si	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.91370	0.01419	0.00407	0.00485	-0.02016	0.00120	0.32451	-0.00006
#2	6.00069	-0.00138	0.00617	-0.00948	-0.02967	0.00025	0.32213	-0.00047
Mean	5.95720	0.00640	0.00512	-0.00231	-0.02492	0.00072	0.32332	-0.00026
%RSD	1.03251	171.83733	29.02135	438.50472	26.97052	92.69030	0.52038	110.40508

	Pb	Se
	calc	calc
#1	0.00398	0.00224
#2	0.00141	-0.00214
Mean	0.00270	0.00005
%RSD	67.35016	6720.41349

Method : Paragon2 File : 131218A Printed : 12/18/2013 16:48:25

SampleId1 : 1312216-1D SampleId2 :

Analysis commenced : 12/18/2013 14:10:33 [SAMPLE]

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE29

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00162	0.21368	-0.00446	0.00732	0.04860	0.00097	0.00013	27.70255	0.00142
#2	0.00098	0.19723	-0.00839	0.00796	0.04860	0.00059	-0.00248	27.58918	0.00091
Mean	0.00130	0.20545	-0.00643	0.00764	0.04860	0.00078	-0.00118	27.64587	0.00117
%RSD	34.74189	5.66183	43.19679	5.97406	0.00000	34.58478	156.91027	0.28998	30.68525

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00002	0.00500	0.16847	0.64906	4.88771	0.00760	3.33822	0.01213	-0.00178
#2	-0.00055	0.00330	0.16932	0.65491	4.88297	0.00761	3.35670	0.01239	0.00039
Mean	-0.00029	0.00415	0.16889	0.65199	4.88534	0.00761	3.34746	0.01226	-0.00069
%RSD	130.54059	28.93526	0.35539	0.63401	0.06851	0.09203	0.39040	1.49099	222.00251

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	55.79417	0.05964	3.16839	0.00693	-0.00099	21.35837	-0.00253	-0.00295	0.00359
#2	55.42248	0.05635	3.21796	0.00284	0.00559	21.71080	-0.00169	-0.00246	0.00015
Mean	55.60832	0.05799	3.19317	0.00489	0.00230	21.53459	-0.00211	-0.00270	0.00187
%RSD	0.47264	4.01082	1.09766	59.29722	202.20181	1.15723	28.13777	12.83480	130.37345

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	6.10513	-0.00332	0.14211	0.00491	0.00129	-0.01958	0.00132	0.32451	-0.00018
#2	6.16617	-0.00040	0.14228	0.00515	0.00101	-0.02850	0.00104	0.31975	-0.00010
Mean	6.13565	-0.00186	0.14219	0.00503	0.00115	-0.02404	0.00118	0.32213	-0.00014
%RSD	0.70350	110.76942	0.08267	3.36746	16.85822	26.21660	16.86146	1.04460	37.20182

SeUser: STEVE WORKMAN

Pb
calc
#1 0.00165
#2 0.00467
Mean 0.00316
%RSD 67.63720 436.71611

Method : Paragon2

File : 131218A

Printed : 12/18/2013 16:48:26

SampleId1 : 1312216-1L 5X

SampleId2 :

Analysis commenced : 12/18/2013 14:12:05

[SAMPLE]

Dilution ratio : 1.00000 to 1.00000 Tray :

Position : TUBE30

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00033	0.05590	-0.01484	-0.00441	0.00885	0.00077	0.00444	5.34133	0.00011
#2	0.00009	0.03372	-0.00923	-0.00430	0.00885	0.00036	-0.00286	5.33959	0.00061
Mean	0.00021	0.04481	-0.01203	-0.00435	0.00885	0.00056	0.00079	5.34046	0.00036
%RSD	81.40537	34.99709	32.95028	1.74674	0.00000	51.34740	655.15253	0.02300	97.64284

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00057	0.00178	0.02931	0.12172	0.65978	0.00354	0.67542	0.00231	-0.00190
#2	-0.00134	0.00088	0.02979	0.12249	0.65952	0.00354	0.67138	0.00231	-0.00202
Mean	-0.00038	0.00133	0.02955	0.12210	0.65965	0.00354	0.67340	0.00231	-0.00196
%RSD	352.80024	47.69417	1.16033	0.44231	0.02795	0.06596	0.42333	0.00000	4.35590

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.73414	0.01205	0.61354	0.00159	-0.00341	4.08485	-0.00005	-0.00121	0.00052
#2	8.72486	0.01151	0.62134	0.00459	0.00037	4.15541	-0.00636	0.00176	0.00396
Mean	8.72950	0.01178	0.61744	0.00309	-0.00152	4.12013	-0.00321	0.00028	0.00224
%RSD	0.07522	3.29080	0.89381	68.51407	175.53941	1.21087	139.02273	760.83199	108.80436

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.13881	-0.00818	0.02572	-0.00141	0.00351	-0.01488	0.00007	0.06368	0.00005
#2	1.15831	-0.00137	0.02577	-0.00124	-0.00890	-0.01963	0.00051	0.06209	-0.00004
Mean	1.14856	-0.00477	0.02575	-0.00132	-0.00270	-0.01726	0.00029	0.06289	0.00001
%RSD	1.20045	100.86201	0.15172	9.23587	325.40925	19.46839	109.45508	1.78209	818.50602

	Pb	Se
	calc	calc
#1	-0.00174	-0.00006
#2	0.00177	0.00323
Mean	0.00001	0.00159
%RSD	16840.57040	146.65211

Method : Paragon2

File : 131218A

Printed : 12/18/2013 16:48:26

SampleId1 : CCV
Analysis commenced : 12/18/2013 14:15:17
Dilution ratio : 1.00000 to 1.00000 Tray :

[CV]
Position : STD1

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
#1	0.20028	48.21669	0.49295	0.97818	0.96536	0.46979	0.51206	49.58860	0.51489
#2	0.20172	48.56425	0.49324	0.97743	0.96069	0.47786	0.51389	50.10624	0.51178
Mean	0.20100	48.39047	0.49310	0.97781	0.96303	0.47382	0.51297	49.84742	0.51333
%RSD	0.50862	0.50787	0.04048	0.05466	0.34316	1.20488	0.25257	0.73429	0.42795

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
#1	0.47825	0.97444	0.99106	19.45200	50.49156	0.50442	48.15512	0.94088	0.96507
#2	0.48056	0.98611	0.98659	19.69691	50.11212	0.50071	48.63133	0.95776	0.97635
Mean	0.47940	0.98028	0.98883	19.57446	50.30184	0.50256	48.39323	0.94932	0.97071
%RSD	0.34185	0.84149	0.31986	0.88472	0.53339	0.52142	0.69583	1.25704	0.82190

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
#1	52.14717	1.01711	4.81761	0.95255	0.93981	4.84007	0.51783	1.01360	0.93158
#2	51.62797	1.00425	4.89172	0.96700	0.96768	4.85420	0.50811	0.99874	0.96423
Mean	51.88757	1.01068	4.85466	0.95978	0.95374	4.84714	0.51297	1.00617	0.94790
%RSD	0.70755	0.89972	1.07938	1.06466	2.06653	0.20602	1.33949	1.04416	2.43502

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
#1	4.73372	1.01366	0.49599	0.46088	0.49935	4.79239	0.48657	0.91677	0.99282
#2	4.80898	1.01851	0.49413	0.46989	0.48440	4.78202	0.49246	0.93425	0.99553
Mean	4.77135	1.01609	0.49506	0.46538	0.49187	4.78720	0.48952	0.92551	0.99417
%RSD	1.11540	0.33783	0.26529	1.36841	2.14847	0.15311	0.85124	1.33578	0.19266

	Pb	Se
	calc	calc
#1	0.94405	0.95890
#2	0.96745	0.97572
Mean	0.95575	0.96731
%RSD	1.73150	1.22990

Method : Paragon2
SampleId1 : CCB
Analysis commenced : 12/18/2013 14:16:54
Dilution ratio : 1.00000 to 1.00000 Tray :

File : 131218A
[CB]
Printed : 12/18/2013 16:48:26
Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	-0.00064	0.04114	-0.00082	-0.00441	-0.00007	0.00085	-0.00635	-0.02546	-0.00033
#2	-0.00032	0.01605	-0.00474	-0.00527	-0.00011	0.00042	-0.00452	-0.02890	-0.00012
Mean	-0.00048	0.02859	-0.00278	-0.00484	-0.00009	0.00063	-0.00543	-0.02718	-0.00022
%RSD	47.46846	62.03123	99.82971	12.57591	27.39928	47.72385	23.78193	8.94781	68.32055

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00050	0.00017	-0.00321	0.00846	0.00399	0.00304	0.05937	0.00011	-0.00118
#2	-0.00061	0.00041	-0.00321	0.00709	-0.00695	0.00300	0.05189	-0.00015	0.00027
Mean	-0.00055	0.00029	-0.00321	0.00778	-0.00148	0.00302	0.05563	-0.00002	-0.00045
%RSD	13.65226	57.77596	0.01103	12.48369	521.94118	0.77233	9.50989	995.02004	227.28995

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08140	-0.00012	0.00305	-0.00112	-0.00130	-0.01878	0.00023	-0.00592	0.00140
#2	0.07784	-0.00072	-0.00667	0.00000	-0.00179	-0.01878	-0.00059	-0.00022	0.00125
Mean	0.07962	-0.00042	-0.00181	-0.00056	-0.00155	-0.01878	-0.00018	-0.00307	0.00132
%RSD	3.16208	102.03741	379.17888	140.16962	22.49205	0.00000	323.02180	131.29613	8.01502

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02432	0.00350	-0.00204	-0.00232	0.00146	-0.01952	-0.00092	-0.00367	0.00091
#2	-0.02212	0.00349	-0.00206	-0.00205	-0.00764	-0.01773	-0.00019	-0.00367	0.00060
Mean	-0.02322	0.00350	-0.00205	-0.00218	-0.00309	-0.01862	-0.00055	-0.00367	0.00075
%RSD	6.71452	0.00626	0.76275	8.62170	208.36075	6.76933	93.14130	0.00000	29.25335

	Pb	Se
	calc	calc
#1	-0.00124	-0.00104
#2	-0.00120	0.00076
Mean	-0.00122	-0.00014
%RSD	2.54372	905.83718

Method : Paragon2
 File : 131218A
 SampleId1 : 1312216-1MS
 SampleId2 :
 Analysis commenced : 12/18/2013 14:19:54
 Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:26
 [SAMPLE]
 Position : TUBE31

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00162	2.32401	1.06794	1.06124	1.07888	0.04946	-0.00119	27.76309	0.05526
#2	0.00162	2.32283	1.07135	1.05065	1.07581	0.04924	-0.00223	27.73960	0.05483
Mean	0.00162	2.32342	1.06964	1.05594	1.07735	0.04935	-0.00171	27.75134	0.05504
%RSD	0.14967	0.03597	0.22567	0.70886	0.20174	0.31431	43.12806	0.05986	0.55437

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.51485	0.20659	0.42941	1.60681	4.82828	0.00763	3.31280	0.54279	1.06530

#2	0.51569	0.20550	0.42796	1.61289	4.81224	0.00760	3.31511	0.54348	1.06930
Mean	0.51527	0.20605	0.42868	1.60985	4.82026	0.00761	3.31396	0.54314	1.06730
%RSD	0.11520	0.37322	0.23930	0.26684	0.23528	0.24515	0.04929	0.08941	0.26537
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	55.69195	0.58829	3.17384	0.55010	0.54504	21.29366	0.47815	2.17966	2.20395
#2	55.43308	0.58466	3.21945	0.54906	0.54972	21.41590	0.47032	2.19809	2.22439
Mean	55.56252	0.58648	3.19664	0.54958	0.54738	21.35478	0.47424	2.18888	2.21417
%RSD	0.32944	0.43685	1.00877	0.13448	0.60442	0.40479	1.16755	0.59554	0.65272
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.24963	0.52035	0.68889	0.50474	2.15034	-0.02830	0.53998	0.84602	0.00109
#2	7.30446	0.52619	0.68657	0.50871	2.14145	-0.02949	0.53808	0.84932	0.00043
Mean	7.27705	0.52327	0.68773	0.50672	2.14589	-0.02889	0.53903	0.84767	0.00076
%RSD	0.53270	0.78809	0.23936	0.55365	0.29324	2.92203	0.24948	0.27508	61.73285
	Pb	Se							
	calc	calc							
#1	0.54673	2.19586							
#2	0.54950	2.21563							
Mean	0.54811	2.20574							
%RSD	0.35771	0.63383							

Method : Paragon2

File : 131218A

SampleId1 : 1312216-1MSD

SampleId2 :

Analysis commenced : 12/18/2013 14:21:26

Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:26

[SAMPLE]

Position : TUBE32

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00170	2.30496	1.07277	1.04547	1.07306	0.04895	-0.00121	27.49344	0.05444
#2	0.00187	2.31693	1.07277	1.05141	1.07910	0.04913	0.00064	27.53815	0.05425
Mean	0.00179	2.31095	1.07277	1.04844	1.07608	0.04904	-0.00028	27.51579	0.05435
%RSD	6.56231	0.36622	0.00000	0.40066	0.39690	0.24815	465.26995	0.11489	0.24510
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.50719	0.20162	0.42868	1.59311	4.82960	0.00764	3.28970	0.53057	1.04515
#2	0.50920	0.20319	0.43110	1.60822	4.83117	0.00766	3.31511	0.53799	1.05607
Mean	0.50820	0.20240	0.42989	1.60066	4.83038	0.00765	3.30241	0.53428	1.05061
%RSD	0.27981	0.54693	0.39809	0.66742	0.02309	0.24398	0.54410	0.98155	0.73517
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	55.34785	0.58576	3.15451	0.54673	0.54379	21.13548	0.47480	2.19630	2.14577
#2	55.29961	0.57978	3.24324	0.54932	0.55037	21.58132	0.47811	2.20577	2.23093

Mean	55.32373	0.58277	3.19888	0.54802	0.54708	21.35840	0.47646	2.20104	2.18835
%RSD	0.06166	0.72605	1.96138	0.33518	0.85140	1.47605	0.49076	0.30430	2.75149

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	7.17301	0.51064	0.68437	0.49465	2.15591	-0.02709	0.53002	0.83036	-0.00041
#2	7.30869	0.52522	0.68744	0.50475	2.16789	-0.03305	0.53494	0.83448	-0.00059
Mean	7.24085	0.51793	0.68591	0.49970	2.16190	-0.03007	0.53248	0.83242	-0.00050
%RSD	1.32500	1.99052	0.31649	1.43014	0.39193	14.00056	0.65443	0.35014	25.64014

	Pb	Se
	calc	calc
#1	0.54476	2.16260
#2	0.55002	2.22255
Mean	0.54739	2.19258
%RSD	0.67930	1.93343

Method : Paragon2
File : 131218A
SampleId1 : 1312216-4
SampleId2 :
Analysis commenced : 12/18/2013 14:22:57
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:26

[SAMPLE]

Position : TUBE33

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00023	0.09299	-0.00166	0.00839	0.01697	0.00092	-0.00151	10.81433	0.00065
#2	-0.00135	0.07384	-0.00502	0.00915	0.01704	0.00052	-0.00386	10.81828	-0.00021
Mean	-0.00079	0.08342	-0.00334	0.00877	0.01700	0.00072	-0.00268	10.81630	0.00022
%RSD	100.15328	16.23434	71.20622	6.07202	0.29228	39.08578	61.75402	0.02580	274.43543

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00058	-0.00002	0.14138	0.00434	1.57993	0.00437	1.46304	0.00479	0.00160
#2	-0.00028	0.00003	0.14199	0.00373	1.57915	0.00437	1.48667	0.00492	0.00209
Mean	0.00015	0.00001	0.14169	0.00404	1.57954	0.00437	1.47485	0.00486	0.00184
%RSD	407.59223	551.31270	0.30219	10.68131	0.03508	0.05336	1.13307	1.98755	18.52679

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	14.56830	0.00685	0.24083	0.00573	0.00012	6.72032	-0.00250	-0.00146	0.00241
#2	14.56156	0.00772	0.22282	-0.00112	0.00282	6.80524	-0.00167	0.00226	-0.00027
Mean	14.56493	0.00728	0.23183	0.00230	0.00147	6.76278	-0.00208	0.00040	0.00107
%RSD	0.03270	8.51449	5.49159	210.46858	129.93591	0.88788	27.99709	661.18478	177.31889

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	3.65543	0.00543	0.05221	0.00328	-0.00157	-0.02010	0.00031	0.20690	-0.00064
#2	3.70447	0.00154	0.05221	0.00479	0.00917	-0.02367	-0.00008	0.20772	-0.00067
Mean	3.67995	0.00349	0.05221	0.00403	0.00380	-0.02189	0.00012	0.20731	-0.00065

%RSD	0.94228	78.90342	0.00000	26.56711	199.88424	11.50944	234.91993	0.28065	2.86160
	Pb		Se						
	calc		calc						
#1	0.00199	0.00112							
#2	0.00151	0.00057							
Mean	0.00175	0.00085							
%RSD	19.51913	46.05022							

Method : Paragon2 File : 131218A
SampleId1 : IP131218-2RVS **SampleId2 :**
Analysis commenced : 12/18/2013 14:24:28
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:27
[SAMPLE]
Position : TUBE34

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00931	1.06368	0.05332	0.04529	0.05039	0.01057	0.09641	4.82531	0.02066
#2	0.01000	1.04236	0.05080	0.04562	0.05046	0.01029	0.10112	4.82878	0.02058
Mean	0.00965	1.05302	0.05206	0.04545	0.05043	0.01043	0.09876	4.82705	0.02062
%RSD	5.07745	1.43190	3.43038	0.50211	0.09860	1.84474	3.37465	0.05084	0.26341

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.01989	0.05027	0.04911	0.93682	8.95245	0.04158	4.86880	0.05190	0.09618
#2	0.01967	0.05091	0.05031	0.94515	8.95616	0.04160	4.92318	0.05272	0.09871
Mean	0.01978	0.05059	0.04971	0.94098	8.95430	0.04159	4.89599	0.05231	0.09745
%RSD	0.76692	0.88982	1.70459	0.62664	0.02931	0.03927	0.78537	1.10785	1.84102

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	8.42119	0.05015	0.98860	0.05032	0.05374	0.93679	0.10605	0.04132	0.05045
#2	8.40602	0.05131	0.99593	0.04971	0.05619	0.92976	0.10114	0.04829	0.05472
Mean	8.41360	0.05073	0.99227	0.05002	0.05497	0.93328	0.10359	0.04481	0.05259
%RSD	0.12749	1.60477	0.52265	0.86298	3.15368	0.53264	3.35222	11.00104	5.73342

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.24970	0.09388	0.04946	0.04847	0.10024	4.81393	0.04953	0.04320	0.04874
#2	0.25985	0.09875	0.04957	0.04936	0.10247	4.85199	0.05009	0.04402	0.04974
Mean	0.25478	0.09631	0.04951	0.04891	0.10135	4.83296	0.04981	0.04361	0.04924
%RSD	2.81845	3.56939	0.15789	1.28625	1.55982	0.55689	0.79782	1.33339	1.43300

	Pb	Se
	calc	calc
#1	0.05260	0.04741
#2	0.05404	0.05258
Mean	0.05332	0.05000
%RSD	1.89895	7.30544

ted: 12/18/2013 16:48:34 **User: STEVE WORKMAN**
 Method : Paragon2 File : 131218A
SampleId1 : EX131217-3MB **SampleId2 :**
Analysis commenced : 12/18/2013 14:26:00
 Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:27
[SAMPLE]
 Position : TUBE35

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00017	0.05526	-0.00558	-0.00333	0.00059	0.00085	-0.00974	0.00292	-0.00036
#2	-0.00064	0.03666	-0.00334	-0.00387	0.00059	0.00037	-0.00374	0.00420	0.00003
Mean	-0.00024	0.04596	-0.00446	-0.00360	0.00059	0.00061	-0.00674	0.00356	-0.00016
%RSD	241.86029	28.61717	35.54028	10.55968	0.00000	55.45773	63.00321	25.61653	169.13797

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00092	0.00017	-0.00369	-0.00465	-0.00382	0.00299	0.03405	-0.00026	-0.00202
#2	-0.00146	0.00022	-0.00273	-0.00420	0.00138	0.00304	0.03578	-0.00026	-0.00190
Mean	-0.00119	0.00020	-0.00321	-0.00443	-0.00122	0.00302	0.03491	-0.00026	-0.00196
%RSD	31.60939	16.39609	21.28516	7.30986	301.53202	1.16040	3.49689	0.00000	4.35590

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	149.05260	0.00131	-0.00861	-0.00044	0.00114	-0.01176	-0.00170	0.00102	0.00572
#2	147.60019	0.00010	-0.00376	0.00420	0.00069	-0.02581	-0.00224	-0.00642	0.00367
Mean	148.32640	0.00071	-0.00619	0.00188	0.00092	-0.01878	-0.00197	-0.00270	0.00470
%RSD	0.69240	120.80599	55.54640	174.42872	34.07812	52.87023	19.67653	194.64411	30.87747

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00199	0.00155	-0.00198	-0.00267	-0.00076	-0.02306	0.00020	-0.00367	0.00075
#2	0.00529	-0.00137	-0.00196	-0.00252	-0.00958	-0.02010	-0.00025	-0.00449	0.00066
Mean	0.00165	0.00009	-0.00197	-0.00260	-0.00517	-0.02158	-0.00002	-0.00408	0.00070
%RSD	311.66609	2251.42755	0.79267	4.16199	120.57424	9.72723	1331.15459	14.23936	8.80159

	Pb	Se
	calc	calc
#1	0.00061	0.00416
#2	0.00186	0.00031
Mean	0.00124	0.00223
%RSD	71.54179	121.75107

Method : Paragon2 File : 131218A
SampleId1 : IP131218-11CS **SampleId2 :**
Analysis commenced : 12/18/2013 14:27:32
 Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:27
[SAMPLE]
 Position : TUBE36

Final concentrations

Position : TUBE36

#1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.09724	1.94852	0.99287	0.95335	1.04597	0.05003	-0.00296	-0.04222	0.05147
	#2	1.95758	0.98833	0.96037	1.04823	0.05014	-0.00634	-0.04437	0.05047
Mean	0.09600	1.95305	0.99060	0.95686	1.04710	0.05008	-0.00465	-0.04330	0.05097
	%RSD	1.82950	0.32456	0.51865	0.15198	0.15611	51.39291	3.51016	1.39403
#1	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.49747	0.20176	0.26181	0.95025	-0.06865	0.00312	0.03002	0.52727	1.05073
	#2	0.49884	0.20195	0.95442	-0.07438	0.00313	0.02657	0.53139	1.05061
Mean	0.49815	0.20185	0.26211	0.95234	-0.07152	0.00313	0.02830	0.52933	1.05067
	%RSD	0.19527	0.06841	0.30963	5.66282	0.37332	8.62967	0.55037	0.00817
#1	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	0.10865	0.53076	-0.01007	0.50725	0.49384	-0.03985	0.44096	1.83463	1.82164
	#2	0.09595	0.52302	0.51416	0.51664	-0.02581	0.44502	1.83360	1.89595
Mean	0.10230	0.52689	-0.00230	0.51070	0.50524	-0.03283	0.44299	1.83411	1.85880
	%RSD	8.77851	1.03867	0.95603	3.19085	30.25097	0.64898	0.03949	2.82670
#1	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	1.01008	0.49411	0.54836	0.49115	1.97517	-0.01871	0.53461	0.47525	0.00236
	#2	1.02431	0.48729	0.49693	1.95875	-0.02762	0.53607	0.48101	0.00130
Mean	1.01719	0.49070	0.54855	0.49404	1.96696	-0.02316	0.53534	0.47813	0.00183
	%RSD	0.98962	0.98220	0.82685	0.59006	27.20364	0.19226	0.85251	40.75153
#1	Pb	Se							
	calc	calc							
	0.49831	1.82597							
	#2	0.51581	1.87519						
Mean	0.50706	1.85058							
	%RSD	2.44131	1.88075						

Method : Paragon2 File : 131218A
SampleId1 : 1312210-1 SampleId2 :
Analysis commenced : 12/18/2013 14:29:03
Dilution ratio : 1.00000 to 1.00000 Tray :
Position : TUBE37

Final concentrations

#1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	-2.68949	-7.32962	0.54124	0.28188	0.35967	0.15829	-0.12508	59.72737	-0.02311
	#2	-2.72178	0.50961	0.28479	0.35960	0.15654	-0.13528	60.59137	-0.02251
Mean	-2.70563	-7.30603	0.52543	0.28334	0.35964	0.15741	-0.13018	60.15937	-0.02281
	%RSD	0.84390	4.25678	0.72564	0.01389	0.78550	5.54252	1.01554	1.83788
#1	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	-2.68949	-7.32962	0.54124	0.28188	0.35967	0.15829	-0.12508	59.72737	-0.02311
	#2	-2.72178	0.50961	0.28479	0.35960	0.15654	-0.13528	60.59137	-0.02251
Mean	-2.70563	-7.30603	0.52543	0.28334	0.35964	0.15741	-0.13018	60.15937	-0.02281
	%RSD	0.84390	4.25678	0.72564	0.01389	0.78550	5.54252	1.01554	1.83788

#1	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#2	-0.01743	0.03029	-0.03579	-0.01030	4.73942	0.02688	6.78433	2.42990	0.27337
Mean	-0.01902	0.03045	-0.04024	-0.01014	4.72128	0.02703	6.79070	2.46469	0.28098
%RSD	-0.01822	0.03037	-0.03801	-0.01022	4.73035	0.02695	6.78752	2.44730	0.27717
	6.19323	0.36891	8.27102	1.05501	0.27114	0.40688	0.06642	1.00540	1.94342

#1	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#2	423.74557	-0.18574	-0.02076	0.47902	0.27699	5.33449	0.07236	-0.92002	-0.03677
Mean	423.33773	-0.19259	-0.00959	0.46912	0.29619	5.36982	0.06446	-0.90760	-0.03031
%RSD	0.13624	-0.18916	-0.01517	0.47407	0.28659	5.35216	0.06841	-0.91381	-0.03354
		2.56016	52.07453	1.47676	4.73687	0.46672	8.16272	0.96085	13.63116

#1	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#2	4.89506	-0.01789	3.49424	-0.01050	-2.88828	-5.83420	-0.31408	0.00455	0.03738
Mean	4.92085	-0.01108	3.50097	-0.01031	-2.94178	-5.92901	-0.32146	0.00866	0.03620
%RSD	0.74128	-0.01449	3.49760	-0.01040	-2.91503	-5.88161	-0.31777	0.00661	0.03679
		33.22651	0.13593	1.32276	1.29770	1.13989	1.64127	44.00661	2.27123

#1	calc	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#2	0.34427	-0.33089	3.49424	-0.01050	-2.88828	-5.83420	-0.31408	0.00455	0.03738
Mean	0.34902	-0.32245	3.50097	-0.01031	-2.94178	-5.92901	-0.32146	0.00866	0.03620
%RSD	1.92637	-0.32667	3.49760	-0.01040	-2.91503	-5.88161	-0.31777	0.00661	0.03679
		1.82858	0.13593	1.32276	1.29770	1.13989	1.64127	44.00661	2.27123

Method : Paragon2
File : 131218A
SampleId1 : 1312210-1D SampleId2 :
Analysis commenced : 12/18/2013 14:30:35
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:27
[SAMPLE]
Position : TUBE38

Final concentrations

#1	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#2	-2.79125	-7.48049	0.53249	0.28662	0.36621	0.16267	-0.13453	62.23112	-0.02386
Mean	-2.80061	-7.39299	0.52458	0.28743	0.36707	0.15774	-0.13454	62.20581	-0.02400
%RSD	0.47249	1.67395	2.13181	0.39740	0.33356	0.16021	-0.13454	62.21846	-0.02393
						2.17934	0.00597	0.02876	0.42080

#1	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#2	-0.01965	0.02996	-0.04141	-0.01441	4.90533	0.02695	6.85621	2.51354	0.27965
Mean	-0.02135	0.03025	-0.04213	-0.01510	4.90230	0.02706	6.90171	2.52815	0.28697
%RSD	11.26439	1.37054	2.42151	6.42635	0.08724	0.61217	0.93248	0.81699	3.60537

#1	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#2	-0.02305	0.03055	-0.04285	-0.01579	4.89928	0.02718	6.94722	2.54276	0.29428
Mean	-0.02135	0.03025	-0.04213	-0.01510	4.90230	0.02706	6.90171	2.52815	0.28697
%RSD	11.26439	1.37054	2.42151	6.42635	0.08724	0.61217	0.93248	0.81699	3.60537

#1	410.88579	-0.19828	-0.04456	0.47585	0.30399	5.44048	0.06665	-0.97930	-0.02936
#2	406.14721	-0.20048	-0.03339	0.45708	0.30878	5.51114	0.05523	-0.99495	-0.02652
Mean	408.51650	-0.19938	-0.03898	0.46646	0.30639	5.47581	0.06094	-0.98712	-0.02794
%RSD	0.82021	0.77725	20.26862	2.84548	1.10398	0.91248	13.25249	1.12114	7.18327

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.01510	-0.01011	3.57853	-0.01022	-3.03977	-6.04634	-0.33269	0.00784	0.04217
#2	5.08190	-0.01303	3.58551	-0.01031	-3.07529	-6.07419	-0.33856	0.01606	0.04007
Mean	5.04850	-0.01157	3.58202	-0.01026	-3.05753	-6.06026	-0.33563	0.01195	0.04112
%RSD	0.93552	17.83067	0.13775	0.57457	0.82144	0.32493	1.23602	48.65212	3.60800

	Pb	Se
	calc	calc
#1	0.36122	-0.34569
#2	0.35816	-0.34901
Mean	0.35969	-0.34735
%RSD	0.60158	0.67556

Method : Paragon2 File : 131218A
SampleId1 : 1312210-1L 5X SampleId2 :
Analysis commenced : 12/18/2013 14:32:07
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:28
[SAMPLE]

Position : TUBE39

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.65216	-1.76649	0.13166	0.05885	0.08155	0.03803	-0.03205	14.63582	-0.00625
#2	-0.64976	-1.76417	0.11733	0.05713	0.08158	0.03736	-0.03152	14.57974	-0.00587
Mean	-0.65096	-1.76533	0.12449	0.05799	0.08157	0.03769	-0.03178	14.60778	-0.00606
%RSD	0.26053	0.09284	8.13667	2.09918	0.03049	1.25121	1.16722	0.27144	4.43462

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00560	0.00674	-0.01249	-0.00770	0.80058	0.00845	1.61753	0.58634	0.06392
#2	-0.00581	0.00659	-0.01225	-0.00847	0.79406	0.00841	1.61349	0.58868	0.06646
Mean	-0.00570	0.00666	-0.01237	-0.00809	0.79732	0.00843	1.61551	0.58751	0.06519
%RSD	2.63988	1.56510	1.36869	6.66805	0.57821	0.35977	0.17663	0.28118	2.75148

	Na	Ni	P	Pb	Pb	S	Sb	Se	I
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	237.01979	-0.04682	-0.02368	0.10745	0.07589	1.11256	0.01044	-0.22411	-0.00309
#2	239.22381	-0.04852	-0.01056	0.09744	0.08077	1.12663	0.00827	-0.23646	-0.00688
Mean	238.12180	-0.04767	-0.01712	0.10245	0.07833	1.11959	0.00935	-0.23029	-0.00498
%RSD	0.65449	2.52052	54.18989	6.90864	4.40762	0.88819	16.46897	3.79277	53.70701

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.08511	-0.00526	0.80716	-0.00420	-0.72182	-1.41347	-0.08610	-0.00203	0.00801

#2	1.08376	-0.01012	0.80772	-0.00413	-0.73170	-1.40516	-0.08604	-0.00038	0.00770
Mean	1.08443	-0.00769	0.80744	-0.00417	-0.72676	-1.40932	-0.08607	-0.00121	0.00785
%RSD	0.08794	44.73221	0.04940	1.17895	0.96111	0.41696	0.04560	96.47866	2.79115

	Pb	Se
	calc	calc
#1	0.08640	-0.07669
#2	0.08632	-0.08333
Mean	0.08636	-0.08001
%RSD	0.06258	5.86697

Method : Paragon2
File : 131218A
SampleId1 : 1312210-1MS
SampleId2 :
Analysis commenced : 12/18/2013 14:33:39
Dilution ratio : 1.00000 to 1.00000 Tray :
Printed : 12/18/2013 16:48:28
[SAMPLE]

Position : TUBE40

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-2.54443	-5.32477	1.47039	1.20991	1.21499	0.19573	-0.12472	59.92292	0.02915
#2	-2.61079	-5.21230	1.45867	1.21337	1.21879	0.19294	-0.13024	60.18660	0.02813
Mean	-2.57761	-5.26853	1.46453	1.21164	1.21689	0.19433	-0.12748	60.05476	0.02864
%RSD	1.82059	1.50945	0.56608	0.20184	0.22063	1.01719	3.06528	0.31047	2.51355

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.40780	0.18991	0.21117	0.74281	4.63296	0.02736	6.74028	2.84862	1.19351
#2	0.40641	0.19303	0.20772	0.74804	4.64794	0.02764	6.72984	2.88202	1.20991
Mean	0.40710	0.19147	0.20944	0.74542	4.64045	0.02750	6.73506	2.86532	1.20171
%RSD	0.24179	1.15073	1.16479	0.49678	0.22828	0.72972	0.10953	0.82438	0.96480

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	421.56770	0.23973	-0.02465	0.96921	0.74743	5.22146	0.50709	0.89098	1.76209
#2	415.26975	0.22914	-0.03679	0.94090	0.77807	5.23559	0.50094	0.87503	1.81553
Mean	418.41873	0.23443	-0.03072	0.95506	0.76275	5.22852	0.50402	0.88300	1.78881
%RSD	1.06432	3.19298	27.95518	2.09546	2.84073	0.19107	0.86206	1.27721	2.11239

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.77680	0.48059	3.93010	0.39894	-0.92167	-5.68623	0.12884	0.41514	0.04381
#2	5.83878	0.47572	3.93713	0.40514	-1.00016	-5.88654	0.12146	0.42172	0.04147
Mean	5.80779	0.47816	3.93361	0.40204	-0.96091	-5.78639	0.12515	0.41843	0.04264
%RSD	0.75459	0.72032	0.12644	1.08922	5.77580	2.44779	4.16653	1.11310	3.87831

	Pb	Se
	calc	calc
#1	0.82128	1.47201
#2	0.83230	1.50234

Mean 0.82679 1.48718User: STEVE WORKMAN
%RSD 0.94197 1.44221

Method : Paragon2 File : 131218A
SampleId1 : CCV SampleId2 :
Analysis commenced : 12/18/2013 14:35:28
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:28
[CV]

Position : STD1

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.20387	51.53824	0.51667	0.99320	0.97600	0.48030	0.52969	51.04281	0.52651
#2	0.20279	51.81773	0.50989	0.99071	0.97874	0.48419	0.52841	50.94895	0.52076
Mean	0.20333	51.67798	0.51328	0.99195	0.97737	0.48225	0.52905	50.99588	0.52364
%RSD	0.37366	0.38242	0.93360	0.17705	0.19879	0.56978	0.17181	0.13015	0.77680
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48693	0.99830	1.00520	19.92799	51.15753	0.51227	48.96687	1.01657	0.99346
#2	0.48628	1.00069	1.00640	20.00796	51.07764	0.51206	49.21118	1.02333	0.98690
Mean	0.48661	0.99950	1.00580	19.96797	51.11759	0.51217	49.08902	1.01995	0.99018
%RSD	0.09436	0.16951	0.08442	0.28318	0.11051	0.02961	0.35192	0.46914	0.46789

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	47.86620	1.03569	4.95082	1.01752	1.02304	4.91775	0.51791	1.00432	1.01307
#2	48.22591	1.02827	5.03301	1.01871	1.03218	5.07312	0.51246	1.02447	1.03378
Mean	48.04605	1.03198	4.99192	1.01811	1.02761	4.99544	0.51518	1.01439	1.02343
%RSD	0.52940	0.50839	1.16414	0.08271	0.62894	2.19931	0.74894	1.40521	1.43069

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.80134	1.03600	0.50304	0.49054	0.50877	4.84067	0.49640	0.98290	1.01276
#2	4.85025	1.03697	0.50385	0.49726	0.50555	4.87212	0.49832	0.98208	1.01428
Mean	4.82579	1.03649	0.50344	0.49390	0.50716	4.85639	0.49736	0.98249	1.01352
%RSD	0.71675	0.06585	0.11318	0.96261	0.44789	0.45785	0.27362	0.05936	0.10636

	Pb	Se
	calc	calc
#1	1.02120	1.01016
#2	1.02769	1.03068
Mean	1.02445	1.02042
%RSD	0.44817	1.42225

Method : Paragon2 File : 131218A
SampleId1 : CCB SampleId2 :
Analysis commenced : 12/18/2013 14:37:06
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:28
[CB]

Position : STD2

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00144	0.07263	-0.00222	-0.00387	-0.00007	0.00096	-0.00374	-0.02460	-0.00035
#2	-0.00048	0.05047	-0.00643	-0.00516	-0.00011	0.00056	0.00174	-0.02546	-0.00007
Mean	-0.00096	0.06155	-0.00432	-0.00452	-0.00009	0.00076	-0.00100	-0.02503	-0.00021
%RSD	71.06621	25.46531	68.79972	20.21191	27.39928	38.01754	388.41946	2.42907	93.28433

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00114	-0.00035	-0.00357	0.00785	-0.02622	0.00322	0.05362	0.00015	-0.00069
#2	-0.00061	0.00046	-0.00261	0.00770	-0.02179	0.00320	0.05477	0.00028	0.00003
Mean	-0.00087	0.00005	-0.00309	0.00778	-0.02400	0.00321	0.05419	0.00022	-0.00033
%RSD	43.05325	1064.81543	22.14870	1.38708	13.03884	0.43624	1.50190	44.81400	155.22347

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.15401	-0.00110	-0.00959	0.00259	0.00121	-0.03283	0.00023	-0.00493	0.00099
#2	0.14528	-0.00006	-0.01007	0.00231	0.00077	-0.01878	-0.00004	-0.00047	0.00430
Mean	0.14965	-0.00058	-0.00983	0.00245	0.00099	-0.02581	0.00010	-0.00270	0.00265
%RSD	4.12753	126.47274	3.49526	8.02777	31.29881	38.48302	198.47312	116.78326	88.48061

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02144	0.00447	-0.00199	-0.00213	0.00229	-0.02070	-0.00030	-0.00285	0.00056
#2	-0.01755	0.00544	-0.00199	-0.00210	0.00036	-0.02248	-0.00052	-0.00449	0.00101
Mean	-0.01950	0.00495	-0.00199	-0.00212	0.00132	-0.02159	-0.00041	-0.00367	0.00078
%RSD	14.12896	13.88167	0.00000	0.92805	103.33280	5.83334	38.16409	31.66727	40.31655

	Pb	Se
	calc	calc
#1	0.00167	-0.00098
#2	0.00128	0.00271
Mean	0.00147	0.00087
%RSD	18.43944	301.71122

Method : Paragon2 File : 131218A Printed : 12/18/2013 16:48:28

SampleId1 : 1312210-1MSD SampleId2 : [SAMPLE]

Analysis commenced : 12/18/2013 14:38:42

Dilution ratio : 1.00000 to 1.00000 Tray : Position : TUBE41

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-2.54347	-5.25762	1.45638	1.18797	1.19408	0.19331	-0.12840	58.42473	0.02786
#2	-2.57990	-5.13944	1.44352	1.19846	1.19784	0.18993	-0.12086	58.80846	0.02729
Mean	-2.56168	-5.19853	1.44995	1.19322	1.19596	0.19162	-0.12463	58.61660	0.02758
%RSD	1.00563	1.60754	0.62744	0.62124	0.22230	1.24518	4.27533	0.46290	1.46370

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.39874	0.18667	0.20876	0.70754	4.62613	0.02669	6.66493	2.78593	1.18185
#2	0.39979	0.18711	0.20383	0.71416	4.61640	0.02693	6.63595	2.82523	1.18537
Mean	0.39926	0.18689	0.20629	0.71085	4.62127	0.02681	6.65044	2.80558	1.18361
%RSD	0.18681	0.16662	1.69033	0.65854	0.14879	0.62672	0.30811	0.99049	0.21040
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	411.35830	0.23627	-0.01930	0.93484	0.73386	5.17201	0.50514	0.93244	1.76549
#2	406.38036	0.22788	-0.03145	0.91534	0.75777	5.21439	0.48647	0.85020	1.82153
Mean	408.86933	0.23207	-0.02538	0.92509	0.74582	5.19320	0.49581	0.89132	1.79351
%RSD	0.86089	2.55693	33.84336	1.49093	2.26681	0.57710	2.66188	6.52405	2.20941
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.70126	0.45823	3.87322	0.39008	-0.93167	-5.72353	0.12329	0.40196	0.04801
#2	5.78005	0.45141	3.88079	0.39736	-1.04108	-5.81539	0.11803	0.41596	0.04497
Mean	5.74066	0.45482	3.87701	0.39372	-0.98637	-5.76946	0.12066	0.40896	0.04649
%RSD	0.97058	1.05993	0.13810	1.30717	7.84277	1.12586	3.07845	2.42002	4.63705

	Pb	Se
	calc	calc
#1	0.80079	1.48809
#2	0.81024	1.49808
Mean	0.80551	1.49308
%RSD	0.82973	0.47329

Method : Paragon2 File : 131218A
SampleId1 : 1312149-2 SampleId2 :
Analysis commenced : 12/18/2013 14:40:14
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:29
[SAMPLE]
Position : TUBE42

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00630	7.81961	0.00171	0.00022	0.00808	0.00103	-0.00781	28.96967	-0.00050
#2	-0.00187	7.81708	-0.00558	0.00097	0.00822	0.00056	-0.00651	28.85062	-0.00055
Mean	-0.00408	7.81835	-0.00194	0.00059	0.00815	0.00080	-0.00716	28.91014	-0.00053
%RSD	76.68400	0.02287	265.82750	89.68935	1.21966	41.30719	12.79360	0.29118	5.92954
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00190	0.15336	0.05640	14.85969	0.12169	0.00461	2.70255	0.41391	0.00390
#2	0.00139	0.15477	0.05724	14.80973	0.12065	0.00455	2.71409	0.41432	0.00559
Mean	0.00164	0.15407	0.05682	14.83471	0.12117	0.00458	2.70832	0.41412	0.00474
%RSD	22.11677	0.64760	1.04886	0.23814	0.60793	0.86602	0.30138	0.07026	25.21116

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	138.10224	0.08579	0.03463	0.00105	0.00763	0.07251	-0.00189	0.00374	0.00981
#2	140.04878	0.08628	0.02832	-0.00197	0.00441	0.04442	0.00003	-0.00320	0.00601
Mean	139.07551	0.08604	0.03147	-0.00046	0.00602	0.05847	-0.00093	0.00027	0.00791
%RSD	0.98969	0.40555	14.19372	465.31301	37.79806	33.97556	146.15488	1818.56022	33.91161

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	5.71239	0.00989	0.14399	1.18782	-0.00551	-0.03489	0.01170	0.02264	0.03131
#2	5.73393	-0.00274	0.14367	1.17925	-0.02126	-0.02236	0.01214	0.02100	0.02787
Mean	5.72316	0.00357	0.14383	1.18354	-0.01338	-0.02863	0.01192	0.02182	0.02959
%RSD	0.26609	249.89864	0.15802	0.51171	83.21900	30.93264	2.59271	5.32996	8.20707

	Pb	Se
	calc	calc
#1	0.00544	0.00779
#2	0.00229	0.00295
Mean	0.00386	0.00537
%RSD	57.72215	63.77934

Method : Paragon2
SampleId1 : 1312232-1 100X
SampleId2 :
Analysis commenced : 12/18/2013 15:26:36
Dilution ratio : 1.00000 to 1.00000
Tray :
Printed : 12/18/2013 16:48:29
[SAMPLE]
Position : TUBE43

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00064	-0.00077	0.01545	7.26150	-0.00060	0.00028	-0.00322	4.07452	0.00015
#2	-0.00048	-0.01094	0.00844	7.26902	-0.00056	-0.00005	-0.00008	4.08882	-0.00055
Mean	-0.00056	-0.00585	0.01194	7.26526	-0.00058	0.00012	-0.00165	4.08167	-0.00020
%RSD	20.54667	122.92449	41.51584	0.07320	4.26461	203.83332	134.23475	0.24765	251.62492

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00061	0.00045	-0.00357	0.03043	96.92121	7.55222	21.90307	0.01066	-0.00226
#2	-0.00050	0.00074	-0.00285	0.03134	96.46190	7.51968	21.99138	0.01079	-0.00262
Mean	-0.00055	0.00060	-0.00321	0.03089	96.69155	7.53595	21.94723	0.01073	-0.00244
%RSD	13.57650	33.88071	15.98867	2.09576	0.33589	0.30528	0.28453	0.89994	10.48427

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	356.42913	-0.00028	-0.01396	0.00441	-0.00274	26.94102	0.00022	-0.00047	0.00320
#2	351.77949	-0.00072	-0.03728	0.00328	-0.00026	27.12914	-0.00252	-0.00469	-0.00137
Mean	354.10431	-0.00050	-0.02562	0.00384	-0.00150	27.03508	-0.00115	-0.00258	0.00092
%RSD	0.92848	62.00741	64.36383	20.75896	116.88931	0.49201	168.73018	115.73530	353.27716

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	ppm	0.07416	ppm	-0.00915	ppm	0.09477	ppm	-0.00219	ppm	-0.01776	ppm	-0.00035	ppm	-0.00121	ppm	0.00039
#2		0.07586		-0.01012		0.09485		-0.00223		-0.02013		-0.00001		-0.00367		0.00047
Mean		0.07501		-0.00963		0.09481		-0.00221		-0.01894		-0.00018		-0.00244		0.00043
%RSD		1.59479		7.13762		0.05779		1.33512		8.86939		130.35879		71.52518		14.08513

	Pb	Se
	calc	calc
#1	-0.00036	0.00198
#2	0.00092	-0.00248
Mean	0.00028	-0.00025
%RSD	323.62006	1274.35103

Method : Paragon2 File : 131218A
SampleId1 : 1312232-2 100X SampleId2 :
Analysis commenced : 12/18/2013 15:28:08
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:29
[SAMPLE]
Position : TUBE44

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00063	0.00588	0.04855	6.89036	-0.00049	0.00031	0.00304	7.25864	-0.00004
#2	-0.00031	-0.00192	0.04294	6.88970	-0.00049	0.00010	-0.00139	7.25602	-0.00047
Mean	-0.00047	0.00198	0.04575	6.89003	-0.00049	0.00021	0.00083	7.25733	-0.00026
%RSD	47.79122	278.56866	8.67440	0.00680	0.00000	70.64025	379.47858	0.02547	118.79356

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00039	-0.00011	-0.00333	0.18209	90.90143	7.09158	20.67633	0.01271	-0.00166
#2	-0.00082	-0.00016	-0.00357	0.18316	91.09332	7.12625	20.79393	0.01284	-0.00262
Mean	-0.00061	-0.00013	-0.00345	0.18262	90.99737	7.10892	20.73513	0.01277	-0.00214
%RSD	49.53977	25.34322	4.96059	0.41437	0.14911	0.34482	0.40106	0.75569	31.89955

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	334.52945	-0.00045	-0.02902	0.00453	-0.00421	25.43748	-0.00005	0.00449	0.00086
#2	331.69935	-0.00088	-0.02270	0.00316	-0.00333	25.46637	-0.00225	-0.00989	0.00512
Mean	333.11440	-0.00066	-0.02586	0.00384	-0.00377	25.45192	-0.00115	-0.00270	0.00299
%RSD	0.60075	46.66266	17.26785	25.26810	16.37966	0.08027	135.64555	376.23577	100.77229

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.09143	-0.01109	0.18059	-0.00238	0.00385	-0.02445	-0.00031	-0.00038	0.00042
#2	0.09143	-0.01012	0.18098	-0.00233	0.00165	-0.02326	-0.00031	0.00126	0.00049
Mean	0.09143	-0.01061	0.18078	-0.00235	0.00275	-0.02385	-0.00031	0.00044	0.00045
%RSD	0.00337	6.48316	0.15189	1.66981	56.61878	3.51755	0.04364	264.74878	10.74071

Pb	Se
calc	calc

#1 -0.00130 0.00207 **User: STEVE WORKMAN**
 #2 -0.00117 0.00012
Mean -0.00124 0.00109
 %RSD 7.17071 125.96844

Method : Paragon2 File : 131218A
SampleId1 : 1312232-1 1000X sampleId2 :
Analysis commenced : 12/18/2013 15:29:40
 Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:29
[SAMPLE]
 Position : TUBE45

Final concentrations

	Ag ppm	Al ppm	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca ppm	Cd ppm
#1	-0.00047	0.00766	0.00115	0.70567	-0.00011	0.00040	-0.00765	0.41234	-0.00031
#2	0.00009	-0.00135	0.00479	0.70265	-0.00014	0.00010	-0.00165	0.41148	-0.00005
Mean	-0.00019	0.00315	0.00297	0.70416	-0.00013	0.00025	-0.00465	0.41191	-0.00018
%RSD	205.15977	201.75950	86.85519	0.30329	19.74744	83.94019	91.27994	0.14771	99.10148
	Co ppm	Cr ppm	Cu ppm	Fe ppm	K ppm	Li ppm	Mg ppm	Mn ppm	Mo ppm
#1	0.00024	0.00065	-0.00381	0.00251	8.66596	0.65921	2.29285	0.00151	-0.00093
#2	-0.00040	0.00031	-0.00297	0.00053	8.66781	0.65899	2.30900	0.00138	-0.00299
Mean	-0.00008	0.00048	-0.00339	0.00152	8.66688	0.65910	2.30093	0.00144	-0.00196
%RSD	592.80493	49.15509	17.62650	92.10071	0.01513	0.02337	0.49643	6.68483	74.05033
	Na ppm	Ni ppm	P ppm	Pb I ppm	Pb II ppm	S ppm	Sb ppm	Se I ppm	Se II ppm
#1	53.97384	0.00093	-0.02562	0.00409	-0.00259	2.56929	-0.00306	-0.00543	0.00257
#2	54.38410	-0.00236	-0.01104	0.00170	0.00149	2.56929	-0.00307	-0.00047	0.00225
Mean	54.17897	-0.00072	-0.01833	0.00290	-0.00055	2.56929	-0.00307	-0.00295	0.00241
%RSD	0.53545	323.30269	56.22122	58.20413	527.67757	0.00000	0.23995	118.92141	9.26730
	Si ppm	Sn ppm	Sr ppm	Ti ppm	Tl ppm	U ppm	V ppm	Zn ppm	Zr ppm
#1	-0.00791	-0.01109	0.01112	-0.00187	-0.00323	-0.02307	0.00043	-0.00121	0.00037
#2	-0.00267	-0.01498	0.01117	-0.00187	0.01192	-0.02010	-0.00019	-0.00038	0.00013
Mean	-0.00529	-0.01304	0.01114	-0.00187	0.00435	-0.02159	0.00012	-0.00079	0.00025
%RSD	70.02305	21.09714	0.35042	0.00000	246.63499	9.73273	369.50508	73.21235	69.14778

Pb
 calc
 #1 -0.00036
 #2 0.00156
Mean 0.00060 0.00063
 %RSD 227.29145 163.04973

Method : Paragon2 File : 131218A
SampleId1 : 1312232-2 1000X sampleId2 :
Analysis commenced : 12/18/2013 15:31:12

Printed : 12/18/2013 16:48:29
[SAMPLE]

Dilution ratio : 1.00000 to 1.00000 Tray :

Position : TUBE46

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
#1	-0.00064	0.01901	-0.00334	0.65325	-0.00011	0.00061	0.00461	0.73081	-0.00044
#2	-0.00015	-0.00134	-0.00558	0.65433	-0.00014	0.00003	-0.00452	0.73253	-0.00030
Mean	-0.00040	0.00884	-0.00446	0.65379	-0.00013	0.00032	0.00005	0.73167	-0.00037
%RSD	86.93512	162.81155	35.54028	0.11664	19.74744	126.14499	14123.27908	0.16642	27.06694

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
#1	-0.00040	0.00022	-0.00394	0.01685	7.94581	0.61597	2.14575	0.00165	-0.00347
#2	-0.00082	-0.00030	-0.00321	0.01639	7.93814	0.61586	2.16998	0.00165	-0.00214
Mean	-0.00061	-0.00004	-0.00357	0.01662	7.94197	0.61592	2.15786	0.00165	-0.00281
%RSD	49.42026	847.39739	14.38214	1.94672	0.06831	0.01326	0.79389	0.00000	33.47842

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
#1	51.87204	-0.00099	-0.01056	0.00081	-0.00223	2.35098	0.00104	-0.00195	-0.00311
#2	51.77713	-0.00066	-0.01250	0.00364	0.00178	2.43548	-0.00471	-0.00245	0.00210
Mean	51.82459	-0.00083	-0.01153	0.00223	-0.00022	2.39323	-0.00184	-0.00220	-0.00051
%RSD	0.12950	28.05445	11.91887	89.90212	1279.24155	2.49667	221.43628	16.01004	727.17519

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
#1	-0.00910	-0.00818	0.01960	-0.00173	0.00561	-0.01596	-0.00041	-0.00038	0.00018
#2	-0.00233	-0.01693	0.01970	-0.00202	0.00092	-0.02131	-0.00041	0.00044	-0.00001
Mean	-0.00572	-0.01255	0.01965	-0.00187	0.00326	-0.01863	-0.00041	0.00003	0.00008
%RSD	83.83472	49.30562	0.35780	11.00876	101.63399	20.28005	0.14393	2069.29944	160.48246

	Pb	Se
	calc	calc
#1	-0.00122	-0.00272
#2	0.00240	0.00058
Mean	0.00059	-0.00107
%RSD	431.14524	218.13314

Method : Paragon2

File : 131218A

SampleId1 : CRI

SampleId2 :

Analysis commenced : 12/18/2013 15:33:12

Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:29

[CV]

Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
#1	0.02096	0.43329	0.01545	0.40834	0.42359	0.01242	0.04920	5.14467	0.01301
#2	0.02153	0.42492	0.00731	0.41050	0.42391	0.01241	0.04686	5.16550	0.01216

Mean	0.02125	0.42910	0.01138	0.40942	0.42375	0.01242	0.04803	5.15509	0.01259
%RSD	1.87338	1.37968	50.53132	0.37217	0.05312	0.02809	3.45722	0.28578	4.79741
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.10027	0.02250	0.05017	0.19157	4.13253	0.01961	5.08459	0.03346	0.02080
#2	0.10027	0.02236	0.05053	0.19187	4.12282	0.01959	5.09038	0.03373	0.02117
Mean	0.10027	0.02243	0.05035	0.19172	4.12767	0.01960	5.08749	0.03360	0.02098
%RSD	0.00024	0.43727	0.51124	0.11279	0.16642	0.07143	0.08042	0.57481	1.22085
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.09397	0.09078	0.20093	0.00980	0.00809	0.17084	0.13115	-0.00258	0.00796
#2	4.09025	0.09078	0.21309	0.00912	0.00802	0.19192	0.12787	-0.00357	0.01316
Mean	4.09211	0.09078	0.20701	0.00946	0.00806	0.18138	0.12951	-0.00308	0.01056
%RSD	0.06433	0.00000	4.15466	5.10602	0.61374	8.21501	1.78949	22.85758	34.86513
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.07925	0.10267	0.02129	0.01902	0.02330	0.18636	0.10761	0.03744	0.05338
#2	0.07655	0.10559	0.02126	0.01940	0.01971	0.18161	0.10862	0.03333	0.05424
Mean	0.07790	0.10413	0.02127	0.01921	0.02150	0.18399	0.10812	0.03539	0.05381
%RSD	2.45564	1.98103	0.11017	1.38139	11.79845	1.82605	0.65808	8.21609	1.13330

	Pb	Se
	calc	calc
#1	0.00866	0.00445
#2	0.00839	0.00759
Mean	0.00852	0.00602
%RSD	2.27394	36.90936

Method : Paragon2
File : 131218A
SampleId1 : ICSA
SampleId2 :
Analysis commenced : 12/18/2013 15:34:49
Dilution ratio : 1.00000 to 1.00000 Tray :
Printed : 12/18/2013 16:48:30
[ICSAB]
Position : STD3

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00029	264.30499	-0.00082	-0.00355	-0.00007	0.00114	-0.00138	270.07843	-0.00030
#2	-0.00068	267.69638	-0.01287	-0.00150	-0.00014	0.00072	-0.00060	271.21231	0.00110
Mean	-0.00048	266.00069	-0.00685	-0.00253	-0.00011	0.00093	-0.00099	270.64537	0.00040
%RSD	57.49533	0.90153	124.52865	57.21580	45.90485	31.65603	55.69874	0.29625	246.74862
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00269	-0.00030	-0.00710	110.64851	-0.01606	0.00349	261.13246	0.00124	-0.00262
#2	0.00301	0.00047	-0.00673	112.05473	-0.01580	0.00348	264.41609	0.00097	0.00027
Mean	0.00285	0.00009	-0.00691	111.35162	-0.01593	0.00348	262.77427	0.00110	-0.00118

%RSD	7.92389	636.55120	3.74760	0.89298	1.15557	0.33479	0.88360	17.50736	174.35689
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.10385	0.00147	-0.00278	0.01145	-0.00485	-0.01878	0.00214	0.00602	0.00232
#2	0.10302	0.00153	0.00207	0.00440	-0.00563	0.00228	-0.00059	-0.00515	0.00048
Mean	0.10344	0.00150	-0.00035	0.00792	-0.00524	-0.00825	0.00078	0.00043	0.00140
%RSD	0.56471	2.58284	968.94548	62.89892	10.54188	180.56111	248.02115	1826.41697	92.87158
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.03281	-0.00137	0.00027	-0.00078	0.00221	0.04353	0.00020	-0.00778	0.00242
#2	-0.02907	0.00058	0.00027	-0.00078	-0.01952	0.03020	-0.00024	-0.00778	0.00282
Mean	-0.03094	-0.00040	0.00027	-0.00078	-0.00866	0.03687	-0.00002	-0.00778	0.00262
%RSD	8.54429	346.66936	0.00000	0.00000	177.53470	25.57194	1548.74714	0.00000	10.67048
	Pb	Se							
	calc	calc							
#1	0.00058	0.00355							
#2	-0.00229	-0.00139							
Mean	-0.00085	0.00108							
%RSD	237.67927	324.02360							

Method : Paragon2

File : 131218A

SampleId1 : ICSAB

SampleId2 :

[ICSAB]

Printed : 12/18/2013 16:48:30

Analysis commenced : 12/18/2013 15:36:27

Dilution ratio : 1.00000 to 1.00000 Tray :

Position : STD4

Final concentrations

#1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.21132	265.49687	0.10553	0.96393	0.48141	0.46614	0.55500	269.00000	1.08071
#2	0.21069	269.80889	0.10413	0.97030	0.48343	0.47453	0.55480	271.33573	1.06957
Mean	0.21100	267.65288	0.10483	0.96712	0.48242	0.47033	0.55490	270.16786	1.07514
%RSD	0.21180	1.13918	0.94706	0.46580	0.29579	1.26156	0.02498	0.61133	0.73241
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47316	0.48043	0.53547	110.60656	-0.02778	1.08059	261.50197	0.48773	0.96519
#2	0.47738	0.48663	0.53823	112.84653	-0.02257	1.08201	265.57415	0.49679	0.97732
Mean	0.47527	0.48353	0.53685	111.72655	-0.02517	1.08130	263.53806	0.49226	0.97125
%RSD	0.62737	0.90626	0.36347	1.41766	14.62587	0.09258	1.09262	1.30145	0.88327
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.08155	1.01288	0.97882	0.06009	0.05560	0.97194	0.63482	0.04403	0.04051
#2	0.08099	1.00458	0.98469	0.05082	0.06039	0.99304	0.62057	0.06021	0.04242
Mean	0.08127	1.00873	0.98176	0.05545	0.05800	0.98249	0.62770	0.05212	0.04147
%RSD	0.49388	0.58171	0.42257	11.81839	5.83801	1.51797	1.60551	21.94666	3.25252

	Si	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.89683	1.05981	0.97077	0.93643	9.42815	0.48648	0.86828	0.48907
#2	0.91853	1.06562	0.97231	0.95846	9.50628	0.49100	0.88642	0.49264
Mean	0.90768	1.06272	0.97154	0.94744	9.46722	0.48874	0.87735	0.49086
%RSD	1.69034	0.38675	0.11215	1.64375	0.58350	0.65486	1.46191	0.51331

	Pb	Se
	calc	calc
#1	0.05710	0.04169
#2	0.05721	0.04835
Mean	0.05715	0.04502
%RSD	0.13302	10.46030

Method : Paragon2 File : 131218A Printed : 12/18/2013 16:48:30

SampleId1 : CCV SampleId2 :

Analysis commenced : 12/18/2013 15:38:04

Dilution ratio : 1.00000 to 1.00000 Tray : [CV]

Position : STD1

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.20096	50.32435	0.50679	0.99050	0.97439	0.46682	0.53149	49.78858	0.52227
#2	0.20207	50.43483	0.50368	0.98391	0.97353	0.47077	0.53464	50.02470	0.51941
Mean	0.20152	50.37959	0.50524	0.98720	0.97396	0.46880	0.53306	49.90664	0.52084
%RSD	0.38973	0.15506	0.43467	0.47183	0.06217	0.59493	0.41761	0.33455	0.38858

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47802	0.97330	1.00618	19.46405	50.87754	0.50762	48.35876	0.98812	0.98436
#2	0.47992	0.97888	1.00472	19.57420	50.68381	0.50610	48.59265	0.99599	0.98642
Mean	0.47897	0.97609	1.00545	19.51913	50.78068	0.50686	48.47570	0.99206	0.98539
%RSD	0.28129	0.40455	0.10232	0.39906	0.26977	0.21177	0.34118	0.56090	0.14801

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	52.56434	1.03184	4.85616	0.98811	0.98942	4.78359	0.50685	0.99020	0.97773
#2	52.25698	1.02607	4.85216	0.99718	1.01318	4.83301	0.50847	1.00304	1.01719
Mean	52.41066	1.02896	4.85416	0.99264	1.00130	4.80830	0.50766	0.99662	0.99746
%RSD	0.41468	0.39657	0.05835	0.64642	1.67856	0.72686	0.22524	0.91122	2.79775

	Si	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.70768	1.02143	0.47385	0.51462	4.80546	0.48590	0.92765	1.00020
#2	4.74435	1.01850	0.47888	0.50121	4.81724	0.48924	0.94579	1.00229
Mean	4.72602	1.01996	0.47636	0.50792	4.81135	0.48757	0.93672	1.00125
%RSD	0.54867	0.20277	0.12645	1.86778	0.17317	0.48361	1.36951	0.14799

SeUser: STEVE WORKMAN

Pb
calc
#1 0.98898
#2 1.00785
Mean 0.99842
%RSD 1.33684 2.16989

Method : Paragon2
File : 131218A
SampleId1 : CCB
SampleId2 :
Analysis commenced : 12/18/2013 15:39:42
Dilution ratio : 1.00000 to 1.00000 Tray :
Position : STD2

Printed : 12/18/2013 16:48:30
[CB]

Final concentrations

#1	Ag	ppm	Al	ppm	As	ppm	B	ppm	Ba	ppm	Be	ppm	Bi	ppm	Ca	ppm	Cd	ppm
#2																		
Mean																		
%RSD																		
#1	Co	ppm	Cr	ppm	Cu	ppm	Fe	ppm	K	ppm	Li	ppm	Mg	ppm	Mn	ppm	Mo	ppm
#2																		
Mean																		
%RSD																		
#1	Na	ppm	Ni	ppm	P	ppm	Pb I	ppm	Pb II	ppm	S	ppm	Sb	ppm	Se I	ppm	Se II	ppm
#2																		
Mean																		
%RSD																		
#1	Si	ppm	Sn	ppm	Sr	ppm	Ti	ppm	Tl	ppm	U	ppm	V	ppm	Zn	ppm	Zr	ppm
#2																		
Mean																		
%RSD																		
#1	Pb	calc	Se	calc														
#2																		
Mean																		
%RSD																		

Method : Paragon2
File : 131218A
Printed : 12/18/2013 16:48:30

SampleId1 : IP131218-2LCS SampleId2 :
Analysis commenced : 12/18/2013 16:38:10
Dilution ratio : 1.00000 to 1.00000 Tray :

[SAMPLE]

Position : TUBE26

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.00055	1.97948	1.09155	1.03931	1.06423	0.04923	-0.00114	-0.05039	0.05472
#2	0.00017	1.97339	1.09696	1.03521	1.06645	0.04910	-0.00426	-0.04910	0.05399
Mean	-0.00019	1.97643	1.09426	1.03726	1.06534	0.04917	-0.00270	-0.04975	0.05436
%RSD	264.65858	0.21783	0.34939	0.27979	0.14705	0.17378	81.80254	1.83308	0.94671

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.51837	0.20744	0.26181	0.97651	-0.03741	0.00251	0.02830	0.54266	1.08533
#2	0.51901	0.20914	0.26375	0.97775	-0.04314	0.00252	0.02772	0.54362	1.08873
Mean	0.51869	0.20829	0.26278	0.97713	-0.04027	0.00252	0.02801	0.54314	1.08703
%RSD	0.08744	0.57681	0.52009	0.08944	10.05605	0.18546	1.45305	0.12518	0.22110

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.04137	0.55892	-0.00473	0.53974	0.51768	-0.00474	0.48097	2.15457	2.09801
#2	0.04148	0.55343	-0.00473	0.53587	0.52819	-0.04687	0.48342	2.16532	2.13474
Mean	0.04143	0.55617	-0.00473	0.53780	0.52293	-0.02581	0.48220	2.15995	2.11637
%RSD	0.17599	0.69791	0.00000	0.50927	1.42179	115.45008	0.35945	0.35205	1.22726

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	1.09210	0.52718	0.56105	0.49232	2.02471	-0.03299	0.54598	0.50983	0.00174
#2	1.09889	0.51161	0.56172	0.49271	2.04224	-0.02646	0.54738	0.49913	0.00120
Mean	1.09550	0.51940	0.56138	0.49252	2.03347	-0.02972	0.54668	0.50448	0.00147
%RSD	0.43845	2.11899	0.08471	0.05596	0.60977	15.53719	0.18122	1.50065	25.76346

	Pb	Se
	calc	calc
#1	0.52502	2.11684
#2	0.53075	2.14493
Mean	0.52788	2.13088
%RSD	0.76666	0.93184

Method : Paragon2 File : 131218A
SampleId1 : CRI SampleId2 :
Analysis commenced : 12/18/2013 16:40:15
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:31

[CV]

Position : STD6

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm

#1	0.02121	0.42067	0.01489	0.40737	0.42483	0.01247	0.05782	5.17636	0.01277
#2	0.02144	0.42068	0.00675	0.40802	0.42875	0.01232	0.06069	5.18287	0.01219
Mean	0.02133	0.42067	0.01082	0.40770	0.42679	0.01240	0.05925	5.17961	0.01248
%RSD	0.78518	0.00076	53.15040	0.11212	0.65051	0.85166	3.42934	0.08889	3.23866

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.10166	0.02283	0.05029	0.19248	4.10234	0.01919	5.09212	0.03387	0.02286
#2	0.10156	0.02241	0.05113	0.19432	4.12071	0.01929	5.15345	0.03414	0.02056
Mean	0.10161	0.02262	0.05071	0.19340	4.11153	0.01924	5.12278	0.03401	0.02171
%RSD	0.07049	1.33340	1.17957	0.67086	0.31608	0.36389	0.84662	0.56789	7.47398

	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.13732	0.09067	0.18244	0.01376	0.00576	0.19894	0.13799	0.01007	0.01316
#2	4.15550	0.08974	0.20385	0.00670	0.00620	0.19192	0.13032	0.02148	0.01190
Mean	4.14641	0.09020	0.19315	0.01023	0.00598	0.19543	0.13416	0.01577	0.01253
%RSD	0.31010	0.73066	7.83643	48.85182	5.15819	2.54153	4.03938	51.15496	7.12055

	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.07926	0.11045	0.02140	0.01934	0.02164	0.18517	0.10963	0.03909	0.05320
#2	0.08670	0.09975	0.02155	0.01952	0.02329	0.18636	0.10912	0.04073	0.05413
Mean	0.08298	0.10510	0.02148	0.01943	0.02247	0.18577	0.10938	0.03991	0.05367
%RSD	6.33748	7.19781	0.50923	0.65750	5.21806	0.45139	0.32539	2.91403	1.22460

	Pb	Se
	calc	calc
#1	0.00842	0.01213
#2	0.00636	0.01509
Mean	0.00739	0.01361
%RSD	19.72701	15.36675

Method : Paragon2
 File : 131218A
 SampleId1 : ICSA
 SampleId2 :
 Analysis commenced : 12/18/2013 16:41:53
 Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:31
 [ICSAB]

Position : STD3

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00011	261.35633	0.00984	-0.00688	-0.00004	0.00134	-0.00007	267.07154	0.00098
#2	-0.00085	263.36833	-0.00502	-0.00764	-0.00007	0.00122	0.00227	266.60488	0.00008
Mean	-0.00037	262.36233	0.00241	-0.00726	-0.00006	0.00128	0.00110	266.83821	0.00053
%RSD	181.86696	0.54226	436.54080	7.33489	44.73242	6.58064	150.82157	0.12366	121.24412

	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00343	0.00093	-0.00686	109.09771	-0.03923	0.00310	259.43822	0.00083	0.00160

#2	0.00194	-0.00006	-0.00758	109.52136	-0.04288	0.00309	261.00907	0.00056	-0.00359
Mean	0.00269	0.00043	-0.00722	109.30953	-0.04106	0.00309	260.22364	0.00069	-0.00099
%RSD	39.17967	159.54190	7.05553	0.27405	6.27755	0.22638	0.42685	27.85062	369.30769
#1	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.07882	0.00279	0.01811	0.01757	-0.00773	-0.00474	0.01039	0.02140	-0.00737
#2	0.07882	0.00136	0.00159	0.00788	0.00510	-0.01176	0.00680	0.01817	0.00295
Mean	0.07882	0.00208	0.00985	0.01272	-0.00132	0.00825	0.00859	0.01978	-0.00221
%RSD	0.00000	48.53804	118.60694	53.82225	689.43699	60.18663	29.54443	11.56511	329.98709
#1	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02518	0.01614	0.00030	-0.00089	0.00645	0.05345	0.00178	-0.00532	0.00284
#2	-0.02554	-0.01012	0.00027	-0.00094	-0.02123	0.03520	-0.00035	-0.00943	0.00254
Mean	-0.02536	0.00301	0.00029	-0.00092	-0.00739	0.04433	0.00071	-0.00737	0.00269
%RSD	0.98623	617.40864	8.12940	3.21971	264.72253	29.12056	211.93648	39.43302	7.69951
#1	Pb	Se							
	calc	calc							
#1	0.00069	0.00221							
#2	0.00603	0.00801							
Mean	0.00336	0.00511							
%RSD	112.25166	80.22555							

Method : Paragon2

File : 131218A

Printed : 12/18/2013 16:48:31

SampleId1 : ICSAB

[ICSAB]

SampleId2 :

Analysis commenced : 12/18/2013 16:43:31

Dilution ratio : 1.00000 to 1.00000

Tray :

Position : STD4

Final concentrations

#1	Ag	Al	As	B	Ba	Be	Bi	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.20971	261.98843	0.11256	0.96296	0.48286	0.46236	0.54660	1.07083
#2	0.20949	264.21284	0.10890	0.96404	0.48520	0.46727	0.55450	1.06554
Mean	0.20960	263.10063	0.11073	0.96350	0.48403	0.46481	0.55055	1.06818
%RSD	0.07370	0.59783	2.33140	0.07924	0.34136	0.74592	1.01406	0.35025
#1	Co	Cr	Cu	Fe	K	Li	Mg	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.47235	0.47541	0.53946	109.03210	-0.04991	1.09214	259.77505	0.96507
#2	0.47403	0.47958	0.54040	110.22293	-0.04730	1.09125	261.96560	0.97125
Mean	0.47319	0.47750	0.53993	109.62752	-0.04861	1.09169	260.87032	0.96816
%RSD	0.25066	0.61765	0.12436	0.76810	3.78741	0.05771	0.59376	0.45190
#1	Na	Ni	P	Pb I	Pb II	S	Sb	Se I
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.06231	1.02481	0.97882	0.05397	0.05413	0.95085	0.63187	0.05818
#2	0.06226	1.02025	0.97540	0.05796	0.05818	0.95085	0.62542	0.05921

Mean	0.06228	1.02253	0.97711	0.05597	0.05615	0.95085	0.62865	0.05870	0.04345
%RSD	0.05856	0.31545	0.24766	5.03466	5.10690	0.00000	0.72598	1.24112	3.62358
#1	0.89176	1.05010	0.97252	0.91707	0.08724	9.43336	0.48452	0.85262	0.48801
#2	0.90107	1.04230	0.97523	0.93132	0.08847	9.49707	0.48761	0.86581	0.49133
Mean	0.89642	1.04620	0.97387	0.92419	0.08785	9.46522	0.48606	0.85921	0.48967
%RSD	0.73464	0.52723	0.19744	1.08991	0.98727	0.47600	0.44994	1.08559	0.48007
	Pb	Se	Sr	Ti	Tl	U	V	Zn	Zr
	calc	calc	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.05407	0.04761	0.97252	0.91707	0.08724	9.43336	0.48452	0.85262	0.48801
#2	0.05811	0.04944	0.97523	0.93132	0.08847	9.49707	0.48761	0.86581	0.49133
Mean	0.05609	0.04853	0.97387	0.92419	0.08785	9.46522	0.48606	0.85921	0.48967
%RSD	5.08289	2.66393	0.19744	1.08991	0.98727	0.47600	0.44994	1.08559	0.48007

Method : Paragon2
File : 131218A
SampleId1 : CCV
SampleId2 :
Analysis commenced : 12/18/2013 16:45:09
Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:31
[CV]

Position : STD1

Final concentrations

#1	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.20290	49.32633	0.52232	0.99352	0.97689	0.46432	0.53411	49.96660	0.53009
#2	0.20491	50.11592	0.51187	0.99870	0.98253	0.47442	0.53991	50.49345	0.52490
Mean	0.20391	49.72113	0.51709	0.99611	0.97971	0.46937	0.53701	50.23003	0.52749
%RSD	0.69656	1.12291	1.42876	0.36796	0.40695	1.52233	0.76381	0.74167	0.69560
#1	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.48113	0.97137	1.01623	19.35870	50.89615	0.50996	48.10800	0.97763	0.98751
#2	0.48463	0.98791	1.01669	19.69654	50.68982	0.50889	48.86710	1.00000	0.99346
Mean	0.48288	0.97964	1.01646	19.52762	50.79298	0.50942	48.48755	0.98882	0.99048
%RSD	0.51168	1.19382	0.03226	1.22333	0.28724	0.14795	1.10703	1.59930	0.42444
#1	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	53.34105	1.06273	4.76005	0.99206	0.97129	4.72710	0.51283	1.01410	0.98797
#2	53.00221	1.05602	4.90023	1.01278	0.99147	4.89657	0.52336	1.02043	1.00903
Mean	53.17163	1.05938	4.83014	1.00242	0.98138	4.81183	0.51809	1.01727	0.99850
%RSD	0.45061	0.44758	2.05213	1.46197	1.45419	2.49028	1.43734	0.44043	1.49118
#1	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	4.65211	1.02728	0.50338	0.46245	0.50952	4.78178	0.48660	0.93012	1.00202
#2	4.77439	1.03213	0.50621	0.47595	0.52207	4.85340	0.49241	0.94579	1.01087
Mean	4.71325	1.02970	0.50479	0.46920	0.51579	4.81759	0.48950	0.93796	1.00644

%RSD	1.83449	0.33301	0.39664	2.03481	1.72037	1.05134	0.83936	1.18120	0.62193
	Pb	Se							
	calc	calc							
#1	0.97820	0.99667							
#2	0.99857	1.01283							
Mean	0.98839	1.00475							
%RSD	1.45682	1.13692							

Method : Paragon2
 File : 131218A
SampleId1 : CCB
SampleId2 :
Analysis commenced : 12/18/2013 16:46:47
 Dilution ratio : 1.00000 to 1.00000 Tray :

Printed : 12/18/2013 16:48:31
 [CB]

Position : STD2

Final concentrations

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00040	0.05194	0.00002	-0.00462	0.00003	0.00105	-0.00243	-0.01342	0.00020
#2	-0.00072	0.03395	-0.00334	-0.00495	0.00007	0.00054	-0.00061	-0.01557	0.00041
Mean	-0.00016	0.04295	-0.00166	-0.00478	0.00005	0.00079	-0.00152	-0.01450	0.00030
%RSD	489.84224	29.61178	143.42246	4.76898	49.82249	45.47602	84.98921	10.48517	49.31391
	Co	Cr	Cu	Fe	K	Li	Mg	Mn	Mo
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.00003	0.00083	-0.00442	0.01166	-0.01007	0.00282	0.06973	0.00028	0.00039
#2	-0.00050	0.00069	-0.00394	0.01044	-0.02231	0.00279	0.06513	0.00042	-0.00069
Mean	-0.00023	0.00076	-0.00418	0.01105	-0.01619	0.00280	0.06743	0.00035	-0.00015
%RSD	159.90017	13.29251	8.17790	7.80520	53.43863	0.66587	4.82832	27.42992	516.03508
	Na	Ni	P	Pb I	Pb II	S	Sb	Se I	Se II
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	0.11738	-0.00050	-0.00035	0.00461	-0.00332	-0.01176	-0.00031	-0.01609	0.00178
#2	0.11464	-0.00061	-0.00764	0.00182	-0.00157	0.00931	-0.00334	-0.01311	-0.00043
Mean	0.11601	-0.00055	-0.00400	0.00321	-0.00245	-0.00123	-0.00182	-0.01460	0.00068
%RSD	1.66836	13.97048	128.88004	61.24884	50.52164	1213.26743	117.17839	14.41249	231.04733
	Si	Sn	Sr	Ti	Tl	U	V	Zn	Zr
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
#1	-0.02567	-0.00040	-0.00176	-0.00198	0.00643	-0.01299	-0.00002	-0.00203	0.00118
#2	-0.02145	0.00447	-0.00177	-0.00228	0.00946	-0.01239	-0.00013	-0.00285	0.00068
Mean	-0.02356	0.00204	-0.00177	-0.00213	0.00794	-0.01269	-0.00008	-0.00244	0.00093
%RSD	12.68434	168.88014	0.44219	10.14197	26.98654	3.31625	105.75836	23.84171	37.98315
	Pb	Se							
	calc	calc							
#1	-0.00068	-0.00417							
#2	-0.00044	-0.00465							
Mean	-0.00056	-0.00441							
%RSD	30.07346	7.73335							

Header Information for Analytical Sequence 13L18k00

Instrument: Agilent ICPMS Model 7700X; Serial No. JP09400112

Software Revision: B.01.01

Date of Analysis: 12/18/2013

Analyst: Ross Miller

Calibration Standards

High Calibration Standard: ST100324-6 (expires 2/28/2015)

This standard contains the following elements at the listed concentrations (ng/ml).

100000	50000	10000	5000	2000	1000	500	200	100	50	30	10	2
Na	Ca	Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	K		Al	Ti	Cu	Ni		Co	Be	Cd	U	
					Li	Sn		As		Y	Ag	
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

1/10, 1/100, and 1/1000 dilutions of the High Calibration Standard are prepared daily to provide additional calibration standards.

ICV

The ICV is prepared by diluting 1ml of the 2nd Source intermediate (ST121126-2, expires 12/18/2013) to 5ml giving the following concentrations (ng/ml).

20000	10000	2000	1000	400	200	100	40	20	10	6	2	0.4
Na	Ca	Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	K		Al	Ti	Cu	Ni		Co	Be	Cd	U	
					Li	Sn		As		Y	Ag	
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

CRI1

The RL1 is prepared by diluting 0.05ml of the Reporting Limit Verification Spike Solution (ST100324-9 expires 2/28/2015) to 50ml giving the following concentrations (ng/ml).

100	50	10	5	2	1	0.5	0.2	0.1	0.05	0.03	0.02	0.01
Na	Ca	Mg	Al	Zn	B	Cr	Mn	V	Pb	Sb	Th	U
	K		Fe	Ti	Cu	Ni		Co	Be	Cd	Tl	Ag
					Li	Sn		As		Y		
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

CRI2

The RL2 is prepared by diluting 0.1ml of the Reporting Limit Verification Spike Solution (ST100324-9 expires 2/28/2015) to 50ml giving the following concentrations (ng/ml).

200	100	20	10	4	2	1	0.4	0.2	0.1	0.06	0.04	0.02
Na	Ca	Mg	Al	Zn	B	Cr	Mn	V	Pb	Sb	Th	U
	K		Fe	Ti	Cu	Ni		Co	Be	Cd	Tl	Ag
					Li	Sn		As		Y		
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

ICSA

The ICSA is prepared by diluting 0.5ml of ICSA intermediate (ST121206-1, expires 01/01/14) to a final volume of 50ml giving the following concentrations (ng/ml).

42.5 X 10 ⁶	30000	25000	20000	10000	200
Cl	Ca	Fe	C	Al	Mo
		Na		K	Ti
				Mg	
				P	
				S	

ICSAB

The ICSAB is prepared by diluting 0.5ml of ICSA intermediate (ST121206-1, expires 01/01/14) and 5ml of High Calibration Standard: ST100324-6 (expires 2/28/2015) to a final volume of 50ml. The ICSAB contains the following elements at the listed concentrations (ng/ml).

42.5X10 ⁶	35000	25500	20000	15000	11000	10500	10000	400	210
Cl	Ca	Fe	C	K	Mg	Al	P	Ti	Mo
	Na						S		

200	100	50	20	10	5	3	1	0.2
Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	Cu	Ni		Co	Be	Cd	U	
	Li	Sn		As		Y	Ag	
				Se		La		
				Ba		Ce		
				Sr		Pr		
						Nd		

CCV

The CCV is prepared by diluting 5ml of the High Calibration Standard: ST100324-6 (expires 2/28/2015) to a final volume of 50ml. The CCV contains the following elements at the listed concentrations (ng/ml).

10000	5000	1000	500	200	100	50	20	10	5	3	1	0.2
Na	Ca	Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	K		Al	Ti	Cu	Ni		Co	Be	Cd	U	
					Li	Sn		As		Y	Ag	
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

Linear Dynamic Range Standards

LDR-Ca,Na,K

The LDR-Ca,Na,K standard is prepared by diluting 1ml of the High Calibration Standard Intermediate Mix (ST100324-5, expires 2/28/2015) to a final volume of 10ml. The LDR-Ca,Na,K standard contains the following elements at the listed concentrations (ng/ml).

100000	50000	20000	10000	5000	2000	1000	500	300	100	20
Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	Al	Ti	Cu	Ni		Co	Be	Cd	U	
			Li	Sn		As		Y	Ag	
						Se		La		
						Mo		Ce		
						Ba		Pr		
						Sr		Nd		

1000 Na

The 1000 Na standard is prepared by diluting 1ml of the 10000mg/L Na stock solution (ST100301-26, expires 2/28/2015) to a final volume of 10ml. The 1000 Na standard contains Na at 1000000 ng/ml.

500 Ca

The 500 Ca standard is prepared by diluting 0.5ml of the 10000mg/L Ca stock solution (ST100301-9, expires 2/28/2015) to a final volume of 10ml. The 500 Ca standard contains Ca at 500000 ng/ml.

500 K

The 500 K standard is prepared by diluting 0.5ml of the 10000mg/L K stock solution (ST100301-22, expires 2/28/2015) to a final volume of 10ml. The 500 K standard contains K at 500000 ng/ml.

Linear Dynamic Range

The instrument Linear Dynamic Range (LDR) is determined at least every 6 months. The current LDR was determined on 10/08/2013. The instrument LDR is given below (ng/ml).

1000000	500000	100000	50000	20000	10000	5000	2000	1000	500	300	100	20
Na	Ca	Mg	Fe	Zn	B	Cr	Mn	V	Pb	Sb	Th	Tl
	K		Al	Ti	Cu	Ni		Co	Be	Cd	U	
					Li	Sn		As		Y	Ag	
								Se		La		
								Mo		Ce		
								Ba		Pr		
								Sr		Nd		

ICB/CCB and all diluent

1% HNO₃, 1%HCl in double deionized water

HNO₃ Lot No. 50770

HCl Lot No. 40272

Internal Standards

The internal standard intermediate contains 2 PPM each of Ga, Ge and Pt; 1 PPM each of In and Rh and 0.5 PPM of Bi. This intermediate is added to all standards and samples in the same proportion of 1 on top of 100. Most often this is done by adding 0.05ml of internal standard intermediate on top of 5ml of sample or standard. The final concentration of internal standard added to the standards or samples is about 20ppb each of Ga, Ge and Pt; 10ppb each of In and Rh; and 5ppb of Bi.

Pipet ID Numbers

1.0 to 5.0 ml -- M-66
0.1 to 1.0ml -- M-60
0.01 to 0.1ml -- M-56
0.5ml -- M-14

Dilutions

2X dilutions made by diluting 5ml of sample to 10ml final volume
5X dilutions made by diluting 1ml of sample to 5ml final volume
10X dilutions made by diluting 1ml of sample to 10ml final volume
50X dilutions made by diluting 0.1ml of sample to 5ml final volume
100X dilutions made by diluting 0.1ml of sample to 10ml final volume
200X dilutions made by diluting 0.05ml of sample to 10ml final volume
500X dilutions made by diluting 0.02ml of sample to 10ml final volume

Analytical Spikes

1312134-1 and 1312080-1 post spiked by diluting ST100324-5 and ST120620-3 1000 fold with the ten fold dilution of the sample digestates.

Daily Maintenance Items

1. Check / change pump tubing
2. Check / clean drain containers
3. Tune instrument per manufacturer's procedures
4. Perform resolution / mass calibration / stability test and print QC tune report

Monthly Maintenance Items

1. Check / clean torch and cones
2. Check / clean nebulizer and spray chamber
3. Check / fill water recirculating reservoir
4. Check / fill vacuum pump oil

Additional Comments

No additional comments.

QC Tune Report

Data File: C:\ICPMH\1\7500\QCTUNE.D
Date Acquired: 18 Dec 2013 10:14:39 am
Operator:
Misc Info:
Vial Number: 0
Current Method: C:\ICPMH\1\METHODS\2008TUNE.m

Minimum Response (CPS)

Element	Actual	Required	Flag
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RSD (%)

Element	Actual	Required	Flag
---------	--------	----------	------

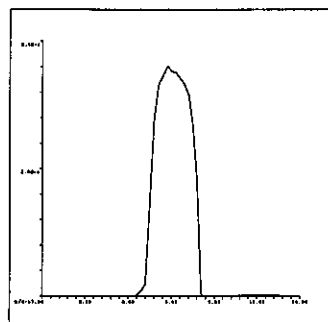
9 Be	1.92	5.00	
24 Mg	1.36	5.00	
25 Mg	1.37	5.00	
26 Mg	0.97	5.00	
59 Co	0.91	5.00	
115 In	0.95	5.00	
206 Pb	0.77	5.00	
207 Pb	0.58	5.00	
208 Pb	0.54	5.00	

Ion Ratio

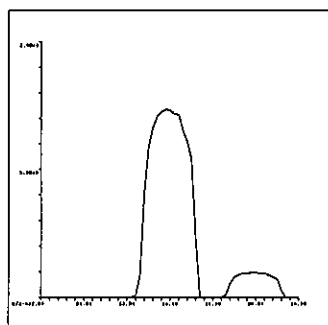
Element	Actual	Required	Flag
---------	--------	----------	------

Maximum Bkg. Count (CPS)

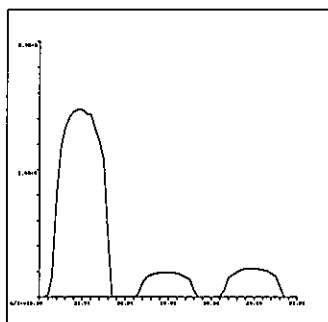
Element	Actual	Required	Flag
---------	--------	----------	------



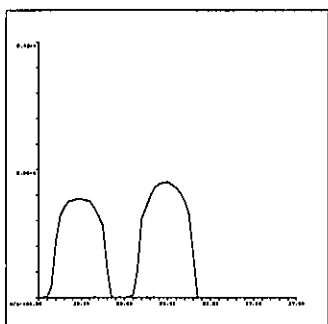
9 Be
Mass Calib.
Actual: 9.00
Required: 8.90-9.10
Flag:
Peak Width
Actual: 0.60
Required: 0.80
Flag:



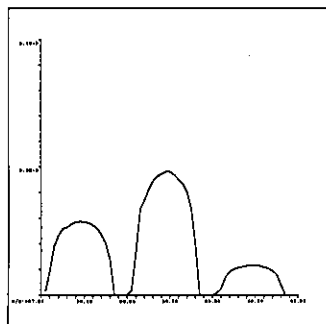
24 Mg
Mass Calib.
Actual: 24.00
Required: 23.90-24.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



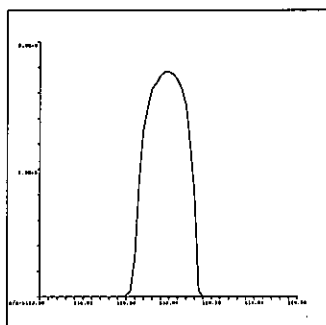
25 Mg
Mass Calib.
Actual: 24.95
Required: 24.90-25.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



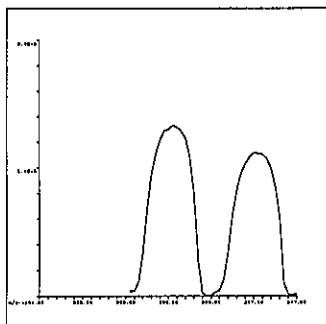
26 Mg
Mass Calib.
Actual: 25.95
Required: 25.90-26.10
Flag:
Peak Width
Actual: 0.65
Required: 0.80
Flag:



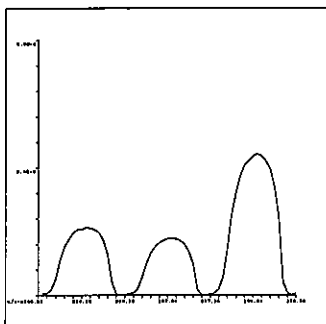
59 Co
Mass Calib.
Actual: 58.95
Required: 58.90-59.10
Flag:
Peak Width
Actual: 0.70
Required: 0.80
Flag:



115 In
Mass Calib.
Actual: 115.00
Required: 114.90-115.10
Flag:
Peak Width
Actual: 0.70
Required: 0.80
Flag:

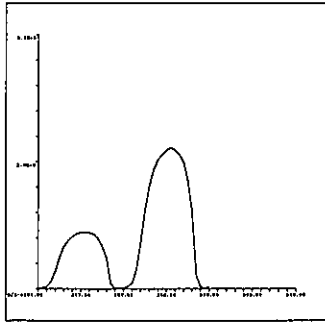


206 Pb
Mass Calib.
Actual: 206.05
Required: 205.90-206.10
Flag:
Peak Width
Actual: 0.70
Required: 0.80
Flag:



207 Pb
Mass Calib.
Actual: 207.05
Required: 206.90-207.10
Flag:
Peak Width
Actual: 0.70
Required: 0.80
Flag:

C:\ICPMH\1\7500\QCTUNE.D



208 Pb

Mass Calib.

Actual: 208.05

Required: 207.90-208.10

Flag:

Peak Width

Actual: 0.70

Required: 0.80

Flag:

QC Tune Result:Pass

Batch Summary Report

Batch Folder: C:\CPMH\1\DATA\13L18k00.B\#
 Analysis File: 13L18k00.batch.xml
 Tune Step: #1 nogas.u
 #2 hehe.u

	Rjct	Acq. Date-Time	Data File	Sample Name	Type	Level	Dilution
1		12/18/2013 10:50:35 AM	001SMPLD	blank	Sample		1.0000
2		12/18/2013 10:53:54 AM	002CALB.D	blank	CalBik	1	1.0000
3		12/18/2013 10:57:12 AM	003CALB.D	blank	CalBik	1	1.0000
4		12/18/2013 11:00:30 AM	004CALS.D	H/1000	CalStd	2	1.0000
5		12/18/2013 11:03:49 AM	005CALS.D	H/100	CalStd	3	1.0000
6		12/18/2013 11:07:07 AM	006CALS.D	H/10	CalStd	4	1.0000
7		12/18/2013 11:10:24 AM	007CALS.D	HIGH	CalStd	5	1.0000
8		12/18/2013 11:18:15 AM	008SMPLD	ICV	6-ICV		1.0000
9		12/18/2013 11:26:05 AM	009SMPLD	ICB	6-CCB		1.0000
10		12/18/2013 11:29:31 AM	010SMPLD	CRI	Sample		1.0000
11		12/18/2013 11:33:19 AM	011SMPLD	ICSA	Sample		1.0000
12		12/18/2013 11:36:37 AM	012SMPLD	ICSAB	Sample		1.0000
13		12/18/2013 11:44:27 AM	013SMPLD	FP131217-5MB 10X	6-CCB		1.0000
14		12/18/2013 11:47:45 AM	014SMPLD	FM131217-5LCS 10X	6-LCS		1.0000
15		12/18/2013 11:51:05 AM	015SMPLD	1312160-1 10X	Sample		1.0000
16		12/18/2013 11:54:30 AM	016SMPLD	1312160-4 10X	Sample		1.0000
17		12/18/2013 11:57:48 AM	017SMPLD	1312160-5 10X	Sample		1.0000
18		12/18/2013 12:01:06 PM	018SMPLD	1312160-7 10X	Sample		1.0000
19		12/18/2013 12:04:24 PM	019SMPLD	1312160-6 10X	Sample		1.0000
20		12/18/2013 12:22:41 PM	020SMPLD	CCV	6-CCV		1.0000
21		12/18/2013 12:26:02 PM	021SMPLD	CCB	6-CCB		1.0000
22		12/18/2013 12:30:46 PM	022SMPLD	1312147-1 10X	Sample		1.0000
23		12/18/2013 12:38:36 PM	023SMPLD	IP131217-4MB 10X	6-CCB		1.0000
24		12/18/2013 12:41:53 PM	024SMPLD	IP131217-4LCS 10X	6-LCS		1.0000
25		12/18/2013 12:45:12 PM	025SMPLD	1312080-1 10X	Sample		1.0000
26		12/18/2013 12:48:30 PM	026SMPLD	1312080-1D 10X	Sample		1.0000
27		12/18/2013 12:51:48 PM	027SMPLD	1312080-1L 50X	Sample		1.0000

Batch Summary Report

	Rjct	Acq. Date-Time	Data File	Sample Name	Type	Level	Dilution
28		12/18/2013 12:55:06 PM	028SMPLD	1312080-1MS 10X	Sample		1.0000
29		12/18/2013 12:58:24 PM	029SMPLD	1312080-1MSD 10X	Sample		1.0000
30		12/18/2013 1:01:42 PM	030SMPLD	1312080-1A 10X	Sample		1.0000
31		12/18/2013 1:04:59 PM	031SMPLD	1312080-2 10X	Sample		1.0000
32		12/18/2013 1:12:50 PM	032SMPLD	CCV	6-CCV		1.0000
33		12/18/2013 1:16:09 PM	033SMPLD	CCB	6-CCB		1.0000
34		12/18/2013 1:21:07 PM	034SMPLD	1312080-3 10X	Sample		1.0000
35		12/18/2013 1:24:31 PM	035SMPLD	1312080-4 10X	Sample		1.0000
36		12/18/2013 1:27:49 PM	036SMPLD	1312080-5 10X	Sample		1.0000
37		12/18/2013 1:31:07 PM	037SMPLD	1312080-6 10X	Sample		1.0000
38		12/18/2013 1:34:25 PM	038SMPLD	1311454-2 10X	Sample		1.0000
39		12/18/2013 1:37:43 PM	039SMPLD	1311454-6 10X	Sample		1.0000
40		12/18/2013 1:41:01 PM	040SMPLD	1311454-10 10X	Sample		1.0000
41		12/18/2013 1:44:19 PM	041SMPLD	1311454-14 10X	Sample		1.0000
42		12/18/2013 1:47:38 PM	042SMPLD	1311454-18 10X	Sample		1.0000
43		12/18/2013 1:55:27 PM	043SMPLD	CCV	6-CCV		1.0000
44		12/18/2013 1:58:45 PM	044SMPLD	CCB	6-CCB		1.0000
45		12/18/2013 2:10:31 PM	001SMPL_13L18o0.D	IP131217-6MB 10X	6-CCB		1.0000
46		12/18/2013 2:13:36 PM	002SMPL_13L18o0.D	IM131217-6LCS 10X	6-LCS		1.0000
47		12/18/2013 2:16:42 PM	003SMPL_13L18o0.D	1312153-1 10X	Sample		1.0000
48		12/18/2013 2:19:48 PM	004SMPL_13L18o0.D	1312153-1D 10X	Sample		1.0000
49		12/18/2013 2:22:54 PM	005SMPL_13L18o0.D	1312153-1L 50X	Sample		1.0000
50		12/18/2013 2:26:00 PM	006SMPL_13L18o0.D	1312153-1MS 10X	Sample		1.0000
51		12/18/2013 2:29:07 PM	007SMPL_13L18o0.D	1312153-1MSD 10X	Sample		1.0000
52		12/18/2013 2:32:12 PM	008SMPL_13L18o0.D	1312153-2 10X	Sample		1.0000
53		12/18/2013 2:35:19 PM	009SMPL_13L18o0.D	1312157-1 10X	Sample		1.0000
54		12/18/2013 2:40:25 PM	001SMPL_13L18o0.D	1312190-1 10X	Sample		1.0000
55		12/18/2013 2:44:53 PM	002SMPL_13L18o0.D	CCV	6-CCV		1.0000
56		12/18/2013 2:47:25 PM	003SMPL_13L18o0.D	CCB	6-CCB		1.0000
57		12/18/2013 2:50:00 PM	004SMPL_13L18o0.D	1312134-1 10X	Sample		1.0000
58		12/18/2013 2:52:35 PM	005SMPL_13L18o0.D	1312134-1D 10X	Sample		1.0000
59		12/18/2013 2:55:09 PM	006SMPL_13L18o0.D	1312134-1L 50X	Sample		1.0000
60		12/18/2013 2:57:41 PM	007SMPL_13L18o0.D	1312134-1MS 10X	Sample		1.0000

Batch Summary Report

	Rjct	Acq. Date-Time	Data File	Sample Name	Type	Level	Dilution
61		12/18/2013 3:00:16 PM	008SMPL_13L18o01.D	1312134-1MSD 10X	Sample		1.0000
62		12/18/2013 3:02:48 PM	009SMPL_13L18o01.D	1312134-1A 10X	Sample		1.0000
63		12/18/2013 3:07:17 PM	010SMPL_13L18o01.D	1312158-1 10X	Sample		1.0000
64		12/18/2013 3:09:49 PM	011SMPL_13L18o01.D	1312207-1 10X	Sample		1.0000
65		12/18/2013 3:12:22 PM	012SMPL_13L18o01.D	1312207-2 10X	Sample		1.0000
66		12/18/2013 3:14:55 PM	013SMPL_13L18o01.D	CCV	6-CCV		1.0000
67		12/18/2013 3:17:30 PM	014SMPL_13L18o01.D	CCB	6-CCB		1.0000
68		12/18/2013 3:20:05 PM	015SMPL_13L18o01.D	IP131218-1MB 10X	6-CCB		1.0000
69		12/18/2013 3:22:39 PM	016SMPL_13L18o01.D	IM131218-1LCS 10X	6-LCS		1.0000
70		12/18/2013 3:25:12 PM	017SMPL_13L18o01.D	1312210-1 100X	Sample		1.0000
71		12/18/2013 3:27:47 PM	018SMPL_13L18o01.D	1312210-1D 100X	Sample		1.0000
72		12/18/2013 3:30:21 PM	019SMPL_13L18o01.D	1312210-1L 500X	Sample		1.0000
73		12/18/2013 3:32:55 PM	020SMPL_13L18o01.D	1312210-1MS 100X	Sample		1.0000
74		12/18/2013 3:35:29 PM	021SMPL_13L18o01.D	1312210-1MSD 100X	Sample		1.0000
75		12/18/2013 3:38:03 PM	022SMPL_13L18o01.D	1312210-2 100X	Sample		1.0000
76		12/18/2013 3:40:37 PM	023SMPL_13L18o01.D	CCV	6-CCV		1.0000
77		12/18/2013 3:43:09 PM	024SMPL_13L18o01.D	CCB	6-CCB		1.0000

Batch Summary Report

Analyte Table

	Sample Name	9 Be [1]		11 B [1]		23 Na [2]		26 Mg [2]		27 Al [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
1	blank		75.33		601.13		9709.92		16.67		36.67
2	blank	-0.005	46.67	-0.219	653.36	-1.018	10166.94	0.827	33.33	0.238	76.67
3	blank	0.000	74.00	-0.228	622.24	0.000	10046.79	0.000	10.00	0.000	53.34
4	H/1000	0.043	334.01	0.914	4031.66	94.110	28942.85	9.378	290.01	4.987	536.70
5	H/100	0.460	2945.61	10.350	33290.38	943.580	198953.19	99.145	3093.77	48.862	5081.01
6	H/10	4.665	28835.15	99.963	313863.01	9821.965	1929974.24	980.703	30011.11	477.524	47715.90
7	HIGH	50.034	291194.94	999.982	3360311.67	100018.374	18587437.22	10001.939	290846.31	5002.259	480486.63
8	ICV	9.818	61910.19	208.721	678818.76	19892.692	3948863.17	1955.823	60617.00	970.620	100322.58
9	ICB	-0.002	66.00	3.758	11421.73	4.287	10807.29	0.982	36.67	0.051	56.67
10	CRI	0.041	334.01	3.787	12867.21	100.260	31123.40	13.605	430.03	14.088	1503.47
11	ICSA	-0.004	58.00	1.920	7209.39	24627.736	4614683.05	9058.902	285112.97	8572.149	871731.52
12	ICSAB	4.922	30007.89	102.682	322290.84	33303.869	6432348.86	9777.411	295170.88	9060.330	927569.52
13	FP131217-5MB...	-0.005	44.67	1.447	4955.24	3.752	10457.07	0.510	23.33	0.407	86.67
14	FM131217-5LC...	4.904	29670.61	103.629	312155.49	1013.693	206226.61	918.597	27683.74	457.378	45863.83
15	1312160-1 10X	-0.006	44.67	9.283	30019.85	3639.565	715809.96	862.209	26151.37	2.492	306.69
16	1312160-4 10X	-0.005	50.67	5.599	18378.94	2717.150	532309.68	822.193	24702.35	11.035	1176.76
17	1312160-5 10X	-0.004	53.33	5.144	16503.71	2810.888	542740.99	797.194	23624.03	0.687	126.67
18	1312160-7 10X	-0.002	70.00	5.027	16672.74	10542.937	2045541.01	5473.314	165354.92	51.259	5244.48
19	1312160-6 10X	0.176	1128.72	5.910	19176.50	9921.950	1898889.45	5373.137	160078.88	643.794	64222.30
20	CCV	4.551	27229.87	96.128	291744.76	9899.708	1901792.58	963.727	28829.14	468.621	46047.58
21	CCB	-0.006	38.00	2.671	8197.63	4.000	10513.81	1.016	36.67	0.178	66.67
22	1312147-1 10X	-0.010	20.67	19.392	58886.63	24184.547	4620351.29	69.303	2080.23	1.776	233.34
23	IP131217-4MB ...	-0.007	35.33	0.356	2197.95	0.864	10120.17	1.000	36.67	-0.219	33.33
24	IP131217-4LCS...	4.796	28959.40	98.315	300129.44	989.151	196962.02	912.222	26872.44	457.908	44576.87
25	1312080-1 10X	0.753	4608.67	7.508	23785.67	376.168	83452.48	9322.881	280524.22	13942.376	1381701.86
26	1312080-1D 10X	0.716	4491.30	6.018	19984.11	360.058	82203.42	9009.012	277230.61	13654.192	1399809.20
27	1312080-1L 50X	0.146	947.37	1.876	6888.13	73.759	25286.76	1957.363	58767.03	2928.164	290267.81
28	1312080-1MS 10X	5.521	34231.82	95.185	296312.80	1312.342	269070.92	8966.436	275653.77	12999.604	1291677.20
29	1312080-1MSD ...	5.656	34250.54	97.831	296938.65	1324.817	264571.99	8939.315	267746.28	13455.346	1324064.36
30	1312080-1A 10X	5.661	33992.68	109.527	332450.84	2311.658	451746.84	11702.405	349314.26	13727.186	1336822.48
31	1312080-2 10X	0.644	4013.84	9.476	30248.01	784.454	164146.64	6885.143	210014.18	12841.535	1299111.86

Batch Summary Report

Analyte Table

	Sample Name	9 Be [1]		11 B [1]		23 Na [2]		26 Mg [2]		27 Al [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
32	CCV	4.630	26390.59	97.105	282808.17	9733.307	1759136.95	953.806	26839.09	456.109	42952.77
33	CCB	-0.005	42.00	3.394	9682.85	-1.951	9112.81	1.999	60.00	0.276	73.34
34	1312080-3 10X	0.645	4051.18	7.984	25777.37	956.853	200085.61	9299.754	287001.26	16155.562	1669167.42
35	1312080-4 10X	0.429	2716.24	10.896	34371.41	572.603	121731.21	19615.018	592729.59	19614.749	1974061.48
36	1312080-5 10X	0.248	1582.09	3.270	11089.27	324.680	73224.49	14660.333	439031.62	9600.930	927734.60
37	1312080-6 10X	0.186	1200.72	5.821	18638.11	1682.175	340581.36	13856.726	424538.72	10237.586	992360.72
38	1311454-2 10X	0.310	1894.12	2.013	7244.97	29.166	16512.10	1863.974	55208.77	4048.561	393217.49
39	1311454-6 10X	0.321	1964.13	1.940	7049.33	14.806	13796.29	1828.029	54131.58	4305.632	420350.03
40	1311454-10 10X	0.306	1880.78	1.733	6465.74	47.694	19809.21	1704.502	49955.21	4081.517	396188.20
41	1311454-14 10X	0.315	1894.12	1.512	5677.70	14.525	13639.51	1825.520	53697.06	3936.976	380615.80
42	1311454-18 10X	0.316	1922.12	1.718	6367.93	16.767	14130.00	1850.537	54643.10	4224.406	409668.98
43	CCV	4.559	26409.23	95.346	282861.79	9706.292	1803913.46	942.834	27272.84	455.889	43313.90
44	CCB	-0.007	35.33	2.614	7734.07	-0.308	9576.49	1.663	53.33	-0.004	50.00
45	IP131217-6MB ...					-2.654	9309.66			-0.093	43.33
46	IM131217-6LCS...					966.066	188310.30			449.578	42722.12
47	1312153-1 10X					3934.206	730356.66			1.196	173.34
48	1312153-1D 10X					4200.695	804353.24			2.198	276.68
49	1312153-1L 50X					800.442	162284.94			1.079	163.34
50	1312153-1MS 10X					5085.303	955748.45			461.015	44242.68
51	1312153-1MSD ...					5109.923	968620.30			462.866	44269.29
52	1312153-2 10X					7967.770	1490081.96			1.277	183.34
53	1312157-1 10X					886.284	182105.72			1.943	246.68
54	1312190-1 10X					91708.105	17725225.16			3.805	443.36
55	CCV					10037.594	1929200.08			454.687	46609.14
56	CCB					10.636	11854.62			0.075	60.00
57	1312134-1 10X					13539.052	2629232.83			4147.243	436918.33
58	1312134-1D 10X					14693.530	2309855.58			5751.849	597252.96
59	1312134-1L 50X					2653.315	516538.96			847.227	87459.77
60	1312134-1MS 10X					16322.742	3108639.85			9988.789	1025087.72
61	1312134-1MSD ...					15632.125	3006722.14			10413.559	1061483.24
62	1312134-1A 10X					16135.978	2985254.75			4786.870	482105.25

Batch Summary Report

Analyte Table

	Sample Name	9 Be [1]		11 B [1]		23 Na [2]		26 Mg [2]		27 Al [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
63	1312158-1 10X					40458.581	7780141.96			2.406	306.68
64	1312207-1 10X					1231.246	240440.60			20.087	2063.56
65	1312207-2 10X					1215.927	235429.56			2.874	346.69
66	CCV					10147.011	1903540.13			456.736	45914.18
67	CCB					11.575	11707.89			0.722	120.00
68	IP131218-1MB ...					7.560	11097.56			0.172	70.00
69	IM131218-1LGS...					1015.142	209146.40			441.830	46495.64
70	1312210-1 100X					14610.153	2901125.27			33.432	3520.54
71	1312210-1D 100X					17125.418	3352540.68			35.386	3723.91
72	1312210-1L 500X					2858.695	537859.55			6.743	736.72
73	1312210-1MS 1...					16080.492	3044351.20			80.214	8385.80
74	1312210-1MSD ...					16817.064	3256113.39			85.603	9016.12
75	1312210-2 100X					14746.478	2903119.23			32.640	3473.86
76	CCV					10174.896	1974402.73			470.729	48789.07
77	CCB					7.837	11351.01			0.263	80.00

Batch Summary Report

Analyte Table

	Sample Name	39 K [2]		44 Ca [2]		51 V [2]		52 Cr [2]		55 Mn [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
1	blank		7598.71		35.16		165.00		571.13		1235.62
2	blank	-19.941	7128.52	-0.833	11.38	-0.003	112.67	-0.016	588.91	0.321	1098.94
3	blank	0.000	7855.56	0.000	15.09	0.000	116.33	0.000	610.02	0.277	997.83
4	H/1000	21.699	9759.89	66.814	360.09	0.092	336.00	0.438	1857.91	0.514	1512.32
5	H/100	448.526	33244.37	477.085	2576.26	0.907	2285.50	4.869	14479.88	2.125	4541.80
6	H/10	4749.985	261097.00	4854.762	25622.86	9.359	21963.49	48.790	136471.77	19.206	35322.29
7	HIGH	50025.545	2533695.75	50014.736	250858.18	100.065	222067.18	500.122	1324136.75	200.078	344186.52
8	ICV	9914.465	542231.30	9804.645	52391.07	19.454	46118.00	100.183	283192.95	39.965	73790.54
9	ICB	-10.025	7398.68	1.565	22.28	0.006	128.33	0.002	616.69	0.196	868.93
10	CRI	28.208	10437.11	62.904	351.10	0.100	368.01	0.493	2073.50	0.487	1515.65
11	ICSA	9684.441	500525.38	29803.871	150423.15	0.035	203.33	0.233	1282.29	1.640	3437.07
12	ICSAB	14324.340	759483.63	33895.125	176490.69	9.701	22470.19	49.803	137504.86	21.078	38203.22
13	FP131217-5MB...	-11.750	7141.85	-0.679	11.68	-0.006	100.67	-0.018	552.24	0.105	706.69
14	FM131217-5LC...	486.638	34192.70	1014.664	5288.87	9.318	21539.95	49.516	136404.10	19.504	35321.27
15	1312160-1 10X	56.768	11787.99	5536.004	28948.91	0.050	246.67	0.001	687.81	0.103	804.48
16	1312160-4 10X	251.745	21845.01	2921.103	15146.78	0.592	1486.07	0.128	1028.94	0.115	822.26
17	1312160-5 10X	264.012	22175.73	2990.069	15298.80	0.593	1467.40	0.154	1084.50	0.028	655.58
18	1312160-7 10X	225.640	20603.67	32974.308	171809.02	0.205	602.01	0.160	1121.16	20.639	37449.42
19	1312160-6 10X	259.827	22076.60	32674.675	167878.18	13.212	30150.61	4.612	13173.16	2110.109	3713150.41
20	CCV	4762.439	255919.28	4725.914	24381.88	9.369	21500.23	48.952	133878.89	19.144	34424.86
21	CCB	-5.816	7421.97	3.082	28.87	-0.005	104.33	-0.009	575.57	0.021	575.57
22	1312147-1 10X	100.654	13876.38	300.252	1562.98	-0.003	120.67	-0.017	626.69	0.033	670.02
23	IP131217-4MB ...	-16.014	7051.77	-2.849	1.76	-0.010	95.33	-0.025	545.57	0.148	785.59
24	IP131217-4LCS...	492.205	33711.94	909.527	4635.84	9.102	20571.39	48.860	131592.27	19.001	33651.11
25	1312080-1 10X	598.183	39979.08	9419.338	48885.45	50.975	117120.95	69.843	191910.71	780.912	1388333.91
26	1312080-1D 10X	628.018	42475.49	9262.764	49175.22	50.077	117667.80	60.194	169241.09	829.600	1508369.25
27	1312080-1L 50X	92.669	13546.10	1945.679	10088.06	10.720	24677.63	14.454	40161.00	164.019	291427.42
28	1312080-1MS 10X	715.651	47117.99	8900.942	47202.46	54.255	127358.64	106.120	297566.60	1042.299	1893150.83
29	1312080-1MSD ...	752.805	47829.87	15332.966	79214.09	55.256	126366.53	99.015	270534.38	793.017	1403709.04
30	1312080-1A 10X	2533.920	139963.06	10790.124	55561.70	58.750	133904.85	117.567	320050.60	768.999	1356615.26
31	1312080-2 10X	686.235	45192.61	11270.532	59298.29	43.890	102244.35	30.783	86128.26	559.894	1009301.59

Batch Summary Report

Analyte Table

	Sample Name	39 K [2]		44 Ca [2]		51 V [2]		52 Cr [2]		55 Mn [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
32	CCV	4698.475	237607.68	4587.252	22267.67	9.225	19913.28	48.209	124032.51	18.803	31816.45
33	CCB	-13.089	6795.07	-2.052	5.17	-0.012	86.00	-0.008	554.46	-0.035	467.79
34	1312080-3 10X	778.894	50704.87	11927.425	63497.12	59.987	141355.61	54.137	152742.27	700.959	1278433.87
35	1312080-4 10X	878.527	54861.72	18355.085	95663.97	78.422	180889.33	96.560	266197.00	1021.969	1824738.68
36	1312080-5 10X	703.481	45266.17	5549.471	28674.34	52.652	120401.11	135.937	371115.17	646.598	1144305.79
37	1312080-6 10X	768.783	49785.75	6037.713	31927.68	46.912	109760.67	91.174	254879.30	781.929	1415610.54
38	1311454-2 10X	1019.186	60996.34	18262.083	93275.79	11.984	27197.52	6.313	17680.76	133.125	233452.76
39	1311454-6 10X	1022.655	61146.77	17159.920	87631.53	12.421	28179.47	5.849	16427.23	113.726	199495.76
40	1311454-10 10X	939.907	56326.74	16823.570	85035.27	11.596	26048.72	4.960	13887.07	105.079	182507.29
41	1311454-14 10X	879.372	53413.36	20883.313	105906.59	13.660	30759.03	5.606	15660.91	111.523	194268.32
42	1311454-18 10X	990.562	59343.31	16973.305	86436.67	12.248	27709.37	5.284	14857.94	113.860	199150.41
43	CCV	4673.923	243071.53	4684.961	23387.16	9.202	20421.21	48.182	127446.74	19.101	33221.37
44	CCB	-6.837	7221.93	1.766	22.21	-0.004	104.00	-0.036	498.91	-0.076	415.57
45	IP131217-6MB ...									-0.154	300.01
46	IM131217-6LCS...									18.783	32522.24
47	1312153-1 10X									-0.023	547.80
48	1312153-1D 10X									0.034	666.69
49	1312153-1L 50X									-0.130	378.90
50	1312153-1MS 10X									19.367	33872.64
51	1312153-1MSD ...									19.285	34024.06
52	1312153-2 10X									-0.119	392.23
53	1312157-1 10X									-0.112	418.90
54	1312190-1 10X									2.006	4200.60
55	CCV									19.530	35126.37
56	CCB									-0.174	275.56
57	1312134-1 10X									147.624	264601.37
58	1312134-1D 10X									212.620	375128.94
59	1312134-1L 50X									29.747	53021.66
60	1312134-1MS 10X									389.557	684345.53
61	1312134-1MSD ...									399.709	708929.83
62	1312134-1A 10X									175.774	300249.66

Batch Summary Report

Analyte Table

	Sample Name	39 K [2]		44 Ca [2]		51 V [2]		52 Cr [2]		55 Mn [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
63	1312158-1 10X									4.228	8125.44
64	1312207-1 10X									-0.081	458.90
65	1312207-2 10X									-0.085	447.79
66	CCV									19.803	34756.63
67	CCB									-0.133	332.23
68	IP131218-1MB ...									-0.146	314.45
69	IM131218-1LCS...									19.431	35637.50
70	1312210-1 100X									28.318	52427.55
71	1312210-1D 100X									33.201	60526.07
72	1312210-1L 500X									5.648	10222.22
73	1312210-1MS 1...									33.066	58288.21
74	1312210-1MSD ...									35.112	63263.99
75	1312210-2 100X									28.619	52530.00
76	CCV									20.384	36989.30
77	CCB									-0.164	291.12

Batch Summary Report

Analyte Table

	Sample Name	56 Fe [2]		59 Co [2]		60 Ni [2]		63 Cu [2]		66 Zn [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
1	blank		4584.19		35.56		724.47		807.81		196.68
2	blank	0.203	5058.75	0.003	37.78	0.035	666.69	-0.024	790.03	-0.011	266.68
3	blank	0.000	4427.51	0.000	24.45	0.000	605.58	0.000	841.15	0.000	266.68
4	H/1000	8.190	26338.87	0.095	512.24	0.440	1240.06	1.061	4491.79	3.166	2516.99
5	H/100	53.125	150548.04	0.977	5269.82	4.838	7299.51	10.290	37107.59	20.802	15571.44
6	H/10	490.092	1324763.42	9.723	51333.27	48.445	65727.19	101.384	351121.05	198.002	143170.43
7	HIGH	5000.956	12809689.39	100.028	501846.11	500.157	639057.79	999.859	3283532.72	2000.191	1372444.46
8	ICV	1010.288	2761575.27	19.979	108840.27	99.410	135929.72	206.395	723228.65	405.726	296922.14
9	ICB	-0.168	4037.32	0.003	38.89	-0.064	530.02	-0.002	836.70	0.046	296.68
10	CRI	28.620	82564.87	0.102	567.80	0.428	1266.74	1.028	4529.58	5.310	4157.40
11	ICSA	23365.562	60215010.77	0.008	67.78	-0.161	447.79	0.118	1301.18	1.832	1553.48
12	ICSAB	23484.605	62434292.40	9.959	51907.18	49.184	65849.95	101.234	346073.39	199.189	142171.06
13	FP131217-5MB...	0.145	4667.55	-0.001	21.11	-0.178	385.56	-0.038	708.92	0.041	286.68
14	FM131217-5LC...	507.184	1350144.04	9.813	51027.86	49.785	66508.35	102.289	348903.75	197.646	140760.39
15	1312160-1 10X	1.926	10096.99	0.003	41.11	-0.016	656.69	0.011	978.93	1.094	1080.09
16	1312160-4 10X	0.497	6231.48	0.011	84.45	-0.044	614.47	3.734	13595.92	2.301	1926.87
17	1312160-5 10X	0.188	5341.17	0.000	26.67	-0.006	654.47	0.057	1112.28	-0.074	240.01
18	1312160-7 10X	792.105	2112129.14	0.080	444.46	0.099	807.81	0.117	1337.85	0.392	576.71
19	1312160-6 10X	80028.004	2.09918E+08	2.969	15283.94	6.904	9694.07	14.156	48543.91	26.675	19038.53
20	CCV	495.780	1310440.35	9.816	50675.72	49.024	65026.97	101.836	344836.85	198.183	140117.62
21	OCB	0.350	5154.39	0.000	23.33	-0.057	526.68	-0.016	775.59	-0.048	230.01
22	1312147-1 10X	0.699	6721.68	0.001	32.22	0.261	1011.16	1.050	4467.34	1.864	1606.82
23	IP131217-4MB ...	0.333	5184.43	0.000	23.33	-0.149	425.57	-0.039	716.69	-0.023	250.01
24	IP131217-4LCS...	503.815	1311089.82	9.619	48892.61	51.926	67776.88	100.248	334269.08	197.682	137615.86
25	1312080-1 10X	27017.225	71579317.27	15.540	80703.17	87.640	116431.61	24.938	85675.39	77.878	55599.21
26	1312080-1D 10X	26092.066	70699832.28	17.199	91332.54	84.967	115454.37	32.920	115343.58	77.612	56652.80
27	1312080-1L 50X	5679.109	15016650.61	3.233	16769.89	18.245	24712.04	5.280	18835.45	16.222	11784.86
28	1312080-1MS 10X	23349.224	63209489.06	23.735	125917.80	123.910	167916.88	120.833	420460.52	254.239	184696.78
29	1312080-1MSD ...	25320.903	66782262.34	24.564	126957.55	119.785	158135.41	123.112	417368.86	266.990	188979.71
30	1312080-1A 10X	26325.086	69200435.64	24.922	128378.56	133.384	175480.38	126.037	425798.47	273.704	193055.84
31	1312080-2 10X	23342.888	62699180.73	11.319	59593.06	43.521	58954.18	24.747	86188.17	69.060	49997.96

Batch Summary Report

Analyte Table

	Sample Name	56 Fe [2]		59 Co [2]		60 Ni [2]		63 Cu [2]		66 Zn [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
32	CCV	497.679	1237244.85	9.576	46502.34	48.072	59985.63	100.331	319567.51	197.966	131661.71
33	CCB	0.795	5934.75	0.000	23.34	-0.278	258.89	-0.052	640.02	-0.039	226.68
34	1312080-3 10X	28587.318	77691708.84	16.594	88406.88	67.544	92201.81	27.632	97279.19	80.045	58589.53
35	1312080-4 10X	35795.305	95244031.91	30.269	157833.96	82.441	110030.21	77.118	264100.98	93.974	67289.79
36	1312080-5 10X	26657.291	70296428.95	18.449	95346.99	181.737	239573.50	42.005	142981.17	57.077	40621.88
37	1312080-6 10X	23857.951	64364594.04	17.091	90356.34	145.626	196523.30	134.851	467485.78	66.194	48139.25
38	1311454-2 10X	6919.471	18047425.98	3.505	17933.29	7.750	10736.95	7.882	27280.57	52.248	36796.04
39	1311454-6 10X	6663.196	17375676.82	2.945	15071.54	7.443	10335.61	5.849	20478.55	21.599	15381.20
40	1311454-10 10X	6384.528	16479836.84	2.671	13533.47	7.049	9724.12	5.501	19117.98	24.534	17249.86
41	1311454-14 10X	6863.522	17773335.99	2.851	14485.43	7.895	10844.82	7.023	24230.36	26.166	18444.54
42	1311454-18 10X	6820.761	17735790.57	2.897	14782.37	7.229	10028.76	6.155	21435.29	22.024	15631.53
43	CCV	498.018	1272893.44	9.485	47343.63	48.223	61866.82	100.053	327648.85	196.871	134600.74
44	CCB	0.802	6074.75	-0.002	13.33	-0.338	195.56	-0.040	688.91	-0.096	196.68
45	IP131217-6MB ...			-0.002	15.56			-0.040	696.70	0.066	300.02
46	IM131217-6LGS...			9.450	46958.02			99.574	324558.11	198.740	135237.65
47	1312153-1 10X			0.000	26.67			-0.042	754.48	0.055	320.02
48	1312153-1D 10X			-0.001	22.22			0.089	1215.62	6.979	5161.13
49	1312153-1L 50X			-0.001	20.00			-0.010	887.82	0.618	723.39
50	1312153-1MS 10X			9.718	48809.12			100.823	332170.60	196.281	135008.76
51	1312153-1MSD ...			9.725	49258.05			100.994	335581.98	194.591	134993.07
52	1312153-2 10X			-0.001	21.11			0.557	2732.49	0.690	760.06
53	1312157-1 10X			-0.001	21.11			0.103	1290.07	0.754	833.40
54	1312190-1 10X			-0.003	12.22			10.849	37996.29	0.927	960.07
55	CCV			9.790	50562.03			101.349	343357.47	199.747	141288.06
56	CCB			0.000	25.55			-0.042	710.03	0.101	330.02
57	1312134-1 10X			3.311	17324.86			10.948	38370.50	20.201	14727.24
58	1312134-1D 10X			4.784	24643.10			16.081	55082.12	30.116	21484.94
59	1312134-1L 50X			0.670	3477.08			2.206	8357.81	4.318	3333.83
60	1312134-1MS 10X			18.261	93641.17			129.551	435678.66	247.435	173769.42
61	1312134-1MSD ...			18.022	93315.96			123.319	418750.55	235.519	167002.66
62	1312134-1A 10X			13.528	67387.21			114.880	375334.57	228.370	155799.32

Batch Summary Report

Analyte Table

	Sample Name	56 Fe [2]		59 Co [2]		60 Ni [2]		63 Cu [2]		66 Zn [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
63	1312158-1 10X			0.042	243.34			0.055	1123.39	0.925	953.41
64	1312207-1 10X			0.000	26.67			0.916	3929.42	6.097	4487.52
65	1312207-2 10X			0.002	34.45			0.411	2241.30	0.462	600.04
66	CCV			9.778	49288.21			101.107	334338.14	201.845	139350.89
67	CCB			-0.004	7.78			-0.031	724.47	0.072	303.35
68	IP131218-1MB ...			-0.002	15.56			-0.068	621.13	0.102	326.69
69	IM131218-1LCS...			9.688	51016.82			99.964	345336.57	196.838	141970.63
70	1312210-1 100X			0.000	26.67			0.004	977.82	0.394	593.38
71	1312210-1D 100X			0.002	36.66			-0.003	941.15	0.470	640.04
72	1312210-1L 500X			-0.002	16.67			-0.064	687.80	-0.011	276.68
73	1312210-1MS 1...			1.009	5167.56			10.527	36029.84	20.762	14760.73
74	1312210-1MSD ...			1.067	5588.81			11.039	38595.52	22.072	16025.18
75	1312210-2 100X			-0.001	21.11			0.063	1172.28	0.811	890.07
76	CCV			9.950	51885.00			102.015	348955.34	202.622	144707.55
77	CCB			0.000	24.44			-0.062	650.02	0.117	340.02

Batch Summary Report

Analyte Table

	Sample Name	75 As [2]		78 Se [2]		88 Sr [2]		98 Mo [2]		109 Ag [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
1	blank		3.00		0.40		66.67		6.67		2.22
2	blank	-0.004	3.33	-0.001	1.20	0.008	86.67	-0.003	3.33	0.003	18.89
3	blank	0.000	4.33	0.000	1.20	0.000	70.00	0.000	11.11	0.000	5.56
4	H/1000	0.094	35.33	0.077	3.73	0.113	293.35	0.094	320.01	0.013	78.89
5	H/100	0.975	335.00	0.932	31.87	0.988	2106.92	0.975	3341.52	0.089	522.24
6	H/10	9.354	3117.31	9.947	321.60	9.679	19342.56	9.386	31540.16	1.012	5724.44
7	HIGH	100.065	31666.60	100.006	3062.43	100.032	191681.38	100.062	319501.15	9.999	54419.88
8	ICV	19.450	6563.35	19.967	652.81	19.287	39817.32	19.410	66054.70	2.046	11981.35
9	ICB	-0.007	2.33	-0.010	0.93	-0.013	46.67	0.001	14.45	0.000	4.44
10	CRI	0.093	36.00	0.114	5.07	0.155	396.69	0.101	352.24	0.012	73.33
11	ICSA	0.003	5.67	0.009	1.60	0.118	320.02	181.151	582155.04	0.011	67.78
12	ICSAB	9.865	3246.67	9.688	309.33	9.813	20110.03	189.117	626920.79	0.992	5762.24
13	FP131217-5MB...	-0.008	2.00	0.010	1.47	0.003	73.34	0.007	31.11	0.002	13.33
14	FM131217-5LC...	9.595	3149.65	10.234	325.87	10.025	20106.98	9.713	32142.43	0.993	5643.31
15	1312160-1 10X	0.009	8.00	0.016	1.87	28.878	57320.03	8.552	28472.23	0.000	8.89
16	1312160-4 10X	0.143	51.67	0.012	1.73	21.741	43931.33	6.693	22086.57	0.009	60.03
17	1312160-5 10X	0.167	58.67	0.030	2.27	22.578	44596.78	6.835	22243.47	0.002	17.78
18	1312160-7 10X	0.030	14.67	0.033	2.40	146.058	294754.60	1.328	4417.34	0.004	32.22
19	1312160-6 10X	0.466	155.67	0.238	8.80	165.568	329292.20	4.074	13336.94	0.134	761.14
20	CCV	9.650	3144.65	9.368	296.27	9.522	18711.67	9.583	31411.01	1.031	5741.10
21	CCB	0.003	5.00	0.005	1.33	-0.011	50.00	0.003	18.89	0.002	16.67
22	1312147-1 10X	-0.003	3.67	0.004	1.47	15.110	29805.35	0.302	1002.27	0.000	8.89
23	IP131217-4MB ...	0.000	4.33	-0.023	0.53	0.000	70.00	0.002	16.67	0.001	10.00
24	IP131217-4LCS...	9.262	2972.28	10.404	323.87	9.782	19045.64	9.618	31107.11	1.025	5653.30
25	1312080-1 10X	3.985	1309.39	1.598	52.00	16.154	32003.24	0.427	1425.64	0.055	316.68
26	1312080-1D 10X	4.113	1382.06	1.432	47.73	16.376	33543.14	0.520	1767.90	0.049	292.23
27	1312080-1L 50X	0.830	275.67	0.355	12.53	3.465	6915.16	0.101	344.46	0.012	71.11
28	1312080-1MS 10X	12.057	4038.85	10.259	333.47	24.537	48698.40	9.229	31165.01	1.111	6261.34
29	1312080-1MSD ...	12.529	4088.53	10.589	335.47	29.379	57735.29	9.132	30035.06	1.052	5868.94
30	1312080-1A 10X	13.658	4441.62	11.168	352.00	26.203	50985.31	10.257	33640.02	1.097	6060.15
31	1312080-2 10X	3.906	1301.39	1.360	45.07	33.856	68357.13	0.473	1597.88	0.035	205.56

Batch Summary Report

Analyte Table

	Sample Name	75 As [2]		78 Se [2]		88 Sr [2]		98 Mo [2]		109 Ag [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
32	CCV	9.257	2837.92	9.528	283.33	9.172	17269.93	9.492	29330.37	0.978	5218.71
33	CCB	-0.006	2.33	-0.027	0.40	-0.001	66.67	-0.003	2.22	0.002	15.55
34	1312080-3 10X	4.012	1352.06	1.119	37.73	22.592	46635.63	0.479	1635.67	0.150	886.71
35	1312080-4 10X	2.918	964.36	1.127	37.20	50.359	101136.13	0.415	1388.98	0.036	212.23
36	1312080-5 10X	3.230	1057.37	0.385	13.47	18.329	35393.47	0.403	1338.97	0.049	275.56
37	1312080-6 10X	10.820	3613.41	0.363	13.07	20.174	39068.94	0.338	1147.83	0.026	150.00
38	1311454-2 10X	2.545	824.69	0.432	14.80	53.787	104254.81	0.203	673.36	221.743	1220058.18
39	1311454-6 10X	2.726	882.70	0.339	11.87	35.945	69859.74	0.165	547.80	9.405	52021.98
40	1311454-10 10X	2.749	881.69	0.356	12.27	33.949	65796.49	0.168	553.35	10.647	58557.93
41	1311454-14 10X	2.730	878.36	0.556	18.53	37.860	73058.66	0.180	592.24	10.478	57391.46
42	1311454-18 10X	3.260	1052.04	0.412	14.13	33.824	65471.44	0.169	558.91	8.924	49031.36
43	CCV	9.207	2901.61	9.817	300.00	9.299	17667.08	9.418	29920.45	1.011	5445.47
44	CCB	-0.003	3.33	-0.018	0.67	-0.010	50.00	0.003	18.89	0.004	24.44
45	IP131217-6MB ...	-0.008	2.00	-0.013	0.80	-0.009	53.33	0.000	10.00	0.003	20.00
46	IM131217-6LCS...	9.193	2883.93	9.927	302.13	9.358	17787.32	9.481	29978.29	0.989	5325.42
47	1312153-1 10X	0.436	140.67	0.223	8.00	55.709	107779.14	0.794	2509.12	0.003	20.00
48	1312153-1D 10X	0.479	159.00	0.099	4.40	59.299	117240.50	0.872	2842.52	0.001	12.22
49	1312153-1L 50X	0.085	32.00	0.000	1.33	11.745	22920.50	0.173	574.46	0.001	11.11
50	1312153-1MS 10X	9.799	3106.98	10.215	314.27	68.887	131364.56	10.646	34022.01	1.053	5725.56
51	1312153-1MSD ...	9.973	3189.32	9.400	291.73	69.805	133031.23	10.602	34168.91	1.045	5657.77
52	1312153-2 10X	0.402	131.67	0.049	2.80	55.549	114403.65	0.784	2512.46	0.003	20.00
53	1312157-1 10X	0.136	49.33	-0.013	0.93	28.298	54956.11	0.062	220.01	0.003	24.44
54	1312190-1 10X	-0.004	3.67	0.012	1.73	80.845	162518.04	0.008	40.00	0.002	16.67
55	CCV	9.644	3144.65	9.996	316.13	9.337	19148.93	9.396	30880.00	0.993	5767.80
56	CCB	-0.005	3.00	0.014	1.60	-0.002	66.67	0.002	16.66	0.001	8.89
57	1312134-1 10X	0.672	226.33	0.498	17.20	75.381	158432.25	1.341	4469.59	0.023	143.34
58	1312134-1D 10X	0.907	299.00	0.476	16.27	94.496	195713.79	1.403	4606.29	0.032	194.45
59	1312134-1L 50X	0.114	41.67	0.098	4.40	14.894	30313.23	0.260	864.48	0.004	30.00
60	1312134-1MS 10X	10.161	3290.68	8.934	280.93	146.020	298901.62	9.696	31651.51	1.021	5944.52
61	1312134-1MSD ...	9.591	3135.98	8.207	260.53	147.727	300408.91	8.801	29005.45	1.001	5788.93
62	1312134-1A 10X	10.869	3418.37	10.418	317.87	88.095	176989.73	11.378	36069.78	1.001	5714.46

Batch Summary Report

Analyte Table

	Sample Name	75 As [2]		78 Se [2]		88 Sr [2]		98 Mo [2]		109 Ag [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
63	1312158-1 10X	0.076	30.00	-0.004	1.20	51.374	104600.06	0.158	534.46	0.002	16.67
64	1312207-1 10X	0.131	46.33	-0.016	0.80	1.774	3603.91	0.131	432.23	0.008	52.22
65	1312207-2 10X	-0.010	1.33	0.019	1.87	3.283	6625.03	0.029	105.56	0.003	24.44
66	CCV	9.567	3044.30	10.002	308.67	9.280	18658.25	9.510	30508.24	0.929	5292.07
67	CCB	-0.004	3.00	-0.013	0.80	-0.018	40.00	0.000	10.00	0.002	17.78
68	IP131218-1MB ...	-0.007	2.33	-0.014	0.80	-0.005	63.34	0.001	14.44	0.001	8.89
69	IM131218-1LOS...	9.497	3157.65	9.986	322.13	9.499	19990.05	9.590	32136.98	0.966	5757.80
70	1312210-1 100X	9.847	3323.02	2.652	87.87	36.400	75129.75	0.003	22.22	0.013	81.11
71	1312210-1D 100X	11.719	3900.15	3.104	101.20	42.438	87676.81	0.006	32.22	0.013	83.33
72	1312210-1L 500X	2.015	637.35	0.589	19.20	6.991	14076.74	-0.002	6.67	0.004	31.11
73	1312210-1MS 1...	11.961	3849.14	3.866	121.60	39.250	81236.23	1.004	3268.16	0.101	601.13
74	1312210-1MSD ...	12.325	4056.52	3.886	124.93	40.834	85267.05	1.082	3600.46	0.121	722.25
75	1312210-2 100X	9.996	3344.36	2.388	78.53	35.839	74778.69	0.001	14.44	0.014	86.67
76	CCV	9.744	3208.00	10.244	327.20	9.737	20183.59	9.654	32034.53	0.954	5598.85
77	CCB	-0.007	2.33	0.001	1.20	-0.009	56.67	0.004	22.22	0.000	4.45

Batch Summary Report

Analyte Table

	Sample Name	111 Cd [2]		121 Sb [2]		137 Ba [2]		205 Tl [2]		208 Pb [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
1	blank		0.67		6.67		0.00		3.33		306.69
2	blank	-0.001	0.00	-0.003	6.67	-0.008	0.00	0.000	3.34	0.002	323.35
3	blank	0.000	1.33	0.000	17.78	0.000	6.67	0.000	2.86	0.000	283.35
4	H/1000	0.027	28.57	0.029	124.45	0.142	133.34	0.002	26.67	0.065	1313.43
5	H/100	0.298	316.97	0.278	1118.95	0.893	853.40	0.020	232.38	0.515	8831.55
6	H/10	2.920	3007.17	2.977	11427.65	9.580	8799.58	0.191	2169.70	5.069	82179.40
7	HIGH	30.008	29725.36	30.002	110667.42	100.043	88379.64	2.001	21933.84	49.993	782886.71
8	ICV	5.989	6382.13	5.873	23313.06	19.556	18581.96	0.399	4665.52	9.995	168711.82
9	ICB	0.000	1.33	-0.001	15.56	0.008	13.33	0.004	41.43	0.001	300.02
10	CRI	0.029	32.56	0.034	155.56	0.307	296.69	0.025	272.86	0.119	2263.53
11	ICSA	-0.038	-38.38	0.503	1983.50	0.038	43.33	0.004	47.14	0.039	933.39
12	ICSAB	2.916	3080.73	3.037	11959.15	9.780	9213.21	0.208	2325.43	5.150	84554.69
13	FP131217-5MB...	-0.001	-0.01	0.002	23.33	0.021	23.33	0.001	13.81	-0.002	253.35
14	FM131217-5LC...	3.096	3200.35	3.068	11816.85	9.593	8839.57	0.218	2412.12	5.264	85858.32
15	1312160-1 10X	-0.002	-0.86	0.003	32.22	3.755	3440.52	0.005	58.57	0.011	496.70
16	1312160-4 10X	-0.002	-0.87	0.002	27.78	1.846	1723.51	0.002	29.52	0.010	473.36
17	1312160-5 10X	-0.008	-6.92	-0.001	16.67	2.010	1836.86	0.001	18.10	-0.001	306.69
18	1312160-7 10X	0.007	8.63	0.010	57.78	5.087	4744.28	0.002	30.95	0.062	1313.43
19	1312160-6 10X	0.768	790.54	0.057	240.01	36.433	33407.33	0.031	341.91	2.337	37957.68
20	CCV	2.974	3012.55	2.965	11193.02	9.734	8792.89	0.203	2263.52	5.056	81084.01
21	CCB	0.000	1.33	0.000	18.89	0.021	23.33	0.005	47.62	0.001	293.35
22	1312147-1 10X	-0.001	0.35	0.006	41.11	2.771	2520.34	0.002	23.33	0.005	396.69
23	IP131217-4MB ...	-0.001	0.66	0.000	18.89	0.037	36.67	0.001	8.10	-0.002	260.01
24	IP131217-4LCS...	3.031	3040.65	2.860	10693.80	9.328	8346.04	0.212	2358.30	5.244	81628.11
25	1312080-1 10X	0.209	214.89	0.571	2191.29	153.272	139699.22	0.104	1157.67	12.773	206468.75
26	1312080-1D 10X	0.223	237.46	0.524	2081.27	155.879	146931.34	0.103	1160.53	14.257	232782.70
27	1312080-1L 50X	0.040	41.89	0.110	437.79	31.201	28447.43	0.023	257.15	2.721	44150.98
28	1312080-1MS 10X	3.277	3359.36	3.522	13454.81	171.187	156424.67	0.331	3663.34	16.693	273052.76
29	1312080-1MSD ...	3.250	3299.71	1.681	6369.16	149.786	135556.27	0.299	3264.67	17.408	280144.77
30	1312080-1A 10X	3.321	3337.25	3.521	13189.03	156.515	140192.86	0.312	3486.63	17.438	277603.34
31	1312080-2 10X	0.136	142.84	0.341	1345.63	135.158	125705.33	0.072	815.27	11.173	184204.01

Batch Summary Report

Analyte Table

	Sample Name	111 Cd [2]		121 Sb [2]		137 Ba [2]		205 Tl [2]		208 Pb [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
32	CCV	2.896	2810.49	2.858	10336.90	9.558	8275.97	0.197	2126.36	4.980	76932.12
33	CCB	-0.001	0.00	0.006	35.55	0.038	36.67	0.007	70.47	0.001	296.68
34	1312080-3 10X	0.167	179.49	0.769	3071.46	210.914	200427.56	0.070	779.55	13.731	227200.20
35	1312080-4 10X	0.141	148.24	0.395	1547.88	156.649	144978.10	0.064	706.21	9.378	151157.18
36	1312080-5 10X	0.120	120.92	0.200	760.03	122.067	108470.52	0.057	626.68	15.837	252642.66
37	1312080-6 10X	0.118	118.98	0.153	590.02	112.159	99989.55	0.050	558.11	24.365	397705.10
38	1311454-2 10X	0.699	701.15	0.112	437.79	84.784	75729.32	0.066	728.12	7.244	119320.08
39	1311454-6 10X	0.560	565.18	0.091	358.90	80.851	72597.82	0.070	771.46	5.846	94198.22
40	1311454-10 10X	0.561	562.51	0.078	311.12	73.138	65288.53	0.067	739.07	5.249	85573.07
41	1311454-14 10X	0.729	727.84	0.082	325.56	80.277	71371.75	0.069	721.93	5.907	94959.81
42	1311454-18 10X	0.615	617.18	0.080	316.68	78.845	70337.99	0.071	757.64	6.476	106079.69
43	CCV	2.931	2870.32	2.899	10581.49	9.860	8609.48	0.190	2048.26	4.997	78442.05
44	CCB	0.000	1.33	-0.001	13.33	0.034	33.33	0.005	51.43	0.003	313.35
45	IP131217-6MB ...	0.000	1.33	-0.003	8.89	0.005	10.00	0.000	6.67	-0.002	253.34
46	IM131217-6LCS...	3.024	2961.66	2.947	10757.16	9.024	7885.70	0.208	2247.80	5.177	80726.86
47	1312153-1 10X	-0.002	-0.78	0.006	43.33	11.983	10700.89	0.006	66.67	0.000	310.01
48	1312153-1D 10X	0.000	1.78	0.018	87.78	13.318	12145.41	0.002	27.62	0.013	516.69
49	1312153-1L 50X	0.001	2.49	-0.001	15.56	2.396	2156.93	0.001	13.33	0.026	706.71
50	1312153-1MS 10X	3.143	3107.75	3.050	11243.07	23.256	20504.54	0.221	2421.17	5.292	82911.70
51	1312153-1MSD ...	3.193	3147.72	3.043	11176.34	22.457	19726.83	0.223	2408.30	5.337	83368.84
52	1312153-2 10X	0.004	5.22	0.015	76.67	8.200	7395.47	0.008	93.34	0.023	673.38
53	1312157-1 10X	-0.001	0.60	0.012	65.56	4.845	4340.82	0.003	32.86	0.005	400.02
54	1312190-1 10X	-0.001	-0.01	0.003	30.00	706.463	656283.52	0.002	24.29	0.039	950.06
55	CCV	2.913	3078.06	2.796	11009.55	9.310	8772.99	0.191	2046.82	4.983	80335.12
56	CCB	0.002	3.33	-0.002	11.11	0.061	56.67	0.008	80.48	0.004	330.02
57	1312134-1 10X	0.059	65.27	0.106	450.01	125.225	121313.32	0.067	727.17	4.298	71372.02
58	1312134-1D 10X	0.090	97.90	0.118	492.24	180.803	172627.70	0.090	962.42	6.103	102577.07
59	1312134-1L 50X	0.032	35.06	0.021	104.45	25.488	24186.53	0.018	194.76	0.865	14563.48
60	1312134-1MS 10X	3.110	3293.87	1.400	5541.07	288.366	272183.55	0.342	3690.48	15.537	261468.02
61	1312134-1MSD ...	3.051	3209.34	1.248	4903.06	291.934	273697.65	0.339	3598.08	15.205	262773.03
62	1312134-1A 10X	2.999	3119.12	3.041	11780.12	137.358	127218.01	0.287	3002.23	9.274	149707.53

Batch Summary Report

Analyte Table

	Sample Name	111 Cd [2]		121 Sb [2]		137 Ba [2]		205 Tl [2]		208 Pb [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS	Conc. [ppb]	CPS
63	1312158-1 10X	0.000	1.83	0.021	102.23	15.814	14837.77	0.005	53.33	0.013	523.36
64	1312207-1 10X	0.003	4.53	0.019	94.45	0.118	116.67	0.002	26.67	0.046	1036.74
65	1312207-2 10X	0.000	1.97	0.010	56.67	0.224	213.34	0.002	23.34	0.002	353.35
66	CCV	3.020	3129.52	2.926	11301.98	9.268	8566.08	0.189	1998.24	5.013	80000.77
67	CCB	0.001	2.67	-0.001	15.56	0.020	23.33	0.008	80.00	0.003	326.69
68	IP131218-1MB ...	-0.001	0.00	-0.002	12.22	0.023	26.67	0.002	25.71	-0.003	233.34
69	IM131218-1LCS...	2.886	3130.35	2.888	11674.49	9.505	9193.26	0.205	2239.71	5.225	84604.55
70	1312210-1 100X	0.135	145.33	0.027	128.89	3.948	3780.66	0.011	120.95	0.148	2743.58
71	1312210-1D 100X	0.002	3.32	0.026	125.56	4.368	4167.43	0.004	42.86	0.184	3306.98
72	1312210-1L 500X	0.022	24.67	0.000	18.89	0.783	730.06	0.001	15.71	0.021	643.38
73	1312210-1MS 1...	0.279	299.66	0.341	1378.97	4.743	4530.90	0.022	240.48	0.683	11308.94
74	1312210-1MSD ...	0.345	373.56	0.374	1521.21	4.784	4614.27	0.027	295.24	0.739	12256.00
75	1312210-2 100X	0.000	1.33	0.077	331.12	3.898	3754.00	0.002	24.76	0.154	2840.25
76	CCV	2.917	3116.37	2.843	11316.44	9.696	9229.80	0.200	2142.55	4.960	82861.47
77	CCB	0.003	3.99	-0.001	15.56	0.023	26.67	0.007	70.95	-0.008	173.34

Batch Summary Report

Analyte Table

	Sample Name	232 Th [2]		238 U [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS
1	blank		13.33		8.89
2	blank	0.002	23.33	-0.001	2.22
3	blank	0.001	10.00	0.000	11.11
4	H/1000	0.008	131.11	0.009	172.23
5	H/100	0.068	1146.76	0.093	1703.46
6	H/10	1.003	16687.60	0.975	17604.15
7	HIGH	10.000	174617.32	10.003	174103.11
8	ICV	1.972	34525.73	1.954	36312.65
9	ICB	0.009	130.00	-0.001	2.22
10	CRI	0.026	438.90	0.013	241.11
11	ICSA	0.015	251.12	0.000	7.78
12	ICSAB	1.056	17792.20	1.028	18270.49
13	FP131217-5MB...	0.002	26.67	0.000	4.44
14	FM131217-5LC...	1.054	17658.74	1.020	17918.86
15	1312160-1 10X	0.018	294.45	0.702	12228.57
16	1312160-4 10X	0.010	160.00	0.243	4300.71
17	1312160-5 10X	0.004	66.67	0.254	4429.65
18	1312160-7 10X	0.019	305.56	4.156	73827.78
19	1312160-6 10X	0.352	5806.81	39.634	698502.31
20	CCV	0.990	16272.66	0.987	17507.29
21	CCB	0.016	226.67	0.000	4.45
22	1312147-1 10X	0.011	186.67	0.012	218.89
23	IP131217-4MB ...	0.002	35.56	0.000	8.89
24	IP131217-4LCS...	1.037	16558.57	0.994	17547.36
25	1312080-1 10X	2.642	44575.10	0.513	9028.47
26	1312080-1D 10X	2.861	48862.07	0.513	9134.09
27	1312080-1L 50X	0.586	9676.71	0.111	1940.17
28	1312080-1MS 10X	3.515	60510.25	1.517	26686.71
29	1312080-1MSD ...	3.933	66875.38	1.577	27353.54
30	1312080-1A 10X	3.579	60003.27	1.505	26655.56
31	1312080-2 10X	2.830	48775.06	0.496	8833.90

Batch Summary Report

Analyte Table

	Sample Name	232 Th [2]		238 U [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS
32	CCV	0.995	15758.80	0.939	16133.52
33	CCB	0.011	163.34	0.000	8.89
34	1312080-3 10X	2.637	45552.44	0.428	7594.30
35	1312080-4 10X	1.668	27792.35	0.322	5648.96
36	1312080-5 10X	4.463	75580.85	0.625	10845.28
37	1312080-6 10X	1.928	32661.32	0.270	4786.42
38	1311454-2 10X	2.443	41882.68	0.261	4553.02
39	1311454-6 10X	3.043	51263.57	0.272	4739.72
40	1311454-10 10X	2.463	41763.42	0.240	4192.89
41	1311454-14 10X	3.052	51300.52	0.266	4406.28
42	1311454-18 10X	2.991	51246.79	0.322	5409.97
43	CCV	0.998	16064.76	0.969	16601.84
44	CCB	0.011	161.11	0.000	3.33
45	IP131217-6MB ...	0.004	58.89	0.000	4.44
46	IM131217-6LCS...	0.999	15986.78	0.987	16882.11
47	1312153-1 10X	0.017	271.12	0.327	5522.22
48	1312153-1D 10X	0.009	143.34	0.357	6186.95
49	1312153-1L 50X	0.005	81.11	0.068	1168.96
50	1312153-1MS 10X	1.047	16838.84	1.341	23319.88
51	1312153-1MSD ...	1.072	17182.61	1.363	23386.62
52	1312153-2 10X	0.018	291.12	0.424	7370.86
53	1312157-1 10X	0.010	168.89	0.059	1023.39
54	1312190-1 10X	0.013	217.78	0.016	284.45
55	CCV	0.937	15474.09	0.976	16552.88
56	CCB	0.016	233.34	0.000	4.44
57	1312134-1 10X	1.778	30476.83	0.431	7369.73
58	1312134-1D 10X	2.203	38437.59	0.553	9406.53
59	1312134-1L 50X	0.359	6053.59	0.093	1549.00
60	1312134-1MS 10X	4.405	78656.13	1.916	32761.34
61	1312134-1MSD ...	4.265	78084.04	1.881	31661.95
62	1312134-1A 10X	2.783	46926.84	1.471	24437.28

Batch Summary Report

Analyte Table

	Sample Name	232 Th [2]		238 U [2]	
		Conc. [ppb]	CPS	Conc. [ppb]	CPS
63	1312158-1 10X	0.015	241.12	0.000	15.56
64	1312207-1 10X	0.006	104.45	0.009	162.23
65	1312207-2 10X	0.004	73.34	0.001	35.55
66	CCV	0.928	15181.47	0.967	16248.05
67	CCB	0.019	280.01	0.000	14.45
68	IP131218-1MB ...	0.008	118.89	0.000	7.78
69	IM131218-1LCS...	1.005	16696.49	1.018	17647.44
70	1312210-1 100X	0.026	431.13	0.002	51.11
71	1312210-1D 100X	0.016	268.90	0.001	32.22
72	1312210-1L 500X	0.006	103.34	0.000	4.44
73	1312210-1MS 1...	0.105	1732.36	0.105	1854.59
74	1312210-1MSD ...	0.108	1786.81	0.115	1970.17
75	1312210-2 100X	0.009	156.67	0.001	31.11
76	CCV	0.914	15646.49	0.988	16787.57
77	CCB	0.013	201.12	0.000	5.56

Batch Summary Report

ISTD Table

	Sample Name	71 Ga (ISTD) [1]		71 Ga (ISTD) [2]		72 Ge (ISTD) [1]		72 Ge (ISTD) [2]		103 Rh (ISTD) [1]	
		CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
1	blank	274883.09		17283.21		146973.95		8182.49		431747.99	
2	blank	281927.84	100.0	17727.07	100.0	146101.76	100.0	8155.76	100.0	433811.14	100.0
3	blank	277463.57	100.0	16912.80	100.0	146596.09	100.0	7845.59	100.0	423948.68	100.0
4	H/1000	301944.79	108.8	19322.26	114.2	157879.95	107.7	9022.89	115.0	459376.69	108.4
5	H/100	317147.53	114.3	20403.58	120.6	163121.27	111.3	9183.02	117.0	481574.17	113.6
6	H/10	315281.36	113.6	19532.47	115.5	161653.28	110.3	9363.15	119.3	477090.46	112.5
7	HIGH	310688.46	112.0	21258.11	125.7	164800.40	112.4	9993.48	127.4	450418.27	106.2
8	ICV	325017.02	117.1	20951.12	123.9	170139.84	116.1	9469.77	120.7	487432.04	115.0
9	ICB	278949.32	100.5	17189.84	101.6	147063.27	100.3	8312.60	106.0	431130.61	101.7
10	CRI	311119.92	112.1	19412.29	114.8	167421.70	114.2	9306.44	118.6	471830.45	111.3
11	ICSA	310677.51	112.0	19495.79	115.3	167150.51	114.0	9186.35	117.1	459994.40	108.5
12	ICSAB	314287.55	113.3	20176.73	119.3	169039.54	115.3	9179.65	117.0	470570.08	111.0
13	FP131217-5MB...	265927.81	95.8	16972.85	100.4	135580.42	92.5	7905.82	100.8	412038.55	97.2
14	FM131217-5LC...	303092.95	109.2	19122.09	113.1	153539.69	104.7	9196.43	117.2	467052.42	110.2
15	1312160-1 10X	307100.32	110.7	19452.45	115.0	157820.52	107.7	8939.59	113.9	469229.06	110.7
16	1312160-4 10X	306874.98	110.6	19789.44	117.0	158245.94	107.9	9002.92	114.8	466089.67	109.9
17	1312160-5 10X	301095.95	108.5	18631.40	110.2	158738.68	108.3	8636.03	110.1	457191.58	107.8
18	1312160-7 10X	310326.78	111.8	19282.12	114.0	161856.43	110.4	9166.36	116.8	467582.56	110.3
19	1312160-6 10X	308540.11	111.2	19842.83	117.3	176663.71	120.5	9513.27	121.3	462108.70	109.0
20	CCV	303012.46	109.2	19359.10	114.5	149052.75	101.7	9132.98	116.4	461779.25	108.9
21	CCB	264418.80	95.3	16252.12	96.1	134138.73	91.5	7975.65	101.7	411502.36	97.1
22	1312147-1 10X	302422.09	109.0	19642.82	116.1	151578.39	103.4	9022.97	115.0	460562.40	108.6
23	IP131217-4MB ...	270199.34	97.4	16802.86	99.3	140584.51	95.9	7988.99	101.8	421547.69	99.4
24	IP131217-4LCS...	302927.70	109.2	19001.89	112.4	150828.99	102.9	8862.77	113.0	466055.42	109.9
25	1312080-1 10X	396555.03	142.9	27006.91	159.7	160818.17	109.7	9626.63	122.7	465380.51	109.8
26	1312080-1D 10X	408027.68	147.1	27247.09	161.1	166066.18	113.3	9656.63	123.1	476899.07	112.5
27	1312080-1L 50X	319337.75	115.1	20757.63	122.7	152287.48	103.9	8559.31	109.1	459843.42	108.5
28	1312080-1MS 10X	397591.68	143.3	25460.80	150.5	164303.20	112.1	9790.04	124.8	478702.07	112.9
29	1312080-1MSD ...	389879.81	140.5	25604.60	151.4	160291.74	109.3	9553.24	121.8	467605.59	110.3
30	1312080-1A 10X	390964.85	140.9	26038.54	154.0	161976.72	110.5	9569.89	122.0	463662.48	109.4
31	1312080-2 10X	389185.27	140.3	25801.64	152.6	161706.72	110.3	9870.09	125.8	472487.92	111.4

Batch Summary Report

ISTD Table

	Sample Name	71 Ga (ISTD) [1]		71 Ga (ISTD) [2]		72 Ge (ISTD) [1]		72 Ge (ISTD) [2]		103 Rh (ISTD) [1]	
		CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
32	CCV	286675.23	103.3	18174.15	107.5	143125.69	97.6	8489.27	108.2	439883.03	103.8
33	CCB	253165.12	91.2	16298.81	96.4	127315.73	86.8	7198.59	91.8	394051.36	92.9
34	1312080-3 10X	420268.77	151.5	27484.43	162.5	164810.43	112.4	10006.93	127.5	475780.16	112.2
35	1312080-4 10X	424746.24	153.1	27056.83	160.0	168996.90	115.3	9416.48	120.0	474921.31	112.0
36	1312080-5 10X	367833.24	132.6	23431.24	138.5	162939.59	111.1	9152.96	116.7	467739.79	110.3
37	1312080-6 10X	358891.26	129.3	22769.95	134.6	159512.70	108.8	9012.87	114.9	465550.71	109.8
38	1311454-2 10X	316494.53	114.1	20483.85	121.1	146103.43	99.7	9049.64	115.3	453538.97	107.0
39	1311454-6 10X	320273.30	115.4	20744.01	122.7	146444.46	99.9	9112.91	116.2	454599.81	107.2
40	1311454-10 10X	320273.55	115.4	20056.64	118.6	146636.95	100.0	8495.91	108.3	456045.62	107.6
41	1311454-14 10X	312395.26	112.6	20654.05	122.1	144579.59	98.6	8646.03	110.2	446183.33	105.2
42	1311454-18 10X	319137.14	115.0	20747.31	122.7	147000.38	100.3	8856.20	112.9	450962.38	106.4
43	CCV	295268.97	106.4	18854.98	111.5	146694.71	100.1	8649.34	110.2	447037.01	105.4
44	CCB	256131.96	92.3	16439.07	97.2	131879.57	90.0	7702.23	98.2	397555.05	93.8
45	IP131217-6MB ...	261397.49	94.2	16592.49	98.1	135054.22	92.1	7915.68	100.9	406459.68	95.9
46	IM131217-6LCS...	289891.56	104.5	18841.85	111.4	149456.47	102.0	8475.92	108.0	445253.79	105.0
47	1312153-1 10X	288871.74	104.1	18538.03	109.6	151294.51	103.2	8602.69	109.7	443710.82	104.7
48	1312153-1D 10X	295500.17	106.5	18140.95	107.3	156084.09	106.5	8852.78	112.8	450075.32	106.2
49	1312153-1L 50X	293323.04	105.7	18741.71	110.8	155398.29	106.0	8569.37	109.2	451449.74	106.5
50	1312153-1MS 10X	297719.97	107.3	18875.01	111.6	158900.43	108.4	8495.93	108.3	455559.65	107.5
51	1312153-1MSD ...	294564.64	106.2	18878.31	111.6	157786.81	107.6	8716.10	111.1	451789.99	106.6
52	1312153-2 10X	296235.21	106.8	19028.65	112.5	155576.69	106.1	9026.18	115.0	447321.05	105.5
53	1312157-1 10X	299061.65	107.8	18981.97	112.2	158742.90	108.3	9116.31	116.2	459349.47	108.4
54	1312190-1 10X			19125.26	113.1			10723.96	136.7		
55	CCV			19392.37	114.7			9379.88	119.6		
56	CCB			17473.59	103.3			8135.79	103.7		
57	1312134-1 10X			22426.32	132.6			9633.31	122.8		
58	1312134-1D 10X			22366.29	132.2			9516.55	121.3		
59	1312134-1L 50X			20847.59	123.3			8992.91	114.6		
60	1312134-1MS 10X			24636.38	145.7			9669.99	123.3		
61	1312134-1MSD ...			24839.91	146.9			10116.89	129.0		
62	1312134-1A 10X			21244.61	125.6			9346.48	119.1		

Batch Summary Report

ISTD Table

	Sample Name	71 Ga (ISTD) [1]		71 Ga (ISTD) [2]		72 Ge (ISTD) [1]		72 Ge (ISTD) [2]		103 Rh (ISTD) [1]	
		CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
63	1312158-1 10X			19118.72	113.0			12008.38	153.1		
64	1312207-1 10X			19495.81	115.3			8929.50	113.8		
65	1312207-2 10X			18744.92	110.8			9002.92	114.8		
66	CCV			19452.63	115.0			8912.84	113.6		
67	OCB			17760.35	105.0			7995.73	101.9		
68	IP131218-1MB ...			17513.43	103.6			7912.25	100.8		
69	IM131218-1LOS...			20463.76	121.0			9640.02	122.9		
70	1312210-1 100X			151014.49	892.9			22816.95	290.8		
71	1312210-1D 100X			172417.62	1019.5			24472.87	311.9		
72	1312210-1L 500X			43706.54	258.4			11241.05	143.3		
73	1312210-1MS 1...			158022.63	934.3			22773.40	290.3		
74	1312210-1MSD ...			166671.03	985.5			23982.07	305.7		
75	1312210-2 100X			151797.37	897.5			22106.13	281.8		
76	CCV			20089.89	118.8			9519.90	121.3		
77	OCB			17777.33	105.1			8012.36	102.1		

Batch Summary Report

ISTD Table

	Sample Name	103 Rh (ISTD) [2]		115 In (ISTD) [1]		115 In (ISTD) [2]		195 Pt (ISTD) [1]		195 Pt (ISTD) [2]	
		CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
1	blank	106500.32		459590.91		57355.69		248525.92		43558.70	
2	blank	108352.88	100.0	465978.26	100.0	58453.67	100.0	251338.72	100.0	44484.69	100.0
3	blank	105188.36	100.0	460788.01	100.0	56506.20	100.0	245032.28	100.0	44367.87	100.0
4	H/1000	115713.78	110.0	497111.63	107.9	61122.13	108.2	267513.77	109.2	47644.72	107.4
5	H/100	120918.85	115.0	519460.57	112.7	65419.59	115.8	281063.04	114.7	50156.05	113.0
6	H/10	118928.40	113.1	520618.79	113.0	63463.03	112.3	277210.19	113.1	49971.88	112.6
7	HIGH	113104.91	107.5	499157.19	108.3	61085.28	108.1	267925.21	109.3	48223.01	108.7
8	ICV	120535.87	114.6	532764.78	115.6	65694.54	116.3	284791.35	116.2	51467.26	116.0
9	ICB	105373.11	100.2	457461.00	99.3	56016.90	99.1	251390.89	102.6	43859.50	98.9
10	CRI	119615.04	113.7	511758.86	111.1	65121.69	115.2	282718.06	107.2	47109.46	106.2
11	ICSA	113809.84	108.2	512272.73	111.2	64669.53	114.4	274982.20	112.2	49466.52	111.5
12	ICSAB	117406.98	111.6	520386.56	112.9	65100.38	115.2	277773.57	113.4	49199.41	110.9
13	FP131217-5MB...	102863.78	97.8	439802.57	95.4	54944.99	97.2	244721.59	99.9	43678.74	98.4
14	FM131217-5LC...	117131.02	111.4	499316.65	108.4	63717.57	112.8	271372.76	110.7	48657.62	109.7
15	1312160-1 10X	117853.54	112.0	519848.94	112.8	63231.63	111.9	273904.68	111.8	48229.22	108.7
16	1312160-4 10X	116794.78	111.0	512097.07	111.1	64325.78	113.8	272465.33	111.2	48998.90	110.4
17	1312160-5 10X	115177.14	109.5	497296.04	107.9	62878.86	111.3	268227.44	109.5	48209.76	108.7
18	1312160-7 10X	117465.93	111.7	513056.96	111.3	64369.74	113.9	275413.02	112.4	49219.53	110.9
19	1312160-6 10X	115824.76	110.1	508237.33	110.3	63419.01	112.2	277393.24	113.2	48828.08	110.1
20	CCV	116277.55	110.5	503479.17	109.3	62438.03	110.5	271889.09	111.0	49085.86	110.6
21	CCB	103030.32	97.9	442513.26	96.0	54837.39	97.0	240674.73	98.2	42836.38	96.5
22	1312147-1 10X	116042.86	110.3	499624.52	108.4	62720.42	111.0	269539.44	110.0	47126.25	106.2
23	IP131217-4MB ...	104403.05	99.3	456986.49	99.2	56317.05	99.7	250340.66	102.2	43698.74	98.5
24	IP131217-4LCS...	114491.58	108.8	506297.06	109.9	61830.36	109.4	272616.64	111.3	48868.49	110.1
25	1312080-1 10X	117013.26	111.2	503773.58	109.3	63025.13	111.5	271274.32	110.7	48698.10	109.8
26	1312080-1D 10X	119653.15	113.8	520800.71	113.0	65214.97	115.4	278906.82	113.8	49330.17	111.2
27	1312080-1L 50X	116728.10	111.0	498699.23	108.2	63051.14	111.6	269325.57	109.9	48126.15	108.5
28	1312080-1MS 10X	119539.59	113.6	516425.07	112.1	63192.65	111.8	278783.00	113.8	48721.43	109.8
29	1312080-1MSD ...	116499.17	110.8	503402.55	109.2	62578.74	110.7	270884.01	110.6	48055.97	108.3
30	1312080-1A 10X	116116.09	110.4	502888.23	109.1	61936.07	109.6	271104.92	110.6	49038.99	110.5
31	1312080-2 10X	118597.44	112.7	513530.53	111.4	64338.04	113.9	275363.65	112.4	49306.18	111.1

Batch Summary Report

iSTD Table

	Sample Name	103 Rh (ISTD) [2]		115 In (ISTD) [1]		115 In (ISTD) [2]		195 Pt (ISTD) [1]		195 Pt (ISTD) [2]	
		CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%	CPS	Recovery%
32	CCV	109369.41	104.0	483014.32	104.8	59813.83	105.9	265346.17	108.3	47567.59	107.2
33	CCB	98720.76	93.9	424471.41	92.1	54340.54	96.2	235614.06	96.2	43123.80	97.2
34	1312080-3 10X	120031.71	114.1	515170.71	111.8	65721.24	116.3	279991.69	114.3	49121.97	110.7
35	1312080-4 10X	117493.85	111.7	510483.58	110.8	64008.91	113.3	278844.25	113.8	48487.32	109.3
36	1312080-5 10X	116435.84	110.7	502326.69	109.0	61450.77	108.8	273603.58	111.7	48025.61	108.2
37	1312080-6 10X	119129.85	113.3	500961.99	108.7	61647.93	109.1	271365.38	110.7	48952.65	110.3
38	1311454-2 10X	115140.38	109.5	495460.61	107.5	61762.81	109.3	269029.21	109.8	48166.17	108.6
39	1311454-6 10X	115126.99	109.4	496748.49	107.8	62089.39	109.9	272920.25	111.4	48152.23	108.5
40	1311454-10 10X	113959.27	108.3	498686.14	108.2	61730.55	109.2	272864.49	111.4	48216.03	108.7
41	1311454-14 10X	114324.61	108.7	487092.33	105.7	61471.55	108.8	264849.01	108.1	45841.74	103.3
42	1311454-18 10X	114797.60	109.1	494662.19	107.4	61691.30	109.2	269689.45	110.1	46490.49	104.8
43	CCV	112448.30	106.9	492148.09	106.8	60357.55	106.8	267263.31	109.1	47467.22	107.0
44	CCB	100809.64	95.8	425394.60	92.3	53297.10	94.3	235422.53	96.1	41653.15	93.9
45	IP131217-6MB ...	102145.06	97.1	435593.34	94.5	54911.64	97.2	241402.80	98.5	41536.18	93.6
46	IM131217-6LCS...	111929.87	106.4	479063.48	104.0	60365.65	106.8	263863.31	107.7	47354.02	106.7
47	1312153-1 10X	111366.87	105.9	485717.40	105.4	61699.62	109.2	260841.20	106.5	46788.21	105.5
48	1312153-1D 10X	114982.05	109.3	493407.48	107.1	63010.83	111.5	264930.19	108.1	47982.13	108.1
49	1312153-1L 50X	115059.80	109.4	488674.12	106.1	62044.74	109.8	263497.46	107.5	46881.98	105.7
50	1312153-1MS 10X	113132.02	107.6	493236.11	107.0	60956.12	107.9	265903.53	108.5	48159.12	108.5
51	1312153-1MSD ...	114108.58	108.5	492684.88	106.9	60752.12	107.5	265882.30	108.5	47534.06	107.1
52	1312153-2 10X	113061.98	107.5	494474.00	107.3	62271.90	110.2	263902.57	107.7	48032.21	108.3
53	1312157-1 10X	117382.44	111.6	501178.04	108.8	61849.27	109.5	267573.51	109.2	47631.33	107.4
54	1312190-1 10X	117640.65	111.8			64242.95	113.7			47761.54	107.6
55	CCV	116328.21	110.6			65125.41	115.3			46949.36	105.8
56	CCB	104963.35	99.8			57041.59	100.9			43056.96	97.0
57	1312134-1 10X	117715.30	111.9			66990.77	118.6			47289.92	106.6
58	1312134-1D 10X	115958.58	110.2			66042.36	116.9			47092.65	106.1
59	1312134-1L 50X	115971.74	110.3			65611.72	116.1			45976.05	103.6
60	1312134-1MS 10X	115567.62	109.9			65281.39	115.5			47396.94	106.8
61	1312134-1MSD ...	116654.32	110.9			64865.44	114.8			46660.99	105.2
62	1312134-1A 10X	112222.49	106.7			64052.95	113.4			46009.13	103.7

Batch Summary Report

ISTD Table

	Sample Name	103 Rh (ISTD) [2]			115 In (ISTD) [1]			115 In (ISTD) [2]			195 Pt (ISTD) [1]			195 Pt (ISTD) [2]		
		CPS	Recovery%		CPS	Recovery%		CPS	Recovery%		CPS	Recovery%		CPS	Recovery%	
63	1312158-1 10X	116908.85	111.1					64900.60	114.9					47901.77	108.0	
64	1312207-1 10X	113532.14	107.9					63408.81	112.2					45377.49	102.3	
65	1312207-2 10X	112488.84	106.9					63585.98	112.5					45217.21	101.9	
66	CCV	113545.43	107.9					63855.53	113.0					46567.86	105.0	
67	CCB	102229.82	97.2					57841.31	102.4					41221.87	92.9	
68	IP131218-1MB ...	102943.56	97.9					58207.35	103.0					41683.43	93.9	
69	IM131218-1LCS...	118621.90	112.8					66837.44	118.3					47995.37	108.2	
70	1312210-1 100X	120398.53	114.5					65761.56	116.4					48032.67	108.3	
71	1312210-1D 100X	118766.22	112.9					65827.24	116.5					46577.95	105.0	
72	1312210-1L 500X	112256.23	106.7					63847.29	113.0					45089.98	101.6	
73	1312210-1MS 1...	114853.93	109.2					65959.66	116.7					48773.80	109.9	
74	1312210-1MSD ...	117455.73	111.7					66527.80	117.7					47243.26	106.5	
75	1312210-2 100X	119373.82	113.5					66461.85	117.6					48333.00	108.9	
76	CCV	117456.39	111.7					65841.35	116.5					47102.70	106.2	
77	CCB	104785.53	99.6					59264.43	104.9					41369.16	93.2	

Batch Summary Report

ISTD Table

	Sample Name	209 Bi (ISTD) [1]		209 Bi (ISTD) [2]	
		OPS	Recovery%	OPS	Recovery%
1	blank	226394.33		55339.06	
2	blank	229379.57	100.0	56359.51	100.0
3	blank	226077.89	100.0	55472.65	100.0
4	H/1000	242907.01	107.4	59551.99	107.4
5	H/100	256706.58	113.5	63889.66	115.2
6	H/10	254783.04	112.7	62427.36	112.5
7	HIGH	240275.28	106.3	60532.96	109.1
8	ICV	257394.20	113.9	65132.12	117.4
9	ICB	228339.31	101.0	56269.41	101.4
10	ORI	251767.51	111.4	62845.68	113.3
11	ICSA	249626.24	110.4	61794.28	111.4
12	ICSAB	251217.85	111.1	63233.46	114.0
13	FP131217-5MB...	220790.07	97.7	53987.32	97.3
14	FM131217-5LC...	248558.37	109.9	62849.32	113.3
15	1312160-1 10X	256525.47	113.5	61978.99	111.7
16	1312160-4 10X	252016.15	111.5	62055.85	111.9
17	1312160-5 10X	246331.60	109.0	61646.98	111.1
18	1312160-7 10X	250730.76	110.9	61871.67	111.5
19	1312160-6 10X	255795.37	113.1	62306.71	112.3
20	CCV	249005.33	110.1	61795.14	111.4
21	CCB	219477.35	97.1	54903.29	99.0
22	1312147-1 10X	246999.52	109.3	62734.66	113.1
23	IP131217-4MB ...	227232.81	100.5	55158.10	99.4
24	IP131217-4LCS...	246443.24	109.0	59953.06	108.1
25	1312080-1 10X	248106.58	109.7	62397.55	112.5
26	1312080-1D 10X	256893.46	113.6	63037.02	113.6
27	1312080-1L 50X	248971.89	110.1	62296.29	112.3
28	1312080-1MS 10X	256693.08	113.5	63166.69	113.9
29	1312080-1MSD ...	251256.86	111.1	62149.16	112.0
30	1312080-1A 10X	248704.80	110.0	61483.14	110.8
31	1312080-2 10X	252665.17	111.8	63621.94	114.7

Batch Summary Report

ISTD Table

	Sample Name	209 Bi (ISTD) [1]		209 Bi (ISTD) [2]	
		CPS	Recovery%	CPS	Recovery%
32	CCV	241269.80	106.7	59474.57	107.2
33	CCB	215559.95	95.3	54053.89	97.4
34	1312080-3 10X	253872.06	112.3	63876.22	115.1
35	1312080-4 10X	252543.71	111.7	62182.81	112.1
36	1312080-5 10X	250982.90	111.0	61596.97	111.0
37	1312080-6 10X	248727.18	110.0	63052.87	113.7
38	1311454-2 10X	257815.77	114.0	63515.09	114.5
39	1311454-6 10X	255184.57	112.9	62109.05	112.0
40	1311454-10 10X	254151.00	112.4	62828.62	113.3
41	1311454-14 10X	250548.99	110.8	61938.66	111.7
42	1311454-18 10X	254377.48	112.5	63146.90	113.8
43	CCV	242293.95	107.2	60449.27	109.0
44	CCB	214186.08	94.7	53435.29	96.3
45	IP131217-6MB ...	218092.99	96.5	53850.31	97.1
46	IM131217-6LCS...	239811.90	106.1	60050.00	108.3
47	1312153-1 10X	238317.85	105.4	59404.52	107.1
48	1312153-1D 10X	239783.92	106.1	60653.34	109.3
49	1312153-1L 50X	237046.36	104.9	59896.38	108.0
50	1312153-1MS 10X	245719.72	108.7	60371.97	108.8
51	1312153-1MSD ...	240298.54	106.3	60187.72	108.5
52	1312153-2 10X	242161.08	107.1	60991.19	109.9
53	1312157-1 10X	247480.96	109.5	61289.28	110.5
54	1312190-1 10X			61968.52	111.7
55	CCV			62072.56	111.9
56	CCB			54699.58	98.6
57	1312134-1 10X			63930.22	115.2
58	1312134-1D 10X			64787.35	116.8
59	1312134-1L 50X			63622.15	114.7
60	1312134-1MS 10X			64994.79	117.2
61	1312134-1MSD ...			66725.60	120.3
62	1312134-1A 10X			62270.17	112.3

ISTD Table

	Sample Name	209 Bi (ISTD) [1]		209 Bi (ISTD) [2]	
		CPS	Recovery%	CPS	Recovery%
63	1312158-1 10X			61663.52	111.2
64	1312207-1 10X			61118.54	110.2
65	1312207-2 10X			61982.42	111.7
66	CCV			61446.18	110.8
67	CCB			54760.18	98.7
68	IP131218-1MB ...			54214.87	97.7
69	IM131218-1LCS...			62363.94	112.4
70	1312210-1 100X			63251.11	114.0
71	1312210-1D 100X			62657.81	113.0
72	1312210-1L 500X			60733.08	109.5
73	1312210-1MS 1...			62186.67	112.1
74	1312210-1MSD ...			62463.93	112.6
75	1312210-2 100X			63146.73	113.8
76	CCV			64328.84	116.0
77	CCB			57182.05	103.1

Calibration for 014SMPLD

Batch Folder: C:\ICPMH\1\DATA\13L18k00.B\

Analysis File: 13L18k00.batch.xml

DA Date-Time: 12/19/2013 8:31:09 AM

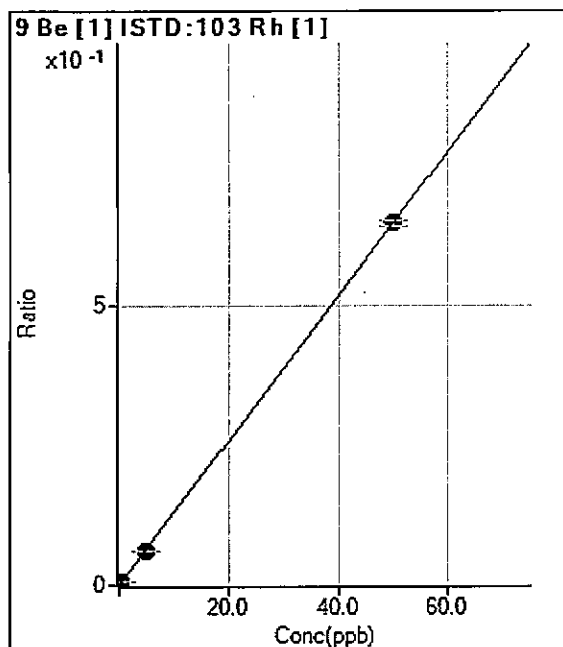
Calibration Title:

Calibration Method: External Calibration

VIS Interpolation Fit:

Tune Step: #1 nogas.u
#2 hehe.u

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.D	blank	12/18/2013 10:57:12 AM
2	004CALS.D	H/1000	12/18/2013 11:00:30 AM
3	005CALS.D	H/100	12/18/2013 11:03:49 AM
4	006CALS.D	H/10	12/18/2013 11:07:07 AM
5	007CALS.D	HIGH	12/18/2013 11:10:24 AM
6			



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	<input type="checkbox"/>	0.000	0.000	74.00	0.0002	P	10.8
2	<input type="checkbox"/>	0.050	0.043	334.01	0.0007	P	9.7
3	<input type="checkbox"/>	0.500	0.460	2945.61	0.0061	P	3.2
4	<input type="checkbox"/>	5.000	4.665	28835.15	0.0604	P	1.0
5	<input type="checkbox"/>	50.000	50.034	291194.94	0.6466	P	1.5
6	<input type="checkbox"/>	10.000					

$$y = 0.0129 * x + 1.7455E-004$$

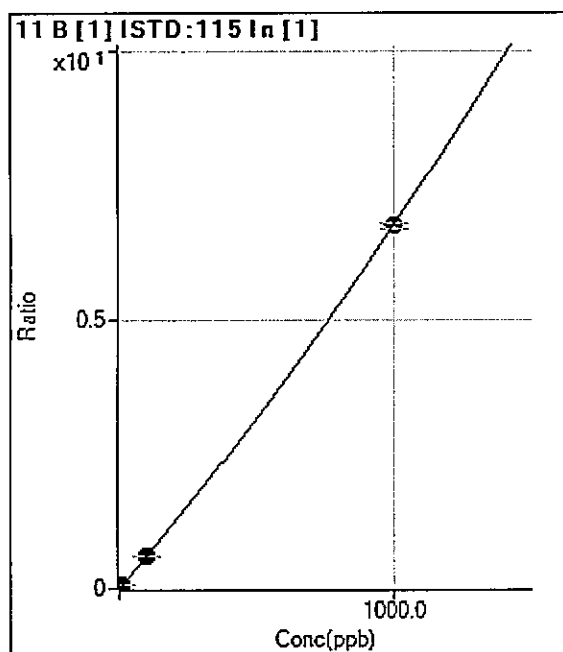
$$R = 1.0000$$

$$DL = 0.004362$$

$$BEC = 0.01351$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	<input type="checkbox"/>	0.000	-0.228	622.24	0.0014	P	2.1
2	<input type="checkbox"/>	1.000	0.914	4031.66	0.0081	P	4.2
3	<input type="checkbox"/>	10.000	10.350	33290.38	0.0641	P	1.8
4	<input type="checkbox"/>	100.000	99.963	313863.01	0.6029	P	1.7
5	<input type="checkbox"/>	1000.000	1000.000	3360311.67	6.7319	A	1.8
6	<input type="checkbox"/>	200.000					

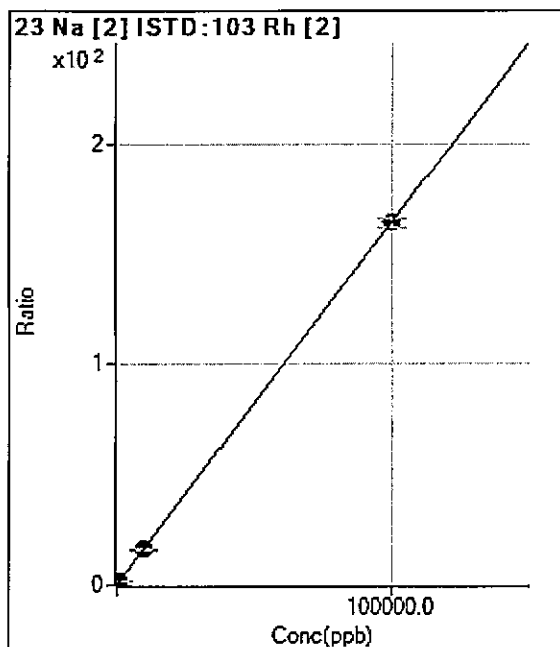
$$y = 8.0592E-007 * x^2 + 0.0059 * x + 0.0027$$

$$DL = 0.01465$$

$$BEC = 0.4556$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	10046.79	0.0955	P	1.3
2	<input type="checkbox"/>	100.000	94.110	28942.85	0.2501	P	2.9
3	<input type="checkbox"/>	1000.000	943.580	198953.19	1.6456	P	2.3
4	<input type="checkbox"/>	10000.000	9821.965	1929974.24	16.2304	A	1.7
5	<input type="checkbox"/>	100000.000	100018.374	18587437.22	164.3988	A	2.4
6	<input type="checkbox"/>	20000.000					

$$y = 0.0016 * x + 0.0955$$

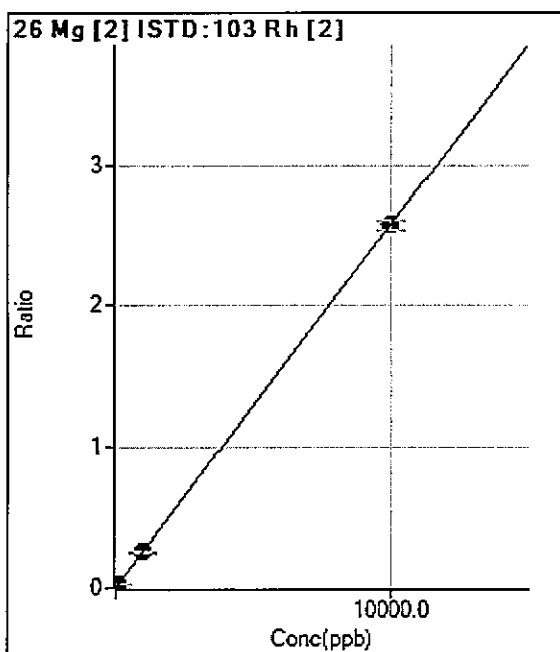
$$R = 1.0000$$

$$DL = 2.285$$

$$BEC = 58.14$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	10.00	0.0001	P	99.5
2	<input type="checkbox"/>	10.000	9.378	290.01	0.0025	P	25.8
3	<input type="checkbox"/>	100.000	99.145	3093.77	0.0256	P	12.6
4	<input type="checkbox"/>	1000.000	980.703	30011.11	0.2523	P	2.3
5	<input type="checkbox"/>	10000.000	10001.939	290846.31	2.5725	P	2.3
6	<input type="checkbox"/>	2000.000					

$$y = 2.5719E-004 * x + 9.4738E-005$$

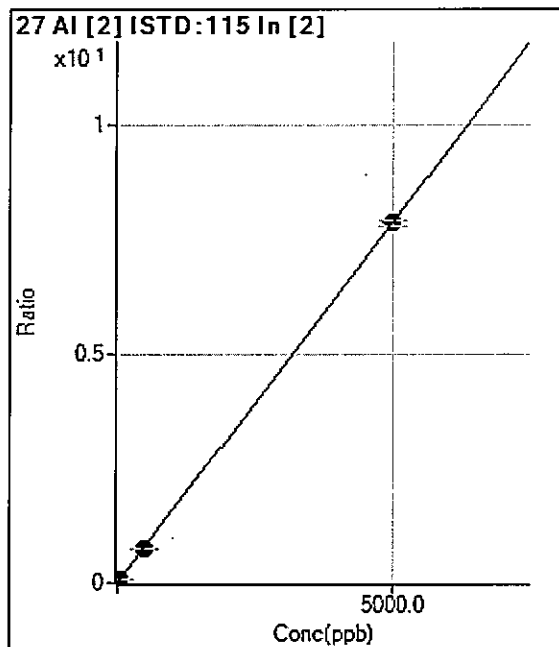
$$R = 1.0000$$

$$DL = 1.099$$

$$BEC = 0.3684$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	53.34	0.0009	P	107.0
2	<input type="checkbox"/>	5.000	4.987	536.70	0.0088	P	23.8
3	<input type="checkbox"/>	50.000	48.862	5081.01	0.0778	P	6.9
4	<input type="checkbox"/>	500.000	477.524	47715.90	0.7518	P	2.2
5	<input type="checkbox"/>	5000.000	5002.259	480486.63	7.8669	P	1.9
6	<input type="checkbox"/>	1000.000					

$$y = 0.0016 * x + 9.3415E-004$$

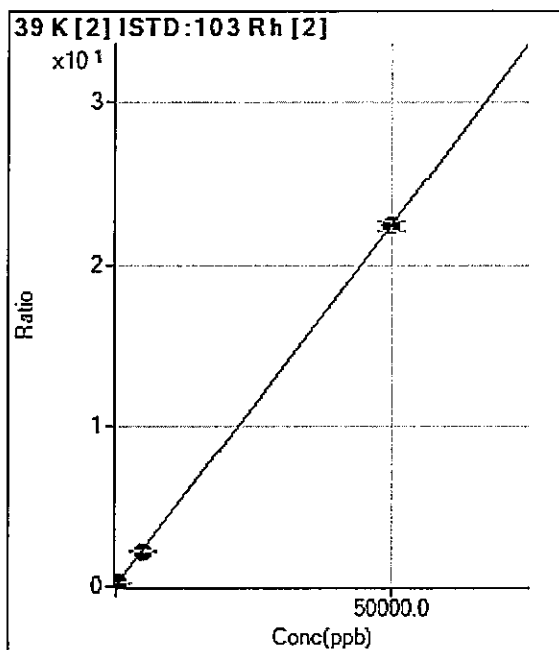
R = 1.0000

DL = 1.907

BEC = 0.5941

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	7855.56	0.0747	P	1.5
2	<input type="checkbox"/>	50.000	21.699	9759.89	0.0844	P	3.0
3	<input type="checkbox"/>	500.000	448.526	33244.37	0.2749	P	1.2
4	<input type="checkbox"/>	5000.000	4749.985	261097.00	2.1955	P	0.6
5	<input type="checkbox"/>	50000.000	50025.545	2533695.75	22.4109	A	2.6
6	<input type="checkbox"/>	10000.000					

$$y = 4.4650E-004 * x + 0.0747$$

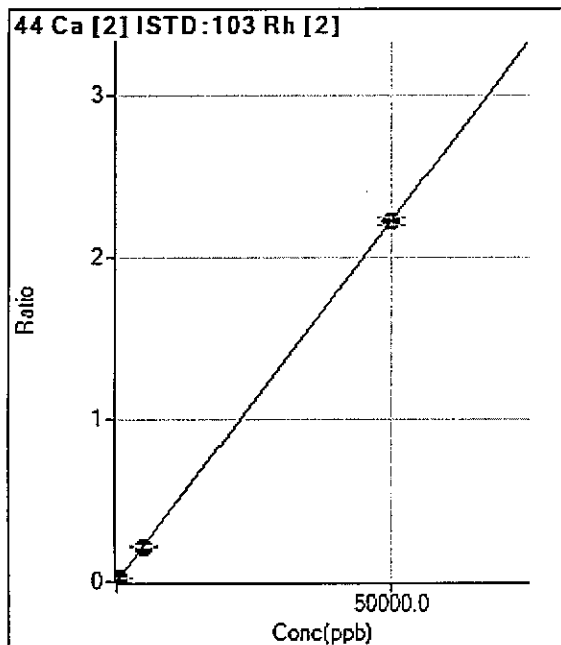
R = 1.0000

DL = 7.545

BEC = 167.2

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	15.09	0.0001	P	40.5
2	<input type="checkbox"/>	50.000	66.814	360.09	0.0031	P	22.8
3	<input type="checkbox"/>	500.000	477.085	2576.26	0.0213	P	6.0
4	<input type="checkbox"/>	5000.000	4854.762	25622.86	0.2155	P	2.8
5	<input type="checkbox"/>	50000.000	50014.736	250858.18	2.2185	P	2.1
6	<input type="checkbox"/>	10000.000					

$$y = 4.4354E-005 * x + 1.4320E-004$$

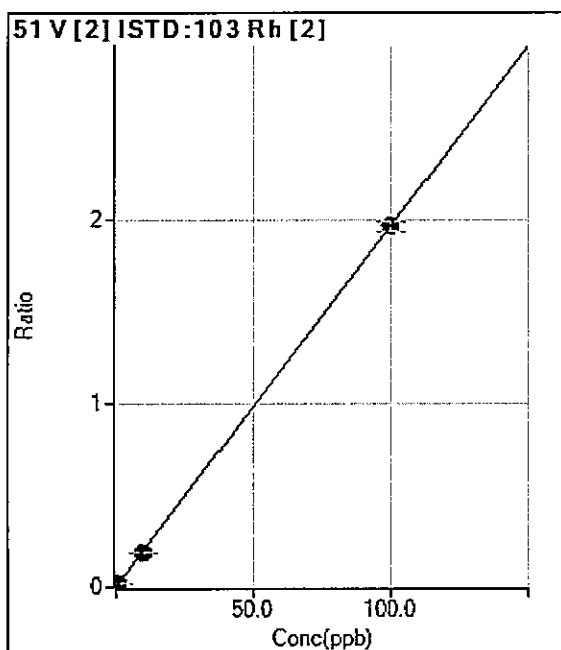
R = 1.0000

DL = 3.923

BEC = 3.229

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	116.33	0.0011	P	9.6
2	<input type="checkbox"/>	0.100	0.092	336.00	0.0029	P	3.0
3	<input type="checkbox"/>	1.000	0.907	2285.50	0.0189	P	3.0
4	<input type="checkbox"/>	10.000	9.359	21963.49	0.1847	P	2.0
5	<input type="checkbox"/>	100.000	100.065	222067.18	1.9642	P	2.6
6	<input type="checkbox"/>	20.000					

$$y = 0.0196 * x + 0.0011$$

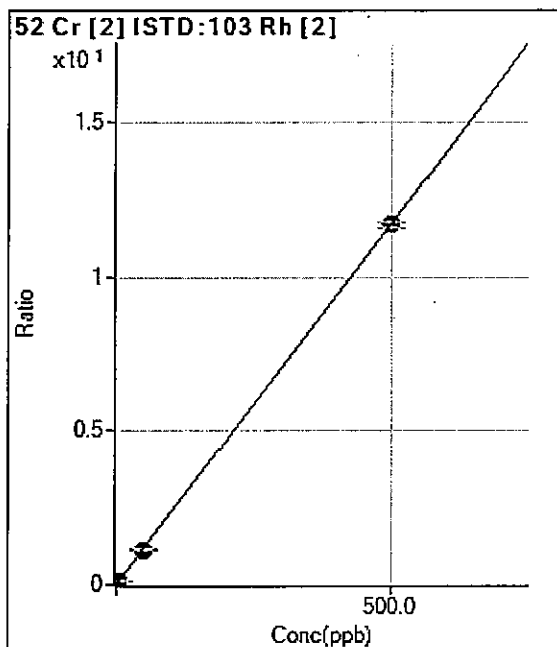
R = 1.0000

DL = 0.01628

BEC = 0.0564

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	<input type="checkbox"/>	0.000	0.000	610.02	0.0058	P	9.8
2	<input type="checkbox"/>	0.500	0.438	1857.91	0.0161	P	4.6
3	<input type="checkbox"/>	5.000	4.869	14479.88	0.1198	P	1.0
4	<input type="checkbox"/>	50.000	48.790	136471.77	1.1477	P	1.8
5	<input type="checkbox"/>	500.000	500.122	1324136.75	11.7109	A	1.9
6	<input type="checkbox"/>	100.000					

$$y = 0.0234 * x + 0.0058$$

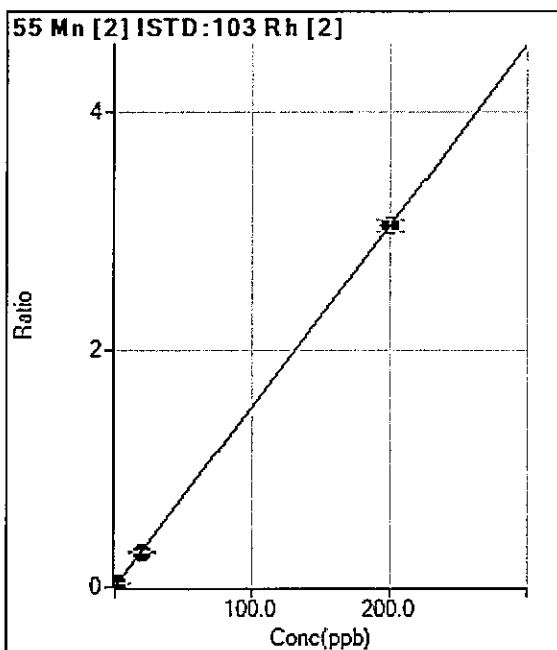
$$R = 1.0000$$

$$DL = 0.07264$$

$$BEC = 0.2479$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	<input type="checkbox"/>	0.000	0.277	997.83	0.0095	P	0.9
2	<input type="checkbox"/>	0.200	0.514	1512.32	0.0131	P	10.9
3	<input type="checkbox"/>	2.000	2.125	4541.80	0.0376	P	3.4
4	<input type="checkbox"/>	20.000	19.206	35322.29	0.2970	P	1.4
5	<input type="checkbox"/>	200.000	200.078	344186.52	3.0447	P	3.2
6	<input type="checkbox"/>	40.000					

$$y = 0.0152 * x + 0.0053$$

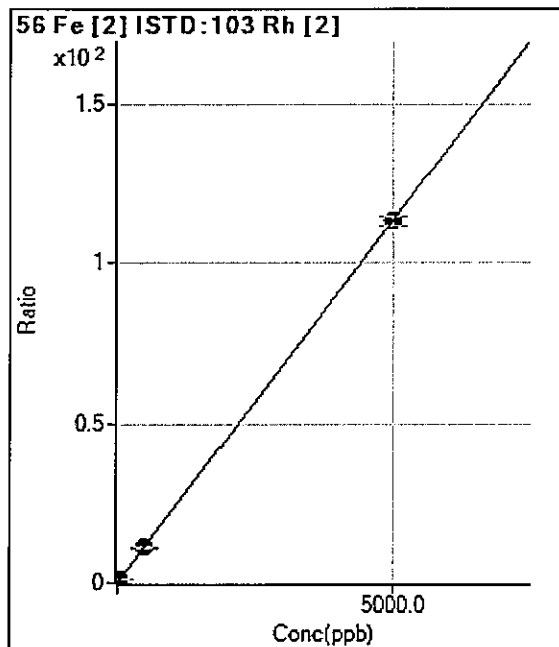
$$R = 1.0000$$

$$DL = 0.01603$$

$$BEC = 0.3472$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	4427.51	0.0421	P	5.5
2	<input type="checkbox"/>	5.000	8.190	26338.87	0.2276	P	2.4
3	<input type="checkbox"/>	50.000	53.125	150548.04	1.2452	P	3.1
4	<input type="checkbox"/>	500.000	490.092	1324763.42	11.1412	A	2.1
5	<input type="checkbox"/>	5000.000	5000.956	12809689.39	113.2982	A	2.4
6	<input type="checkbox"/>	1000.000					

$$y = 0.0226 * x + 0.0421$$

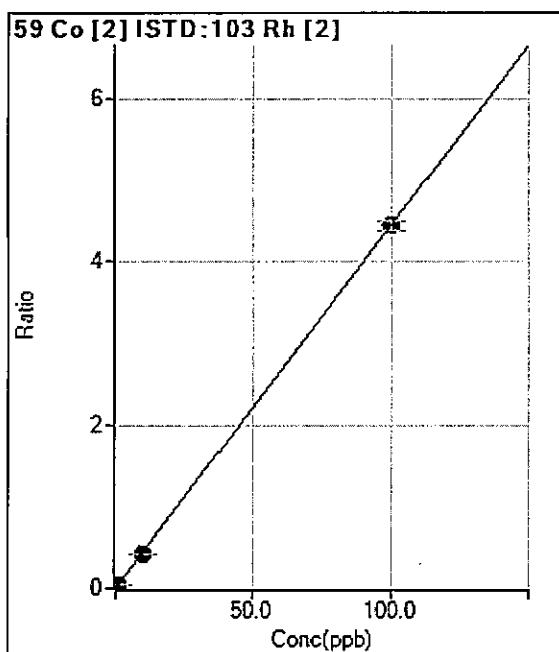
$$R = 1.0000$$

$$DL = 0.306$$

$$BEC = 1.859$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	24.45	0.0002	P	64.6
2	<input type="checkbox"/>	0.100	0.095	512.24	0.0044	P	8.4
3	<input type="checkbox"/>	1.000	0.977	5269.82	0.0436	P	2.3
4	<input type="checkbox"/>	10.000	9.723	51333.27	0.4317	P	0.9
5	<input type="checkbox"/>	100.000	100.028	501846.11	4.4389	P	2.5
6	<input type="checkbox"/>	20.000					

$$y = 0.0444 * x + 2.3311E-004$$

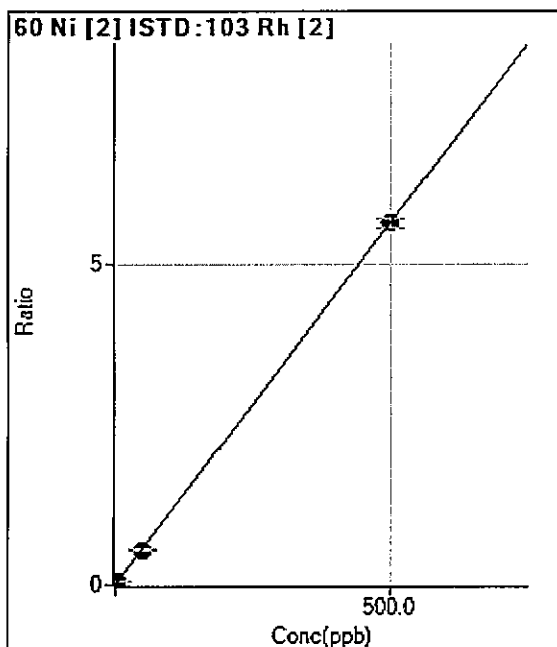
$$R = 1.0000$$

$$DL = 0.01019$$

$$BEC = 0.005253$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	605.58	0.0058	P	6.9
2	<input type="checkbox"/>	0.500	0.440	1240.06	0.0107	P	6.6
3	<input type="checkbox"/>	5.000	4.838	7299.51	0.0604	P	3.2
4	<input type="checkbox"/>	50.000	48.445	65727.19	0.5527	P	0.6
5	<input type="checkbox"/>	500.000	500.157	639057.79	5.6525	P	2.4
6	<input type="checkbox"/>	100.000					

$$y = 0.0113 * x + 0.0058$$

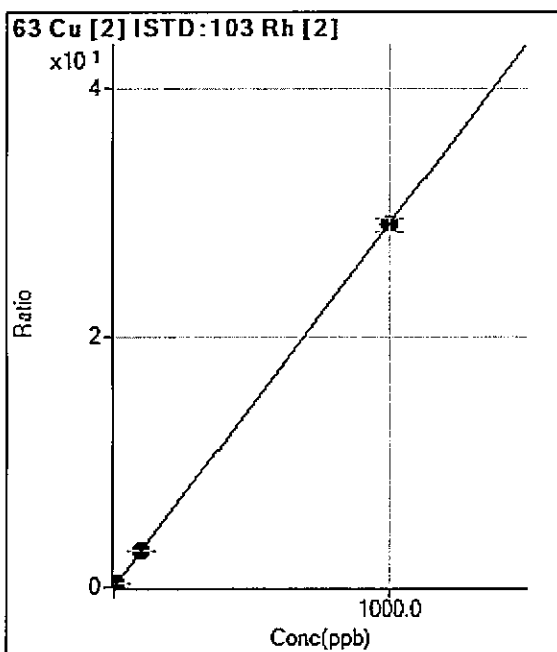
$$R = 1.0000$$

$$DL = 0.1056$$

$$BEC = 0.5099$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	841.15	0.0080	P	4.0
2	<input type="checkbox"/>	1.000	1.061	4491.79	0.0388	P	3.2
3	<input type="checkbox"/>	10.000	10.290	37107.59	0.3069	P	1.9
4	<input type="checkbox"/>	100.000	101.384	351121.05	2.9527	P	1.1
5	<input type="checkbox"/>	1000.000	999.859	3283532.72	29.0486	A	3.6
6	<input type="checkbox"/>	200.000					

$$y = 0.0290 * x + 0.0080$$

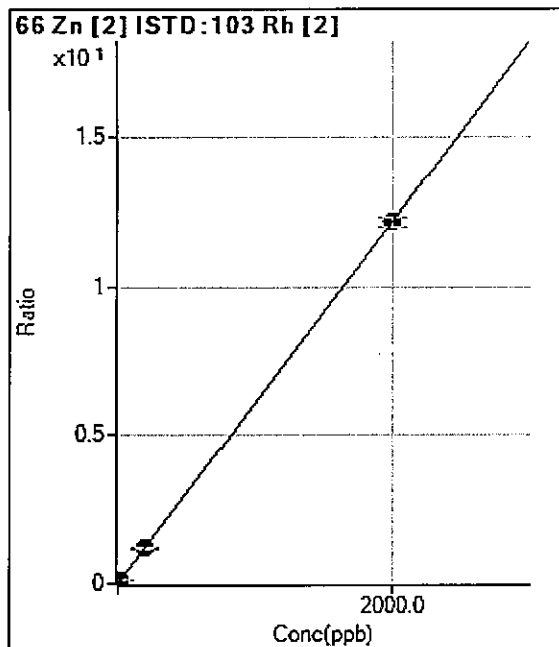
$$R = 1.0000$$

$$DL = 0.03289$$

$$BEC = 0.2753$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	266.68	0.0025	P	21.6
2	<input type="checkbox"/>	2.000	3.166	2516.99	0.0217	P	5.6
3	<input type="checkbox"/>	20.000	20.802	15571.44	0.1288	P	2.4
4	<input type="checkbox"/>	200.000	198.002	143170.43	1.2040	P	2.4
5	<input type="checkbox"/>	2000.000	2000.191	1372444.46	12.1398	P	2.7
6	<input type="checkbox"/>	400.000					

$$y = 0.0061 * x + 0.0025$$

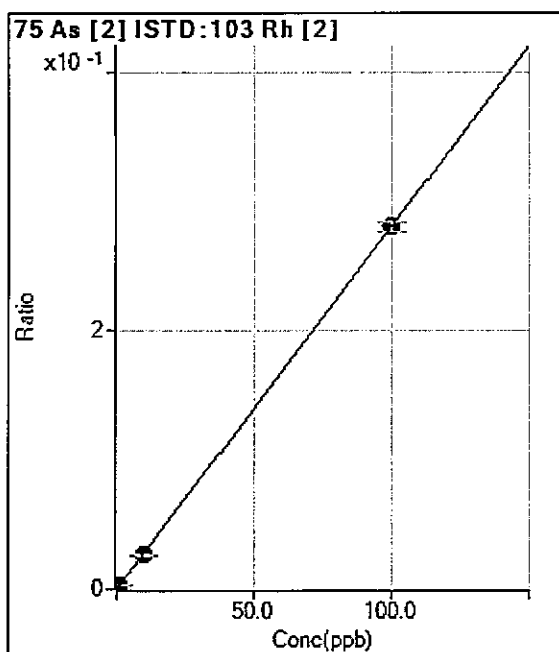
$$R = 1.0000$$

$$DL = 0.27$$

$$BEC = 0.4175$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	4.33	0.0000	P	26.6
2	<input type="checkbox"/>	0.100	0.094	35.33	0.0003	P	13.9
3	<input type="checkbox"/>	1.000	0.975	335.00	0.0028	P	9.8
4	<input type="checkbox"/>	10.000	9.354	3117.31	0.0262	P	4.0
5	<input type="checkbox"/>	100.000	100.065	31666.60	0.2801	P	2.3
6	<input type="checkbox"/>	20.000					

$$y = 0.0028 * x + 4.1188E-005$$

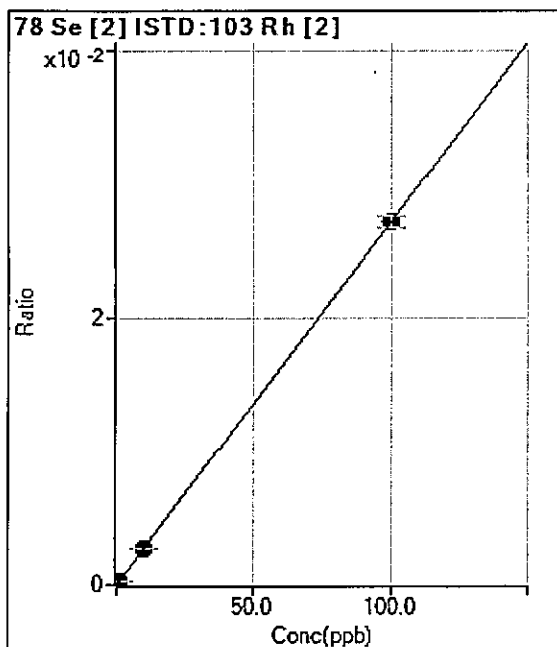
$$R = 1.0000$$

$$DL = 0.01172$$

$$BEC = 0.01472$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	1.20	0.0000	P	120.0
2	<input type="checkbox"/>	0.100	0.077	3.73	0.0000	P	33.9
3	<input type="checkbox"/>	1.000	0.932	31.87	0.0003	P	11.1
4	<input type="checkbox"/>	10.000	9.947	321.60	0.0027	P	2.2
5	<input type="checkbox"/>	100.000	100.006	3062.43	0.0271	P	3.0
6	<input type="checkbox"/>	20.000					

$$y = 2.7076E-004 * x + 1.1441E-005$$

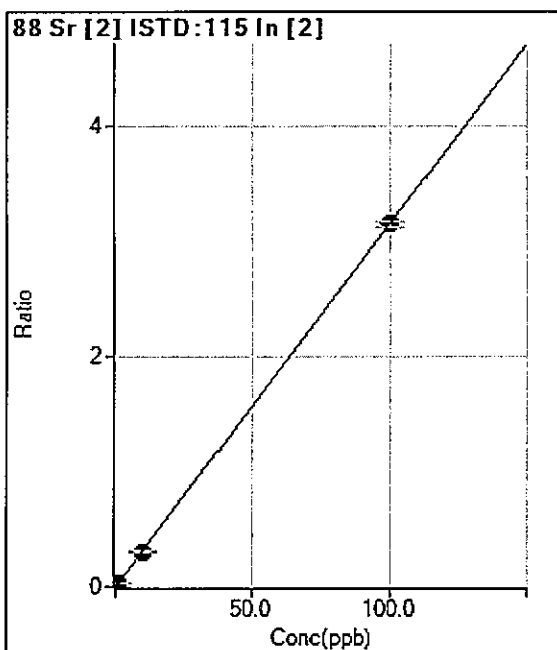
R = 1.0000

DL = 0.1521

BEC = 0.04226

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	70.00	0.0012	P	39.3
2	<input type="checkbox"/>	0.100	0.113	293.35	0.0048	P	17.5
3	<input type="checkbox"/>	1.000	0.988	2106.92	0.0322	P	2.9
4	<input type="checkbox"/>	10.000	9.679	19342.56	0.3048	P	3.0
5	<input type="checkbox"/>	100.000	100.032	191681.38	3.1382	P	1.8
6	<input type="checkbox"/>	20.000					

$$y = 0.0314 * x + 0.0012$$

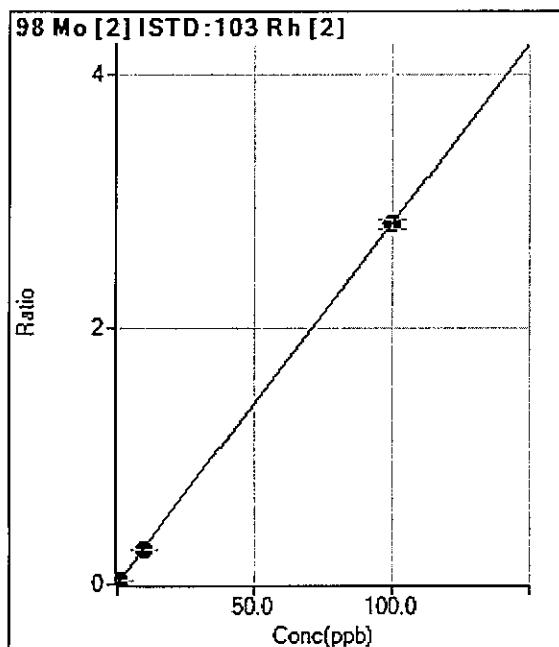
R = 1.0000

DL = 0.04673

BEC = 0.03968

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	11.11	0.0001	P	105.6
2	<input type="checkbox"/>	0.100	0.094	320.01	0.0028	P	5.3
3	<input type="checkbox"/>	1.000	0.975	3341.52	0.0276	P	6.2
4	<input type="checkbox"/>	10.000	9.386	31540.16	0.2652	P	1.7
5	<input type="checkbox"/>	100.000	100.062	319501.15	2.8259	P	2.3
6	<input type="checkbox"/>	20.000					

$$y = 0.0282 * x + 1.0622E-004$$

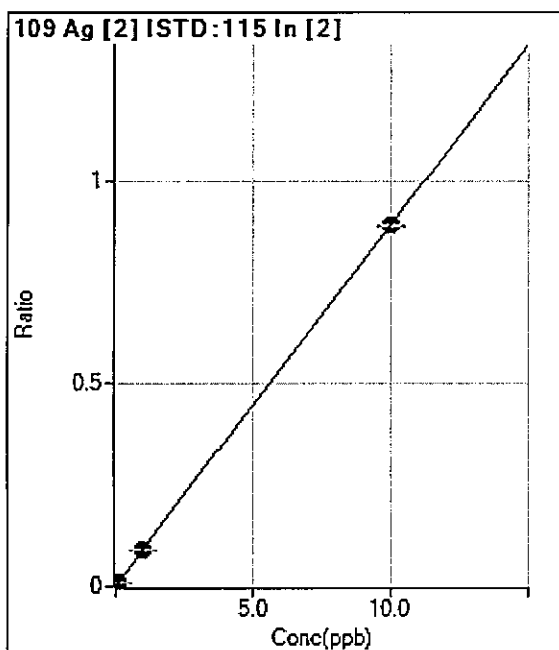
$$R = 1.0000$$

$$DL = 0.01191$$

$$BEC = 0.003761$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	5.56	0.0001	P	35.6
2	<input type="checkbox"/>	0.010	0.013	78.89	0.0013	P	19.7
3	<input type="checkbox"/>	0.100	0.089	522.24	0.0080	P	5.9
4	<input type="checkbox"/>	1.000	1.012	5724.44	0.0902	P	3.6
5	<input type="checkbox"/>	10.000	9.999	54419.88	0.8909	P	0.6
6	<input type="checkbox"/>	2.000					

$$y = 0.0891 * x + 9.8637E-005$$

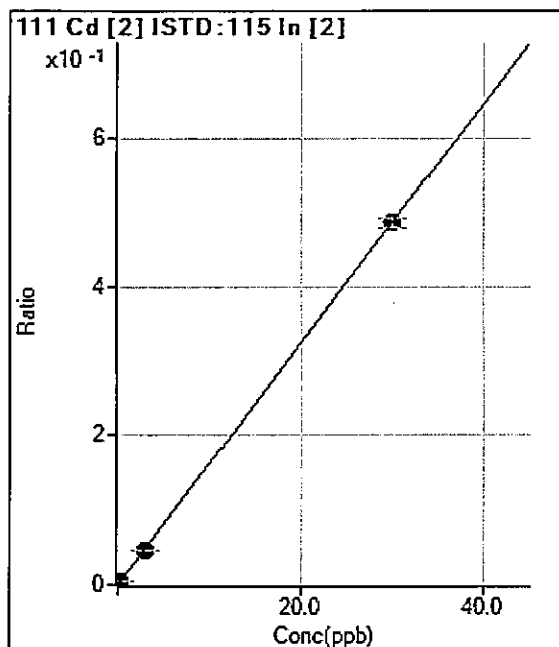
$$R = 1.0000$$

$$DL = 0.001183$$

$$BEC = 0.001107$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	1.33	0.0000	P	173.9
2	<input type="checkbox"/>	0.030	0.027	28.57	0.0005	P	35.5
3	<input type="checkbox"/>	0.300	0.298	316.97	0.0049	P	15.8
4	<input type="checkbox"/>	3.000	2.920	3007.17	0.0474	P	1.2
5	<input type="checkbox"/>	30.000	30.008	29725.36	0.4867	P	2.5
6	<input type="checkbox"/>	6.000					

$$y = 0.0162 * x + 2.3139E-005$$

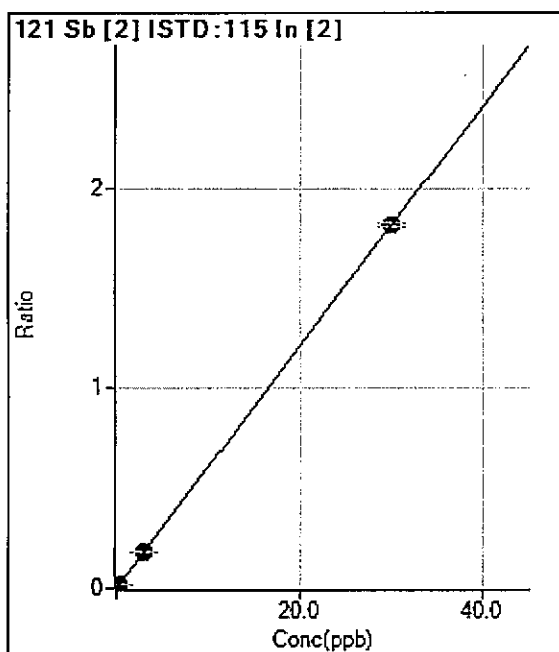
$$R = 1.0000$$

$$DL = 0.007443$$

$$BEC = 0.001427$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	17.78	0.0003	P	93.2
2	<input type="checkbox"/>	0.030	0.029	124.45	0.0020	P	11.7
3	<input type="checkbox"/>	0.300	0.278	1118.95	0.0171	P	4.8
4	<input type="checkbox"/>	3.000	2.977	11427.65	0.1801	P	2.2
5	<input type="checkbox"/>	30.000	30.002	110667.42	1.8118	P	1.0
6	<input type="checkbox"/>	6.000					

$$y = 0.0604 * x + 3.1576E-004$$

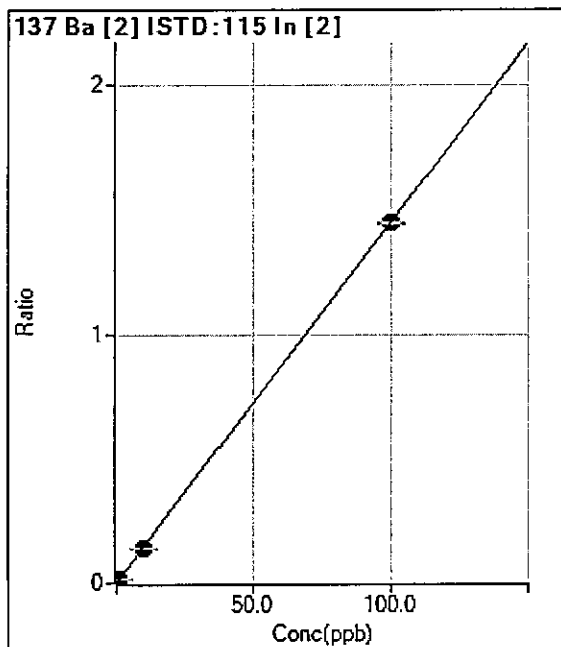
$$R = 1.0000$$

$$DL = 0.01462$$

$$BEC = 0.00523$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	6.67	0.0001	P	86.7
2	<input type="checkbox"/>	0.100	0.142	133.34	0.0022	P	34.7
3	<input type="checkbox"/>	1.000	0.893	853.40	0.0130	P	6.6
4	<input type="checkbox"/>	10.000	9.580	8799.58	0.1387	P	1.9
5	<input type="checkbox"/>	100.000	100.043	88379.64	1.4469	P	0.9
6	<input type="checkbox"/>	20.000					

$$y = 0.0145 * x + 1.1880E-004$$

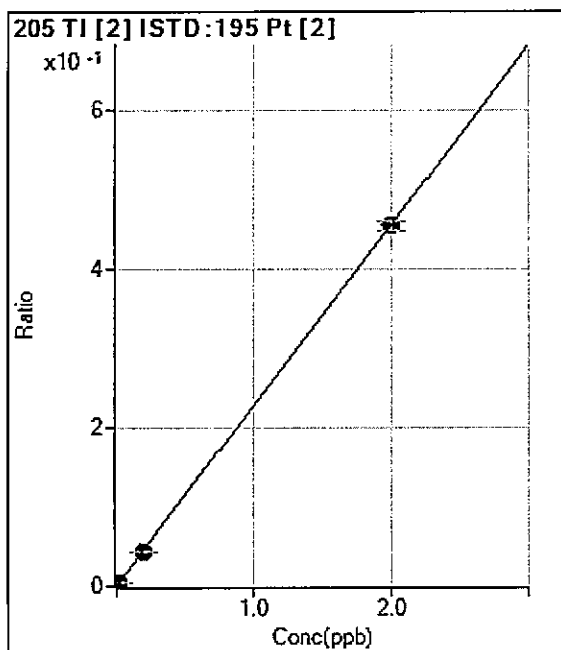
$$R = 1.0000$$

$$DL = 0.02136$$

$$BEC = 0.008215$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	2.86	0.0001	P	50.4
2	<input type="checkbox"/>	0.002	0.002	26.67	0.0006	P	29.8
3	<input type="checkbox"/>	0.020	0.020	232.38	0.0046	P	12.2
4	<input type="checkbox"/>	0.200	0.191	2169.70	0.0434	P	2.3
5	<input type="checkbox"/>	2.000	2.001	21933.84	0.4550	P	2.3
6	<input type="checkbox"/>	0.400					

$$y = 0.2273 * x + 6.4760E-005$$

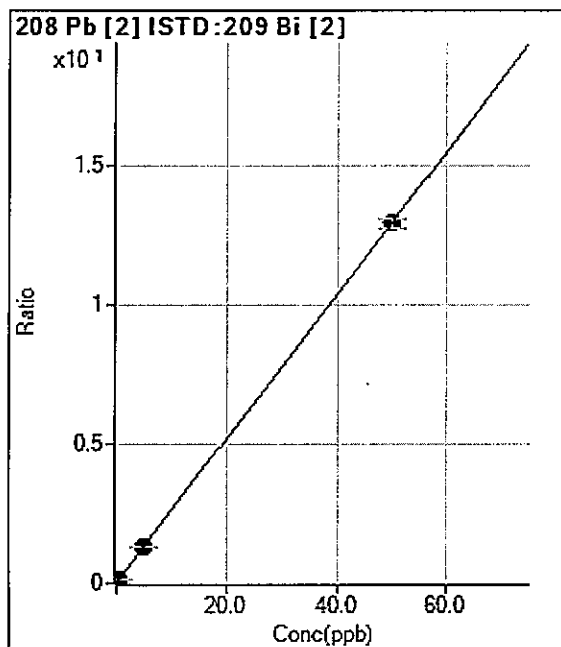
$$R = 1.0000$$

$$DL = 0.0004309$$

$$BEC = 0.0002849$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	283.35	0.0051	P	17.8
2	<input type="checkbox"/>	0.050	0.065	1313.43	0.0221	P	14.8
3	<input type="checkbox"/>	0.500	0.515	8831.55	0.1382	P	1.9
4	<input type="checkbox"/>	5.000	5.069	82179.40	1.3164	P	2.5
5	<input type="checkbox"/>	50.000	49.993	782886.71	12.9373	P	2.3
6	<input type="checkbox"/>	10.000					

$$y = 0.2587 * x + 0.0051$$

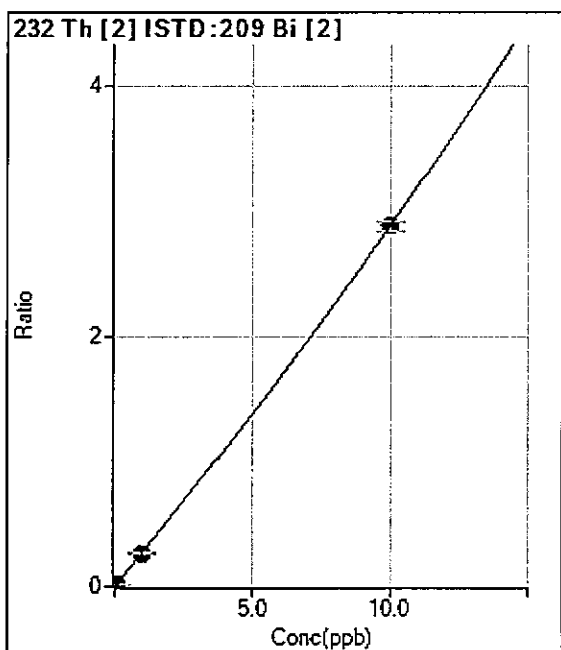
$$R = 1.0000$$

$$DL = 0.0106$$

$$BEC = 0.01979$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.001	10.00	0.0002	P	114.2
2	<input type="checkbox"/>	0.010	0.008	131.11	0.0022	P	8.9
3	<input type="checkbox"/>	0.100	0.068	1146.76	0.0179	P	11.6
4	<input type="checkbox"/>	1.000	1.003	16687.60	0.2673	P	1.0
5	<input type="checkbox"/>	10.000	10.000	174617.32	2.8855	P	2.3
6	<input type="checkbox"/>	2.000					

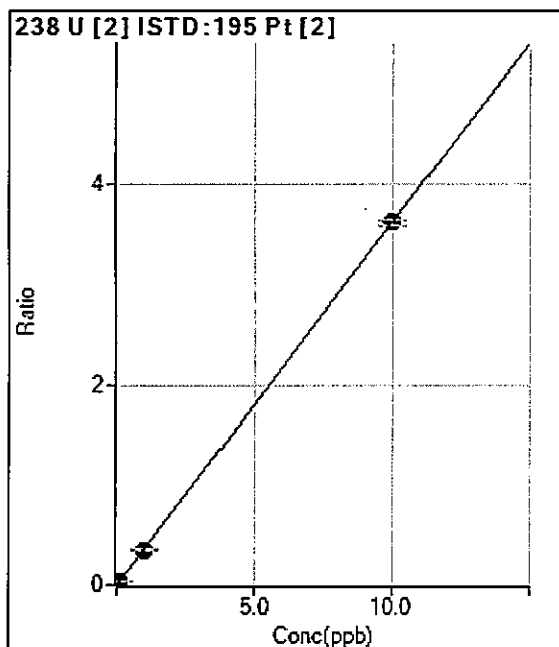
$$y = 0.0025 * x^2 + 0.2639 * x$$

$$DL = 0.002308$$

$$BEC = 0$$

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	0.000	0.000	11.11	0.0003	P	148.6
2	<input type="checkbox"/>	0.010	0.009	172.23	0.0036	P	2.7
3	<input type="checkbox"/>	0.100	0.093	1703.46	0.0340	P	3.4
4	<input type="checkbox"/>	1.000	0.975	17604.15	0.3523	P	1.7
5	<input type="checkbox"/>	10.000	10.003	174103.11	3.6109	P	1.5
6	<input type="checkbox"/>	2.000					

$$y = 0.3610 * x + 2.5647E-004$$

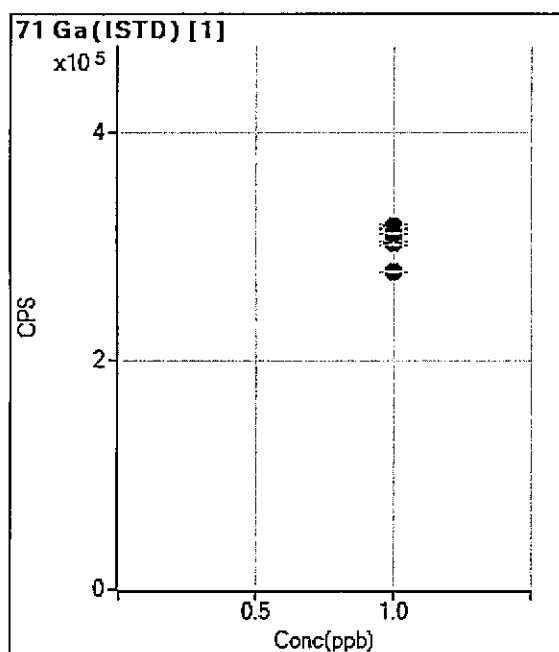
R = 1.0000

DL = 0.003167

BEC = 0.0007105

Weight: None

Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	<input type="checkbox"/>	1.000		277463.57		P	0.4
2	<input type="checkbox"/>	1.000		301944.79		P	1.1
3	<input type="checkbox"/>	1.000		317147.53		P	1.4
4	<input type="checkbox"/>	1.000		315281.36		P	0.3
5	<input type="checkbox"/>	1.000		310688.46		P	0.1
6	<input type="checkbox"/>	1.000					



Miscellaneous

ALS Laboratory Group

Beaker Lot No. 5171040 Initial Prep N/A Final Prep N/A
Avg. Beaker Wt. (g) 10.2 Prep Start Time 1300 Prep End Time 1800
Method: 2PA200-7 SOP/Rev: 806R16

Balance(s): 30 Pipet(s): M-51 Digestate Wt. (g) 50.38

Note: Each Page is copied as completed and included with the workorder/run documentation; reviewed subsequently

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