FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

~~172~~ 1

LABORATORY NAME Bonner Analytical Testing Company

CITY/STATE Hattiesburg / MS

CASE NO. 42562 SDG NO. MF5WA4

SDG NOs. TO FOLLOW

MOD. REF. NO. NA

666733

CONTRACT NO. EPW09037

SOW NO. ISM01.3

All documents delivered in the Complete SDG File must be original documents where possible. (Reference - Exhibit B Section 2.6)

		PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
1.	Inventory Sheet (DC-2)	1	2	✓	✓
2.	SDG Narrative	3	4	✓	✓
3.	Sample Log-In Sheet (DC-1)	5	6	✓	✓
4.	Traffic Report/Chain of Custody Record(s)	7	9	✓	✓
5.	Cover Page	10	11	✓	✓
Inorganic Analysis					
6.	Data Sheet (Form I-IN)	11	26	✓	✓
7.	Initial & Continuing Calibration Verification (Form IIA-IN)	27	35	✓	✓
8.	Blanks (Form III-IN)	36	42	✓	✓
9.	ICP-AES Interference Check Sample (Form IVA-IN)	43	44	✓	✓
10.	ICP-MS Interference Check Sample (Form IVB-IN)	45	45	✓	✓
11.	Matrix Spike Sample Recovery (Form VA-IN)	46	48	✓	✓
12.	Post-Digestion Spike Sample Recovery (Form VB-IN)	NA	NA	✓	
13.	Duplicates (Form VI-IN)	49	51	✓	✓
14.	Laboratory Control Sample (Form VII-IN)	52	53	✓	✓
15.	ICP-AES and ICP-MS Serial Dilutions (Form VIII-IN)	54	55	✓	✓
16.	Method Detection Limit (Annually) (Form IX-IN)	56	~~60~~ 59	✓	✓
17.	ICP-AES Interelement Correction Factors (Annually) (Form XA-IN)	~~61~~ 60	60	✓	✓
18.	ICP-AES Interelement Correction Factors (Annually) (Form XB-IN)	61	62	✓	✓
19.	Internal Standard Association (Form XI-IN)	63	63	✓	✓
20.	Preparation Log (Form XII-IN)	64	~~69~~	✓	✓
21.	Analysis Run Log (Form XIII-IN)	70	73	✓	✓
22.	ICP-MS Tune (Form XIV-IN)	74	74	✓	✓

FULL INORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

		PAGE NOs. FROM	PAGE NOs. TO	CHECK LAB	CHECK REGION
23.	ICP-MS Internal Standards Relative Intensity Summary (Form XV-IN)	77	76	✓	✓
24.	Initial Calibration (Form XVI-IN)	79	92	✓	✓
25.	ICP-AES Raw Data	93	222	✓	✓
26.	ICP-MS Raw Data	223	253	✓	✓
27.	Mercury Raw Data	254	259	✓	✓
28.	Cyanide Raw Data	260	264	✓	✓
29.	Preparation Logs Raw Data	265	268	✓	✓
30.	Percent Solids Determination Log	269	269	✓	✓
31.	USEPA Shipping/Receiving Documents	N/A	N/A	✓	
	Airbill (No. of Shipments 2)	270	271	✓	✓
	Sample Tags	N/A	N/A	✓	—
	Sample Log-In Sheet (Lab)	272	277	✓	✓
32.	Misc. Shipping/Receiving Records (list all individual records)				
	Communication Logs	NA	NA	✓	
		N/A	N/A	✓	
33.	Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)	278	282	✓	✓
	In House / Digestate chains	NA	NA	✓	
34.	Internal Original Sample Prep & Analysis Records (describe or list)	N/A	N/A		
	Prep Records	283	309		✓
	Analysis Records	310	315		✓
	PE Instructions	NA	NA		
	Description	N/A	N/A		
35.	Other Records (describe or list)	N/A	N/A		
	Communication Logs	~~316~~ 317	~~316~~ 318		✓
	e-mails Corrective Actions	316	316		✓

36. Comments:

Completed by: (CLP Lab) (Signature) Chris Bonna / CEO (Print Name & Title) 6/6/12 (Date)

Audited by: ~~(USEPA)~~ ESAT (Signature) LINDA HOFFMAN / DATA REVIEWER (Print Name & Title) 07/17/12 (Date)

BONNER ANALYTICAL TESTING COMPANY

2703 OAK GROVE ROAD, HATTIESBURG, MS 39402
PHONE: (601) 264-2854 FAX: (601) 268-7084

SDG NARRATIVE:

SDG Number: MF5WA4
Case Number: 42562
Contract Number: EPW09037

Sample Receipt:
On May 16, 2012 we received 6 soils via FedEx air bill 8991 9781 6254. Custody seals were present and intact. Cooler temp was determined to be 5°C. Samples were in condition with no discrepancies.

On May 17, 2012 we received 10 soils via FedEx air bill 8758 5477 6922. Custody seals were present and intact. Cooler temp was determined to be 6°C. Samples were in condition with no discrepancies.

Analytes for this case are; Al, Ca, Fe, Mg, K, Na By ICP-AES, Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn, Ni, Se, Ag, Tl, V, Zn by ICP-MS & Hg, CN.

Metals ICP-AES:
Analytical analysis began 6/3/2012 at 11:35. Samples MF5WA4, A6, A8D, B0, A9, B1 exceeded the high calibration point for Ca. Sample MF5WA7 exceeded the high calibration point for Fe. All affected samples were reanalyzed at proper dilutions.

Metals ICP-MS:
Analytical analysis began 6/5/12 at 22:46. During screening the lab noticed high levels of Ca, Fe, Cr, Mn and Ni in the samples. The samples were analyzed at an initial 20x dilution to preserve the instrument.

Mercury:
No Discrepancies

Cyanide:
No Discrepancies

Sample Equation:

Lab ID 1205240-11 EPA Sample # MF5W/A9

Date & Time 6-3-12 14:31

Metals: 192320 µg/L * (0.100 L) * 100 % * 1000 g * 1 mg 26130 mg/kg
(Analyte Al)
(1.00 g) 73.6 % 1 kg 1000 µg

Date & Time 6-6-12 1255

Metals: 2.4240 µg/L * (0.100 L) * 100 % * 1000 g * 1 mg 0.33 mg/kg
(Analyte As)
(1.00 g) 73.6 % 1 kg 1000 µg

Date & Time 6-5-12 13:10

Hg: 0.2436 µg/L * (0.100 L) * 100 % * 1000 g * 1 mg 0.066 mg/kg
0.5g
~~(0.20~~ g) 73.6 % 1 kg 1000 µg

Date & Time 5-24-12 9:06

CN: -5.47 µg/L * (0.050 L) * 100 % * 1000 g * 1 mg Non Detect
(1.00 g) 73.6 % 1 kg 1000 µg

Authorized By Brandon G. Beck
Brandon G. Beck
Document Control Officer

SAMPLE LOG-IN SHEET

Lab Name BONNER ANALYTICAL		Page 1 of 2
Received By (Print Name) Patricia Aiken		Log-in Date 5-16-12
Received By (Signature) Patricia Aiken		
Case Number 42562	Sample Delivery Group No. MF5WA4	Mod. Ref. No. N/A

Remarks:	
1. Custody Seal(s)	Present/Absent* Intact/Broken
2. Custody Seal NOs.	N/A N/A
3. Traffic Reports/Chain of Custody Records or Packing Lists	Present/Absent*
4. Airbill	Airbill/Sticker Present/Absent*
5. Airbill No.	8991 9781 6254 N/A
6. Sample Tags	Present/Absent*
Sample Tag Numbers	Listed/Not Listed on Traffic Report/Chain of Custody Record
7. Sample Condition	Intact/Broken*/ Leaking
8. Cooler Temperature Indicator Bottle	Present/Absent*
9. Cooler Temperature	5°C
10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree?	Yes/No*
11. Date Received at Lab	5-16-12
12. Time Received	0908

Sample Transfer	
Fraction AES/MS	Fraction Hg/CN
Area# CLP 01	Area# CLP01
By P. Aiken	By P. Aiken
On 5-16-12	On 5-16-12

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MF5WA4	N/A	6-456735	1205240-01	Ice good
2	MF5WA5		6-456741	1205240-02	
3	MF5WA6		6-456747	1205240-03	
4	MF5WA7		6-456753	1205240-04	
5	MF5WA8		6-456759	1205240-05	
6	MF5WB0		6-456771	1205240-06	
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

PA

* Contact SMO and attach record of resolution

Reviewed By [illegible]	~~Logbook No.~~
Date 6-4-12	~~Logbook Page No.~~

PA

SAMPLE LOG-IN SHEET

Lab Name BONNER ANALYTICAL		Page 2 of 2
Received By (Print Name) Patricia Aiken		Log-in Date 7-21-12
Received By (Signature) Patricia Aiken		
Case Number 42562	Sample Delivery Group No. MF5WA4	Mod. Ref. No. N/A

Remarks:	
1. Custody Seal(s)	Present/Absent* Intact/Broken
2. Custody Seal NOs.	N/A N/A
3. Traffic Reports/Chain of Custody Records or Packing Lists	Present/Absent*
4. Airbill	Airbill/Sticker Present/Absent*
5. Airbill No.	8158 5477 6822 N/A
6. Sample Tags	Present/Absent*
Sample Tag Numbers	Listed/Not Listed on Traffic Report/Chain of Custody Record
7. Sample Condition	Intact/Broken*/ Leaking
8. Cooler Temperature Indicator Bottle	Present/Absent*
9. Cooler Temperature	6°C
10. Does information on Traffic Reports/Chain of Custody Records and sample tags agree?	Yes/No*
11. Date Received at Lab	5-17-12
12. Time Received	0952

Sample Transfer	
Fraction AES/MS	Fraction Hg/CN
Area# CLP01	Area# CLP01
By P. Aik	By P. Aik
On 5-17-12	On 5-17-12

	EPA Sample #	Aqueous/ Water Sample pH	Corresponding Sample Tag #	Corresponding Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
1	MF5WA0	~~6-456705~~ N/A	6-456705	1205240-07	Ice good
2	MF5WA1		6-456717	1205240-08	
3	MF5WA2		6-456723	1205240-09	
4	MF5WA3		6-456729	1205240-10	
5	MF5WA9		6-456765	1205240-11	
6	MF5WB1		6-456777	1205240-12	
7	MF5WB2		6-456783	1205240-13	
8	MF5WB3		6-456789	1205240-14	
9	MF5WB6		6-456807	1205240-15	
10	MF5WB7		6-456813	1205240-16	
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

* Contact SMO and attach record of resolution

PA 5-21-12

Reviewed By MAH	Logbook No.
Date 6-4-12	Logbook Page No.

USEPA CLP Inorganics COC (LAB COPY)

DateShipped: 5/15/2012
CarrierName: FedEx
AirbillNo: 899197816254

CHAIN OF CUSTODY RECORD

Case #: 42562
Cooler #: 2 of 2

No: 6-051512-175250-0003

Lab: Bonner Analytical Testing Company
Lab Contact: Patricia Aiken
Lab Phone: 601-264-2854

Inorganic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Organic Sample #	For Lab Use Only
MF5WA4	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456735 (None) (1)	SO-05	05/08/2012 15:15	F5WA4	good
MF5WA5	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456741 (None) (1)	SO-06	05/15/2012 15:50	F5WA5	
MF5WA6	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456747 (None) (1)	SO-07	05/15/2012 16:26	F5WA6	
MF5WA7	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456753 (None) (1)	SO-08	05/15/2012 17:05	F5WA7	
MF5WA8	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456759 (None) (1)	SO-09	05/15/2012 17:25	F5WA8	
MF5WB0	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456771 (None) (1)	SO-11	05/15/2012 18:00	F5WB0	

Sample(s) to be used for Lab QC: MF5WA8 - Special Instructions: Analytes for ICP-MS: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, cyanide, lead, manganese, mercury, nickel, selenium, silver, thallium, vanadium, zinc.

Analytes for ICP-AES: aluminum, calcium, iron, magnesium, potassium, sodium.

5°C

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TM, Hg, CN=TAL Metals, Hg, CN: ICP AES + MS

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	Craig Watt	5/15/12							P. Aiken	5-16-12	0908

178

USEPA CLP Inorganics COC (LAB COPY)

DateShipped: 5/16/2012
CarrierName: FedEx
AirbillNo: 875854776922

CHAIN OF CUSTODY RECORD

Case #: 42562
Cooler #: 1

No: 6-051612-161546-0006

Lab: Bonner Analytical Testing Company
Lab Contact: Patricia Aiken
Lab Phone: 601-264-2854

Inorganic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Organic Sample #	For Lab Use Only
MF5WA0	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456705 (None) (1)	SO-01	05/16/2012 09:15	F5WA0	good
MF5WA1	Soil/ Gary Hazelwood	Composite	TM, Hg, CN(21)	6-456717 (None) (1)	SO-02	05/16/2012 09:30	F5WA1	
MF5WA2	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456723 (None) (1)	SO-03	05/16/2012 10:13	F5WA2	
MF5WA3	Soil/ Gary Hazelwood	Composite	TM, Hg, CN(21)	6-456729 (None) (1)	SO-04	05/16/2012 10:36	F5WA3	
MF5WA9	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456765 (None) (1)	SO-10	05/16/2012 11:45	F5WA9	
MF5WB1	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456777 (None) (1)	SO-12	05/16/2012 12:12	F5WB1	
MF5WB2	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456783 (None) (1)	SO-13	05/16/2012 12:55	F5WB2	
MF5WB3	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456789 (None) (1)	SO-14	05/16/2012 13:13	F5WB3	
MF5WB6	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456807 (None) (1)	SO-17	05/16/2012 14:45	F5WB6	
MF5WB7	Soil/ Gary Hazelwood	Grab	TM, Hg, CN(21)	6-456813 (None) (1)	SO-18	05/16/2012 15:00	F5WB7	

Sample(s) to be used for Lab QC: MF5WA0 - Special Instructions: Analytes for ICP-MS: antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, cyanide, lead, manganese, mercury, nickel, selenium, silver, thallium, vanadium, zinc.

Analytes for ICP-AES: aluminum, calcium, iron, magnesium, potassium, sodium.

6°C

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TM, Hg, CN=TAL Metals, Hg, CN: ICP AES + MS

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	Craig Watt	5/16/12							P. Aiken	5-17-12	0952

179

SAMPLE DELIVERY GROUP (SDG) COVER SHEET

SDG Number: MF5WA4

☒ ICP-AES ☒ Mercury ☒ Cyanide ☒ ICP-MS

☐ VOA ☐ VOA-SIM ☐ Trace-VOA ☐ Trace-VOA-SIM ☐ SVOA ☐ SVOA-SIM ☐ Aroclors ☐ Pesticides

Laboratory Name: Bonner Analytical Testing **Laboratory Code:** BONNER
Contract No.: EPW09037 **Case No.:** 42562
Solicitation No.: N/A **SDG Turnaround:** 21 day
Modified Analysis No(s).: N/A

EPA Sample Nmbers in SDG (Listed in Numerical Order)

1) MF5WA0	7) MF5WA6	13) MF5WB2	19)
2) MF5WA1	8) MF5WA7	14) MF5WB3	20)
3) MF5WA2	9) MF5WA8	15) MF5WB6	21)
4) MF5WA3	10) MF5WA9	16) MF5WB7	22)
5) MF5WA4	11) MF5WB0	17)	23)
6) MF5WA5	12) MF5WB1	18)	24)

PA
5-21-12

MF5WA4	MF5WB7
First Sample in SDG	Last Sample in SDG
05/16/2012	05/17/2012
First Sample Receipt Date	Last Sample Receipt Date

Note: There are a maximum of 20 samples (excluding PE Sample) in SDG. Attach TRs to this form in alphanumeric order (the order listed above on this form).

Patricia Ach
Signature

5-21-12
Date

USEPA - CLP

COVER PAGE

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

SOW No.: ISM01.3

EPA Sample No.	Lab Sample ID
MF5WA0	1205240-07
MF5WA1	1205240-08
MF5WA2	1205240-09
MF5WA3	1205240-10
MF5WA4	1205240-01
MF5WA5	1205240-02
MF5WA6	1205240-03
MF5WA7	1205240-04
MF5WA8	1205240-05
MF5WA8D	2052305-DUP1
MF5WA8D	2052220-DUP1
MF5WA8D	2052220-DUP2
MF5WA8D	2052222-DUP1
MF5WA8D	2052221-DUP1
MF5WA8S	2052220-MS1
MF5WA8S	2052221-MS1
MF5WA8S	2052222-MS1
MF5WA8S	2052305-MS1
MF5WA9	1205240-11
MF5WB0	1205240-06
MF5WB1	1205240-12
MF5WB2	1205240-13
MF5WB3	1205240-14
MF5WB6	1205240-15
MF5WB7	1205240-16

		ICP-AES	ICP-MS
Were ICP-AES and ICP interelement corrections applied?	(Yes/No)	Yes	Yes
Were ICP-AES and ICP background corrections applied?	(Yes/No)	Yes	No
If yes, were raw data generated before application of background corrections?	(Yes/No)	Yes	No

The laboratory did not receive any instructions with this SDG to modify the SOW standard laboratory sample preparation procedures (e.g., subsampling). To aid in the determination of data usability with respect to project decisions, any modifications performed are described below.

Comments:

Al, Ca, Fe, Mg, Ni, K were flagged as "E" estimated due to interferences occurring during the analysis of the serial dilution.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the electronic data submitted has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Brandon G. Beck For Chris Bonner

Date: _____ Title: CEO

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1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WA0

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-07

% Solids: 75.3 Date Received: 05/17/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	30200		E	P
7440-36-0	Antimony	26.6	U	D N	MS
7440-38-2	Arsenic	6.4	J	D	MS
7440-39-3	Barium	194		D	MS
7440-41-7	Beryllium	1.4	J	D	MS
7440-43-9	Cadmium	0.33	J	D	MS
7440-70-2	Calcium	29500		* E	P
7440-47-3	Chromium	37.5		D	MS
7440-48-4	Cobalt	11.8	J	D	MS
7440-50-8	Copper	14.6	J	D	MS
7439-89-6	Iron	19200		E	P
7439-92-1	Lead	17.5		D	MS
7439-95-4	Magnesium	3570		E	P
7439-96-5	Manganese	1000		D	MS
7439-97-6	Mercury	0.027	J		CV
7440-02-0	Nickel	23.9		D E	MS
7440-09-7	Potassium	3330		E	P
7782-49-2	Selenium	0.90	J	D	MS
7440-22-4	Silver	0.42	J	D	MS
7440-23-5	Sodium	36.9	J		P
7440-28-0	Thallium	0.26	J	D	MS
7440-62-2	Vanadium	86.7		D	MS
7440-66-6	Zinc	68.3		D	MS
57-12-5	Cyanide	0.66	U		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts: YES

Comments:
Artifacts: plant matter

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WA1

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-08

% Solids: 77.7 Date Received: 05/17/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	29000		E	P
7440-36-0	Antimony	25.7	U	D N	MS
7440-38-2	Arsenic	7.5	J	D	MS
7440-39-3	Barium	175		D	MS
7440-41-7	Beryllium	1.3	J	D	MS
7440-43-9	Cadmium	0.32	J	D	MS
7440-70-2	Calcium	55600		* E	P
7440-47-3	Chromium	37.3		D	MS
7440-48-4	Cobalt	10.9	J	D	MS
7440-50-8	Copper	13.9	J	D	MS
7439-89-6	Iron	18500		E	P
7439-92-1	Lead	17.1		D	MS
7439-95-4	Magnesium	3440		E	P
7439-96-5	Manganese	896		D	MS
7439-97-6	Mercury	0.020	J		CV
7440-02-0	Nickel	23.1		D E	MS
7440-09-7	Potassium	2770		E	P
7782-49-2	Selenium	1.0	J	D	MS
7440-22-4	Silver	0.25	J	D	MS
7440-23-5	Sodium	64.1	J		P
7440-28-0	Thallium	0.26	J	D	MS
7440-62-2	Vanadium	88.4		D	MS
7440-66-6	Zinc	67.9		D	MS
57-12-5	Cyanide	0.64	U		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts: YES

Comments:
Artifacts: rocks and plant matter

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WA2

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-09

% Solids: 78.7 Date Received: 05/17/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28200		E	P
7440-36-0	Antimony	25.4	U	D N	MS
7440-38-2	Arsenic	5.9	J	D	MS
7440-39-3	Barium	205		D	MS
7440-41-7	Beryllium	1.4	J	D	MS
7440-43-9	Cadmium	0.32	J	D	MS
7440-70-2	Calcium	55200		* E	P
7440-47-3	Chromium	39.5		D	MS
7440-48-4	Cobalt	11.8	J	D	MS
7440-50-8	Copper	13.6	J	D	MS
7439-89-6	Iron	17400		E	P
7439-92-1	Lead	16.2		D	MS
7439-95-4	Magnesium	3190		E	P
7439-96-5	Manganese	1020		D	MS
7439-97-6	Mercury	0.040	J		CV
7440-02-0	Nickel	24.4		D E	MS
7440-09-7	Potassium	2460		E	P
7782-49-2	Selenium	1.0	J	D	MS
7440-22-4	Silver	0.11	J	D	MS
7440-23-5	Sodium	44.1	J		P
7440-28-0	Thallium	0.30	J	D	MS
7440-62-2	Vanadium	89.4		D	MS
7440-66-6	Zinc	69.4		D	MS
57-12-5	Cyanide	0.64	U		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts: YES

Comments:
Artifacts: rocks and plant matter

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WA3

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-10

% Solids: 76.9 Date Received: 05/17/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	28400		E	P
7440-36-0	Antimony	26.0	U	D N	MS
7440-38-2	Arsenic	6.1	J	D	MS
7440-39-3	Barium	210		D	MS
7440-41-7	Beryllium	1.4	J	D	MS
7440-43-9	Cadmium	0.42	J	D	MS
7440-70-2	Calcium	59500		* E	P
7440-47-3	Chromium	40.9		D	MS
7440-48-4	Cobalt	12.1	J	D	MS
7440-50-8	Copper	15.6	J	D	MS
7439-89-6	Iron	17900		E	P
7439-92-1	Lead	20.2		D	MS
7439-95-4	Magnesium	3310		E	P
7439-96-5	Manganese	1110		D	MS
7439-97-6	Mercury	0.049	J		CV
7440-02-0	Nickel	25.2		D E	MS
7440-09-7	Potassium	2640		E	P
7782-49-2	Selenium	1.2	J	D	MS
7440-22-4	Silver	0.58	J	D	MS
7440-23-5	Sodium	49.3	J		P
7440-28-0	Thallium	0.28	J	D	MS
7440-62-2	Vanadium	95.8		D	MS
7440-66-6	Zinc	88.5		D	MS
57-12-5	Cyanide	0.65	U		AS

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: _____ Artifacts: YES

Comments:
Artifacts: rocks and plant matter

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WA4

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-01

% Solids: 73.5 Date Received: 05/16/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	30600		E	P
7440-36-0	Antimony	0.61	J	D N	MS
7440-38-2	Arsenic	4.9	J	D	MS
7440-39-3	Barium	168		D	MS
7440-41-7	Beryllium	1.6	J	D	MS
7440-43-9	Cadmium	0.66	J	D	MS
7440-70-2	Calcium	105000		D * E	P
7440-47-3	Chromium	34.9		D	MS
7440-48-4	Cobalt	9.9	J	D	MS
7440-50-8	Copper	12.7	J	D	MS
7439-89-6	Iron	18100		E	P
7439-92-1	Lead	13.6	J	D	MS
7439-95-4	Magnesium	3290		E	P
7439-96-5	Manganese	797		D	MS
7439-97-6	Mercury	0.0085	J		CV
7440-02-0	Nickel	21.0		D E	MS
7440-09-7	Potassium	2840		E	P
7782-49-2	Selenium	2.8	J	D	MS
7440-22-4	Silver	9.3	J	D	MS
7440-23-5	Sodium	65.8	J		P
7440-28-0	Thallium	0.60	J	D	MS
7440-62-2	Vanadium	80.8		D	MS
7440-66-6	Zinc	63.6		D	MS
57-12-5	Cyanide	0.34	J		AS

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: _____ Artifacts: YES

Comments:
Artifacts: rocks

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WA5

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-02

% Solids: 77.9 Date Received: 05/16/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	18200		E	P
7440-36-0	Antimony	25.7	U	D N	MS
7440-38-2	Arsenic	5.3	J	D	MS
7440-39-3	Barium	155		D	MS
7440-41-7	Beryllium	0.91	J	D	MS
7440-43-9	Cadmium	1.4	J	D	MS
7440-70-2	Calcium	59500		* E	P
7440-47-3	Chromium	57.0		D	MS
7440-48-4	Cobalt	43.5		D	MS
7440-50-8	Copper	62.7		D	MS
7439-89-6	Iron	14900		E	P
7439-92-1	Lead	210		D	MS
7439-95-4	Magnesium	2290		E	P
7439-96-5	Manganese	717		D	MS
7439-97-6	Mercury	0.038	J		CV
7440-02-0	Nickel	17.3		D E	MS
7440-09-7	Potassium	2420		E	P
7782-49-2	Selenium	0.79	J	D	MS
7440-22-4	Silver	39.7		D	MS
7440-23-5	Sodium	93.0	J		P
7440-28-0	Thallium	0.16	J	D	MS
7440-62-2	Vanadium	48.8	J	D	MS
7440-66-6	Zinc	1560		D	MS
57-12-5	Cyanide	0.47	J		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts: YES

Comments:
Artifacts: rocks

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WA6

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: Sdg No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-03

% Solids: 78.9 Date Received: 05/16/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	21300		E	P
7440-36-0	Antimony	25.3	U	D N	MS
7440-38-2	Arsenic	8.0	J	D	MS
7440-39-3	Barium	151		D	MS
7440-41-7	Beryllium	1.6	J	D	MS
7440-43-9	Cadmium	0.37	J	D	MS
7440-70-2	Calcium	81100		D * E	P
7440-47-3	Chromium	38.2		D	MS
7440-48-4	Cobalt	11.3	J	D	MS
7440-50-8	Copper	13.5	J	D	MS
7439-89-6	Iron	16800		E	P
7439-92-1	Lead	18.4		D	MS
7439-95-4	Magnesium	2680		E	P
7439-96-5	Manganese	856		D	MS
7439-97-6	Mercury	0.018	J		CV
7440-02-0	Nickel	25.1		D E	MS
7440-09-7	Potassium	2190		E	P
7782-49-2	Selenium	0.80	J	D	MS
7440-22-4	Silver	9.4	J	D	MS
7440-23-5	Sodium	69.2	J		P
7440-28-0	Thallium	0.24	J	D	MS
7440-62-2	Vanadium	68.8		D	MS
7440-66-6	Zinc	90.5		D	MS
57-12-5	Cyanide	1.1			AS

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts: YES

Comments:
Artifacts: rocks

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WA7

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-04

% Solids: 76.7 Date Received: 05/16/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23000		E	P
7440-36-0	Antimony	26.1	U	D N	MS
7440-38-2	Arsenic	6.9	J	D	MS
7440-39-3	Barium	141		D	MS
7440-41-7	Beryllium	1.1	J	D	MS
7440-43-9	Cadmium	0.52	J	D	MS
7440-70-2	Calcium	5700		* E	P
7440-47-3	Chromium	55.3		D	MS
7440-48-4	Cobalt	9.0	J	D	MS
7440-50-8	Copper	28.9		D	MS
7439-89-6	Iron	40600		D E	P
7439-92-1	Lead	83.4		D	MS
7439-95-4	Magnesium	2630		E	P
7439-96-5	Manganese	553		D	MS
7439-97-6	Mercury	0.015	J		CV
7440-02-0	Nickel	24.0		D E	MS
7440-09-7	Potassium	2060		E	P
7782-49-2	Selenium	1.1	J	D	MS
7440-22-4	Silver	0.60	J	D	MS
7440-23-5	Sodium	30.0	J		P
7440-28-0	Thallium	0.23	J	D	MS
7440-62-2	Vanadium	74.0		D	MS
7440-66-6	Zinc	1570		D	MS
57-12-5	Cyanide	1.2			AS

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: _____ Artifacts: YES

Comments:
Artifacts: plant matter

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WA8

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-05

% Solids: 76.0 Date Received: 05/16/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	24600		E	P
7440-36-0	Antimony	26.3	U	D N	MS
7440-38-2	Arsenic	6.2	J	D	MS
7440-39-3	Barium	157		D	MS
7440-41-7	Beryllium	1.3	J	D	MS
7440-43-9	Cadmium	0.36	J	D	MS
7440-70-2	Calcium	65100		* E	P
7440-47-3	Chromium	34.1		D	MS
7440-48-4	Cobalt	9.9	J	D	MS
7440-50-8	Copper	13.0	J	D	MS
7439-89-6	Iron	16200		E	P
7439-92-1	Lead	18.4		D	MS
7439-95-4	Magnesium	3010		E	P
7439-96-5	Manganese	J 730		D	MS
7439-97-6	Mercury	0.022	J		CV
7440-02-0	Nickel	21.6		D E	MS
7440-09-7	Potassium	2720		E	P
7782-49-2	Selenium	1.0	J	D	MS
7440-22-4	Silver	0.30	J	D	MS
7440-23-5	Sodium	52.3	J		P
7440-28-0	Thallium	0.25	J	D	MS
7440-62-2	Vanadium	79.4		D	MS
7440-66-6	Zinc	192		D	MS
57-12-5	Cyanide	0.42	J		AS

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: _____ Artifacts: YES

Comments:
Artifacts: rocks

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WA9

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-11

% Solids: 73.6 Date Received: 05/17/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26100		E	P
7440-36-0	Antimony	27.2	U	D N	MS
7440-38-2	Arsenic	6.6	J	D	MS
7440-39-3	Barium	151		D	MS
7440-41-7	Beryllium	1.2	J	D	MS
7440-43-9	Cadmium	0.75	J	D	MS
7440-70-2	Calcium	121000		D * E	P
7440-47-3	Chromium	37.7		D	MS
7440-48-4	Cobalt	9.5	J	D	MS
7440-50-8	Copper	23.2	J	D	MS
7439-89-6	Iron	18000		E	P
7439-92-1	Lead	35.5		D	MS
7439-95-4	Magnesium	3410		E	P
7439-96-5	Manganese	755		D	MS
7439-97-6	Mercury	0.066	J		CV
7440-02-0	Nickel	23.7		D E	MS
7440-09-7	Potassium	2980		E	P
7782-49-2	Selenium	1.4	J	D	MS
7440-22-4	Silver	0.21	J	D	MS
7440-23-5	Sodium	87.5	J		P
7440-28-0	Thallium	0.24	J	D	MS
7440-62-2	Vanadium	76.4		D	MS
7440-66-6	Zinc	153		D	MS
57-12-5	Cyanide	0.68	U		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts: YES

Comments:
Artifacts: plant matter

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
MF5WB0

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-06

% Solids: 76.1 Date Received: 05/16/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	26300		E	P
7440-36-0	Antimony	26.3	U	D N	MS
7440-38-2	Arsenic	7.0	J	D	MS
7440-39-3	Barium	161		D	MS
7440-41-7	Beryllium	1.3	J	D	MS
7440-43-9	Cadmium	0.40	J	D	MS
7440-70-2	Calcium	96000		D * E	P
7440-47-3	Chromium	34.4		D	MS
7440-48-4	Cobalt	11.0	J	D	MS
7440-50-8	Copper	12.8	J	D	MS
7439-89-6	Iron	16600		E	P
7439-92-1	Lead	19.1		D	MS
7439-95-4	Magnesium	3170		E	P
7439-96-5	Manganese	797		D	MS
7439-97-6	Mercury	0.013	J		CV
7440-02-0	Nickel	22.5		D E	MS
7440-09-7	Potassium	2750		E	P
7782-49-2	Selenium	0.99	J	D	MS
7440-22-4	Silver	0.26	J	D	MS
7440-23-5	Sodium	62.4	J		P
7440-28-0	Thallium	0.24	J	D	MS
7440-62-2	Vanadium	88.6		D	MS
7440-66-6	Zinc	183		D	MS
57-12-5	Cyanide	0.66	U		AS

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: _____ Artifacts: YES

Comments:
Artifacts: rocks

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WB1

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-12

% Solids: 81.3 Date Received: 05/17/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	22200		E	P
7440-36-0	Antimony	24.6	U	D N	MS
7440-38-2	Arsenic	9.6	J	D	MS
7440-39-3	Barium	342		D	MS
7440-41-7	Beryllium	1.2	J	D	MS
7440-43-9	Cadmium	0.33	J	D	MS
7440-70-2	Calcium	183000		D * E	P
7440-47-3	Chromium	32.7		D	MS
7440-48-4	Cobalt	30.4		D	MS
7440-50-8	Copper	9.4	J	D	MS
7439-89-6	Iron	13000		E	P
7439-92-1	Lead	19.5		D	MS
7439-95-4	Magnesium	2520		E	P
7439-96-5	Manganese	2220		D	MS
7439-97-6	Mercury	0.060	J		CV
7440-02-0	Nickel	30.6		D E	MS
7440-09-7	Potassium	1900		E	P
7782-49-2	Selenium	1.0	J	D	MS
7440-22-4	Silver	0.076	J	D	MS
7440-23-5	Sodium	102	J		P
7440-28-0	Thallium	0.31	J	D	MS
7440-62-2	Vanadium	106		D	MS
7440-66-6	Zinc	45.2		D	MS
57-12-5	Cyanide	0.62	U		AS

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: _____ Artifacts: YES

Comments:
Artifacts: rocks and plant matter

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WB2

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-13

% Solids: 75.3 Date Received: 05/17/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	25200		E	P
7440-36-0	Antimony	26.6	U	D N	MS
7440-38-2	Arsenic	6.6	J	D	MS
7440-39-3	Barium	192		D	MS
7440-41-7	Beryllium	1.0	J	D	MS
7440-43-9	Cadmium	0.33	J	D	MS
7440-70-2	Calcium	14600		* E	P
7440-47-3	Chromium	32.0		D	MS
7440-48-4	Cobalt	11.4	J	D	MS
7440-50-8	Copper	14.7	J	D	MS
7439-89-6	Iron	18800		E	P
7439-92-1	Lead	22.4		D	MS
7439-95-4	Magnesium	3340		E	P
7439-96-5	Manganese	950		D	MS
7439-97-6	Mercury	0.060	J		CV
7440-02-0	Nickel	21.0		D E	MS
7440-09-7	Potassium	2690		E	P
7782-49-2	Selenium	1.0	J	D	MS
7440-22-4	Silver	0.088	J	D	MS
7440-23-5	Sodium	33.4	J		P
7440-28-0	Thallium	0.24	J	D	MS
7440-62-2	Vanadium	70.7		D	MS
7440-66-6	Zinc	63.6		D	MS
57-12-5	Cyanide	0.66	U		AS

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: _____ Artifacts: YES

Comments:
Artifacts: plant matter

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WB3

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-14

% Solids: 75.5 Date Received: 05/17/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23500		E	P
7440-36-0	Antimony	26.5	U	D N	MS
7440-38-2	Arsenic	6.8	J	D	MS
7440-39-3	Barium	186		D	MS
7440-41-7	Beryllium	1.4	J	D	MS
7440-43-9	Cadmium	0.36	J	D	MS
7440-70-2	Calcium	14600		* E	P
7440-47-3	Chromium	32.6		D	MS
7440-48-4	Cobalt	11.0	J	D	MS
7440-50-8	Copper	15.2	J	D	MS
7439-89-6	Iron	16700		E	P
7439-92-1	Lead	23.1		D	MS
7439-95-4	Magnesium	3200		E	P
7439-96-5	Manganese	858		D	MS
7439-97-6	Mercury	0.059	J		CV
7440-02-0	Nickel	22.1		D E	MS
7440-09-7	Potassium	2450		E	P
7782-49-2	Selenium	1.2	J	D	MS
7440-22-4	Silver	0.10	J	D	MS
7440-23-5	Sodium	32.5	J		P
7440-28-0	Thallium	0.23	J	D	MS
7440-62-2	Vanadium	71.6		D	MS
7440-66-6	Zinc	67.3		D	MS
57-12-5	Cyanide	0.66	U		AS

Color Before: BROWN Clarity Before: _____ Texture: MEDIUM

Color After: COLORLESS Clarity After: _____ Artifacts: YES

Comments:
Artifacts: plant matter

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WB6

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-15

% Solids: 75.1 Date Received: 05/17/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23900		E	P
7440-36-0	Antimony	26.6	U	D N	MS
7440-38-2	Arsenic	7.0	J	D	MS
7440-39-3	Barium	148		D	MS
7440-41-7	Beryllium	1.1	J	D	MS
7440-43-9	Cadmium	0.43	J	D	MS
7440-70-2	Calcium	55800		* E	P
7440-47-3	Chromium	34.2		D	MS
7440-48-4	Cobalt	9.6	J	D	MS
7440-50-8	Copper	19.0	J	D	MS
7439-89-6	Iron	16700		E	P
7439-92-1	Lead	22.3		D	MS
7439-95-4	Magnesium	2790		E	P
7439-96-5	Manganese	644		D	MS
7439-97-6	Mercury	0.049	J		CV
7440-02-0	Nickel	22.2		D E	MS
7440-09-7	Potassium	2420		E	P
7782-49-2	Selenium	0.96	J	D	MS
7440-22-4	Silver	0.10	J	D	MS
7440-23-5	Sodium	77.7	J		P
7440-28-0	Thallium	0.23	J	D	MS
7440-62-2	Vanadium	79.2		D	MS
7440-66-6	Zinc	77.8		D	MS
57-12-5	Cyanide	0.16	J		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts: YES

Comments:
Artifacts: rocks and plant matter

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

MF5WB7

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil Lab Sample ID: 1205240-16

% Solids: 75.2 Date Received: 05/17/2012

Concentration Units (**ug/L**, **ug**, or **mg/kg** dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	23900		E	P
7440-36-0	Antimony	26.6	U	D N	MS
7440-38-2	Arsenic	7.0	J	D	MS
7440-39-3	Barium	140		D	MS
7440-41-7	Beryllium	1.2	J	D	MS
7440-43-9	Cadmium	0.42	J	D	MS
7440-70-2	Calcium	58200		* E	P
7440-47-3	Chromium	34.5		D	MS
7440-48-4	Cobalt	9.2	J	D	MS
7440-50-8	Copper	18.0	J	D	MS
7439-89-6	Iron	18300		E	P
7439-92-1	Lead	22.5		D	MS
7439-95-4	Magnesium	2810		E	P
7439-96-5	Manganese	594		D	MS
7439-97-6	Mercury	0.072	J		CV
7440-02-0	Nickel	21.0		D E	MS
7440-09-7	Potassium	2430		E	P
7782-49-2	Selenium	1.2	J	D	MS
7440-22-4	Silver	0.092	J	D	MS
7440-23-5	Sodium	79.9	J		P
7440-28-0	Thallium	0.21	J	D	MS
7440-62-2	Vanadium	77.3		D	MS
7440-66-6	Zinc	83.6		D	MS
57-12-5	Cyanide	0.31	J		AS

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: COLORLESS Clarity After: Artifacts: YES

Comments:
Artifacts: rocks

USEPA - CLP

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Initial Calibration Verification Source: USEPA, Lot: ICV-1 (0307)

Continuing Calibration Verification Source: In-House, Lot: B2D0078

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	2521.0	2540	101	20000	19100	96	19700	99	P
Calcium	10026	10900	109	50000	51900	104	53100	106	P
Iron	5082.0	5520	109	20000	20300	101	20900	104	P
Magnesium	6074.0	6030	99	50000	49800	100	50700	101	P
Potassium	10021	10200	101	50000	48700	97	50300	101	P
Sodium	10097	10400	103	50000	49400	99	51200	102	P

(1) Control Limits: Mercury 85-115; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Initial Calibration Verification Source: USEPA, Lot: ICV-1 (0307)

Continuing Calibration Verification Source: In-House, Lot: B2D0078

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				20000	19800	99	19500	97	P
Calcium				50000	54000	108	54000	108	P
Iron				20000	20900	104	21200	106	P
Magnesium				50000	52300	105	51000	102	P
Potassium				50000	50600	101	49700	99	P
Sodium				50000	51000	102	51100	102	P

(1) Control Limits: Mercury 85-115; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

iInitial Calibration Verification Source: USEPA, Lot: ICV-1 (0307)

Continuing Calibration Verification Source: In-House, Lot: B2D0078

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				20000	19700	98			P
Calcium				50000	54100	108			P
Iron				20000	21200	106			P
Magnesium				50000	51600	103			P
Potassium				50000	50200	100			P
Sodium				50000	51300	103			P

(1) Control Limits: Mercury 85-115; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Initial Calibration Verification Source: USEPA, Lot: ICV-1 (0307)

Continuing Calibration Verification Source: In-House, Lot: B2D0078

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Iron	5082.0	5430	107	20000	21100	106	21900	109	P

(1) Control Limits: Mercury 85-115; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Initial Calibration Verification Source: USEPA, Lot: ICV-1 (0307)

Continuing Calibration Verification Source: In-House, Lot: B2D0078

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Iron				20000	22000	110	21800	109	P

(1) Control Limits: Mercury 85-115; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Initial Calibration Verification Source: QATS, Lot: EPA (0307)

Continuing Calibration Verification Source: In-House, Lot: B2E0085

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Antimony	198.80	208	105	500.00	522	104	531	106	MS
Arsenic	199.80	211	105	500.00	516	103	539	108	MS
Barium	99.400	98.8	99	2500.0	2560	102	2660	107	MS
Beryllium	99.000	102	103	500.00	489	98	503	101	MS
Cadmium	99.200	97.8	99	500.00	546	109	544	109	MS
Chromium	98.000	99.0	101	500.00	505	101	530	106	MS
Cobalt	99.800	100	100	500.00	513	103	547	109	MS
Copper	98.400	101	102	500.00	479	96	487	97	MS
Lead	200.40	206	103	500.00	510	102	511	102	MS
Manganese	99.800	103	103	500.00	515	103	544	109	MS
Nickel	100.60	94.8	94	500.00	522	104	531	106	MS
Selenium	205.80	208	101	500.00	512	102	522	104	MS
Silver	100.20	98.7	99	65.000	64.4	99	67.8	104	MS
Thallium	205.60	206	100	500.00	503	101	508	102	MS
Vanadium	100.20	103	103	500.00	499	100	537	107	MS
Zinc	205.00	192	94	2500.0	2560	102	2650	106	MS

(1) Control Limits: Mercury 85-115; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Initial Calibration Verification Source: USEPA, Lot: EPA (0508)

Continuing Calibration Verification Source: Inorganic Ventures, Lot: B0I0018

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury	4.0000	4.0	101	2.0000	2.0	97	2.0	100	CV

(1) Control Limits: Mercury 85-115; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Initial Calibration Verification Source: USEPA, Lot: EPA (0508)

Continuing Calibration Verification Source: Inorganic Ventures, Lot: B0I0018

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Mercury				2.0000	2.2	107			CV

(1) Control Limits: Mercury 85-115; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A-IN
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Initial Calibration Verification Source: USEPA, Lot: ICV - 0400

Continuing Calibration Verification Source: Ricca Chemical, Lot: B8A0023

Concentration Units: ug/L

	Initial Calibration Verification			Continuing Calibration Verification					M
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Cyanide	99.000	104	105	250.00	259	103	235	94	AS

(1) Control Limits: Mercury 85-115; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Preparation Blank Matrix (soil/water/wipe/filter): Soil

Preparation Blank Concentration Units (ug/L, ug, or mg/kg): mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	1	C	2	C	3	C		C	M
Aluminum	200	U	200	U	200	U	200	U	20.0	U	P
Calcium	5000	U	5000	U	5000	U	5000	U	500	U	P
Iron	100	U	5.7	J	3.1	J	2.9	J	10	U	P
Magnesium	5000	U	14.1	J	18.6	J	15.2	J	500	U	P
Potassium	75.8	J	63.0	J	104	J	98.3	J	5.5	J	P
Sodium	22.0	J	18.7	J	45.1	J	50.7	J	2.3	J	P

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Preparation Blank Matrix (soil/water/wipe/filter): Soil

Preparation Blank Concentration Units (ug/L, ug, or mg/kg): mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	1	C	2	C	3	C		C	M
Aluminum			7.8	J	5.6	J					P
Calcium			35.5	J	5000	U					P
Iron			10.8	J	6.4	J					P
Magnesium			28.1	J	21.9	J					P
Potassium			55.0	J	54.4	J					P
Sodium			23.1	J	19.3	J					P

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Preparation Blank Matrix (soil/water/wipe/filter): Soil

Preparation Blank Concentration Units (ug/L, ug, or mg/kg): mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	1	C	2	C	3	C		C	M
Iron	13.1	J	11.0	J	5.5	J	100	U			P

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Preparation Blank Matrix (soil/water/wipe/filter): Soil

Preparation Blank Concentration Units (ug/L, ug, or mg/kg): mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	1	C	2	C	3	C		C	M
Iron			9.5	J							p

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Preparation Blank Matrix (soil/water/wipe/filter): Soil

Preparation Blank Concentration Units (ug/L, ug, or mg/kg): mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	1	C	2	C	3	C		C	M
Antimony	0.35	J	0.53	J	0.51	J			20.0	U	MS
Arsenic	1.0	U	1.0	U	1.0	U			10	U	MS
Barium	10	U	10	U	10	U			100	U	MS
Beryllium	1.0	U	1.0	U	1.0	U			10	U	MS
Cadmium	1.0	U	1.0	U	1.0	U			10	U	MS
Chromium	2.0	U	2.0	U	2.0	U			20.0	U	MS
Cobalt	1.0	U	0.024	J	0.027	J			10	U	MS
Copper	2.0	U	2.0	U	2.0	U			20.0	U	MS
Lead	0.038	J	0.048	J	0.048	J			10	U	MS
Manganese	1.0	U	1.0	U	1.0	U			10	U	MS
Nickel	1.0	U	1.0	U	1.0	U			10	U	MS
Selenium	5.0	U	5.0	U	5.0	U			50.0	U	MS
Silver	1.0	U	1.0	U	1.0	U			10	U	MS
Thallium	1.0	U	0.059	J	1.0	U			10	U	MS
Vanadium	5.0	U	5.0	U	5.0	U			50.0	U	MS
Zinc	2.0	U	2.0	U	2.0	U			20.0	U	MS

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Preparation Blank Matrix (soil/water/wipe/filter): Soil

Preparation Blank Concentration Units (ug/L, ug, or mg/kg): mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	1	C	2	C	3	C		C	M
Mercury	0.11	J	0.15	J	0.14	J	0.14	J	0.025	J	CV

USEPA - CLP

3-IN
BLANKS

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Preparation Blank Matrix (soil/water/wipe/filter): Soil

Preparation Blank Concentration Units (ug/L, ug, or mg/kg): mg/kg

Analyte	Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)						Preparation Blank		
		C	1	C	2	C	3	C		C	M
Cyanide	6.5	J	2.9	J	10	U			0.15	J	AS

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

ICP-AES Instrument ID: ICAPP02 ICSA Source: USEPA, Lot:Part A(1206)

ICSB Source: USEPA, Lot:Part B (0203)

Concentration Units: ug/L

Analyte	True		Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R
Aluminum	244100	241100	247000	101	245000	102
Calcium	234900	231100	263000	112	262000	113
Iron	95600	94800	100000	105	99300	105
Magnesium	247500	251100	260000	105	260000	104
Potassium	0	0	87.0		70.9	
Sodium	0	0	847		835	

USEPA - CLP

4A-IN
ICP-AES INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

ICP-AES Instrument ID: ICAPP02 ICSA Source: USEPA, Lot:Part A(1206)

ICSB Source: USEPA, Lot:Part B (0203)

Concentration Units: ug/L

Analyte	True		Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R
Aluminum	244100	241100	239000	98	240000	100
Calcium	234900	231100	256000	109	254000	110
Iron	95600	94800	99200	104	100000	105
Magnesium	247500	251100	255000	103	255000	102

USEPA - CLP

4B-IN
ICP-MS INTERFERENCE CHECK SAMPLE

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

ICP-AES Instrument ID: ICPMS01 ICSA Source: USEPA, Lot:Part A&B (803)

ICSB Source: USEPA, Lot:Part A&B (803)

Concentration Units: ug/L

Analyte	True		Found			
	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R
Antimony	1.5	22	31.8	2120	414	1882
Arsenic	0.1	19	7.3	7300	408	2147
Barium	1.2	22	30.1	2508	438	1991
Beryllium	0	19	5.7		368	1937
Cadmium	0.7	20	20.9	2986	381	1905
Chromium	21	40	427	2033	844	2110
Cobalt	1	20	23.9	2390	415	2075
Copper	8	25	163	2038	497	1988
Lead	4	25	85.5	2138	486	1944
Manganese	7	27	177	2529	616	2281
Nickel	6	24	110	1833	480	2000
Selenium	0.3	19	0.75	250	363	1911
Silver	0	18	0.34		333	1850
Thallium	0	21	0.38		383	1824
Vanadium	0.5	19	-20	-4000	418	2200
Zinc	11	29	216	1964	584	2014

USEPA - CLP

5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MF5WA8S

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil

% Solids for Sample: 76.0

Concentration Units (ug/L or mg/kg dry weight): mg/kg

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		26600		24600		526	380		P
Antimony	75-125	1.5	J	26.3	U	13.2	11	N	MS
Arsenic	75-125	11.9	J	6.2	J	5.26	108		MS
Barium	75-125	423		157		263	101		MS
Beryllium	75-125	7.5	J	1.3	J	6.58	94		MS
Cadmium	75-125	6.6	J	0.36	J	6.58	95		MS
Chromium	75-125	63.7		34.1		26.3	113		MS
Cobalt	75-125	68.8		9.9	J	65.8	90		MS
Copper	75-125	41.7		13.0	J	32.9	87		MS
Iron		16800		16200		263	228		P
Lead		21.9		18.4		2.63	133		MS
Manganese		838		730		65.8	164		MS
Nickel	75-125	86.9		21.6		65.8	99		MS
Selenium	75-125	13.2	J	1.0	J	13.2	92		MS
Silver	75-125	6.2	J	0.30	J	6.58	90		MS
Thallium	75-125	6.3	J	0.25	J	6.58	92		MS
Vanadium	75-125	158		79.4		65.8	119		MS
Zinc	75-125	271		192		65.8	120		MS

Comments:

USEPA - CLP

5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MF5WA8S

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil

% Solids for Sample: 76.0

Concentration Units (ug/L or mg/kg dry weight): mg/kg

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Mercury	75-125	0.74		0.022	J	0.658	109		CV

Comments:

USEPA - CLP

5A-IN
MATRIX SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MF5WA8S

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil

% Solids for Sample: 76.0

Concentration Units (ug/L or mg/kg dry weight): mg/kg

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Cyanide	75-125	6.4		0.42	J	6.58	91		AS

Comments:

USEPA - CLP

6-IN
DUPLICATES

EPA SAMPLE NO.

MF5WA8D

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil

% Solids for Sample: 76.0

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		24600		25900		5		P
Antimony		26.3	U	26.3	U			MS
Arsenic		6.2	J	6.1	J	2		MS
Barium	132	157		148		6		MS
Beryllium		1.3	J	1.2	J	8		MS
Cadmium		0.36	J	0.38	J	5		MS
Calcium		65100		88900		31	*	P
Chromium	26.3	34.1		31.9		7		MS
Cobalt		9.9	J	9.5	J	4		MS
Copper		13.0	J	11.9	J	9		MS
Iron		16200		16500		2		P
Lead	13.2	18.4		18.7		2		MS
Magnesium	658	3010		3130		4		P
Manganese		730		666		9		MS
Nickel	13.2	21.6		19.9		8		MS
Potassium	658	2720		2810		3		P
Selenium		1.0	J	0.82	J	20		MS
Silver		0.30	J	0.34	J	13		MS
Sodium		52.3	J	54.7	J	4		P
Thallium		0.25	J	0.23	J	8		MS
Vanadium	65.8	79.4		74.4		7		MS
Zinc		192		201		5		MS

USEPA - CLP

6-IN
DUPLICATES

EPA SAMPLE NO.

MF5WA8D

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Matrix: Soil

% Solids for Sample: 76.0

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury		0.022	J	0.016	J	32		CV

USEPA - CLP

6-IN
DUPLICATES

EPA SAMPLE NO.

MF5WA8D

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil

% Solids for Sample: 76.0

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Cyanide	0.66	0.42	J	0.93		76		AS

USEPA - CLP

7-IN
LABORATORY CONTROL SAMPLE

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Analyte	Aqueous/Water (ug/L), Soil/Sediment (mg/kg), Wipe/Filter (ug)		
	True	Found	%R
Aluminum	40.000	36.4	91
Calcium	1000.0	1000	100
Iron	20.000	19.0	95
Magnesium	1000.0	926	93
Potassium	1000.0	932	93
Sodium	1000.0	955	96

USEPA - CLP

7-IN
LABORATORY CONTROL SAMPLE

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Analyte	Aqueous/Water (ug/L), Soil/Sediment (mg/kg), Wipe/Filter (ug)		
	True	Found	%R
Antimony	2.0000	2.0	100
Arsenic	1.0000	1.1	110
Barium	10.000	10.2	102
Beryllium	1.0000	0.98	98
Cadmium	1.0000	1.0	100
Chromium	2.0000	2.1	105
Cobalt	1.0000	1.0	100
Copper	2.0000	1.9	95
Lead	1.0000	0.99	99
Manganese	1.0000	1.1	110
Nickel	1.0000	0.97	97
Selenium	5.0000	5.2	104
Silver	1.0000	0.98	98
Thallium	1.0000	0.97	97
Vanadium	5.0000	5.6	112
Zinc	2.0000	2.0	100

USEPA - CLP

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS

EPA SAMPLE NO.

MF5WA8L

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	24600		28400		15	E	P
Calcium	65100		77600		19	E	P
Iron	16200		19700		21	E	P
Magnesium	3010		3700		23	E	P
Potassium	2720		3080		13	E	P
Sodium	52.3	J	54.8	J	5		P

USEPA - CLP

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS

EPA SAMPLE NO.

MF5WA8L

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Matrix: Soil

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Antimony	26.3	U	132	U			MS
Arsenic	6.2	J	6.3	J	1		MS
Barium	157		159	J	1		MS
Beryllium	1.3	J	1.0	J	22		MS
Cadmium	0.36	J	0.40	J	10		MS
Chromium	34.1		34.0	J	0		MS
Cobalt	9.9	J	9.9	J	1		MS
Copper	13.0	J	11.9	J	8		MS
Lead	18.4		18.5	J	1		MS
Manganese	730		729		0		MS
Nickel	21.6		18.2	J	16	E	MS
Selenium	1.0	J	1.0	J	0		MS
Silver	0.30	J	0.31	J	4		MS
Thallium	0.25	J	0.23	J	9		MS
Vanadium	79.4		78.2	J	2		MS
Zinc	192		199		4		MS

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (MDL) (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument Type: P Instrument ID: ICAPP02 Date: 01/13/2012

Preparation Method: 3050B

Concentration Units (ug/L, mg/kg, or ug): mg/Kg

Analyte	Wavelength/Mass	MDL
Aluminum	396.10 nm	0.71
Calcium	318.10 nm	1.4
Iron	238.20 nm	0.24
Magnesium	279.00 nm	1.2
Potassium	766.40 nm	3.79
Sodium	589.50 nm	0.70

Comments:

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (MDL) (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument Type: MS Instrument ID: ICPMS01 Date: 01/06/2012

Preparation Method: 3050B

Concentration Units (ug/L, mg/kg, or ug): mg/Kg

Analyte	Wavelength/Mass		MDL
Antimony	121.00	amu	0.022
Arsenic	75.00	amu	0.0061
Barium	137.00	amu	0.0051
Beryllium	9.00	amu	0:0028
Cadmium	111.00	amu	0.0026
Chromium	52.00	amu	0.0066
Cobalt	59.00	amu	0.0014
Copper	65.00	amu	0.017
Lead	208.00	amu	0.0028
Manganese	55.00	amu	0.015
Nickel	60.00	amu	0.0099
Selenium	78.00	amu	0.023
Silver	107.00	amu	0.0016
Thallium	205.00	amu	0.0023
Vanadium	51.00	amu	0.039
Zinc	66.00	amu	0.025

Comments:

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (MDL) (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument Type: CV Instrument ID: LM01 Date: 01/06/2012

Preparation Method: 7471B

Concentration Units (ug/L, mg/kg, or ug): mg/Kg

Analyte	Wavelength/Mass	MDL
Mercury	257.00 nm	0.0038

Comments:

USEPA - CLP

9-IN
METHOD DETECTION LIMITS (MDL) (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument Type: AS Instrument ID: CN02 Date: 01/19/2012

Preparation Method: Midi-distillation

Concentration Units (ug/L, mg/kg, or ug): mg/Kg

Analyte	Wavelength/Mass	MDL
Cyanide	578.00 nm	0.11

Comments:

USEPA - CLP

10A-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

ICP-AES Instrument ID: ICAPP02 Date: 03/27/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	Sb
Aluminum	396.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189	0.0000000	0.0000000	-0.000086	0.0000000	0.0000000
Barium	455.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	214.4	0.0000000	0.0000000	0.0000350	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000220	0.0000000	0.0000000	0.0000000
Cobalt	228.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.7	0.0000000	0.0000000	-0.000099	0.0000000	0.0000000
Iron	238.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0001670	0.0000000	0.0000550	0.0000000	0.0000000
Magnesium	279	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196	0.0000000	0.0000000	-0.000171	0.0000000	0.0000000
Silver	328	0.0000000	0.0000000	-0.000032	0.0000000	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0000000	-0.000069	0.0000000	0.0000000
Vanadium	292.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.2	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

USEPA - CLP

10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

ICP-AES Instrument ID: ICAPP02 Date: 03/27/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Cr	Co	Cu	Pb	Mn
Aluminum	396.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.8	0.0053870	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	455.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	214.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0002850
Cobalt	228.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Iron	238.2	0.0000000	-0.010921	0.0000000	0.0000000	0.0000000
Lead	220.3	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.4	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.8	0.0000000	0.0048860	0.0000000	0.0000000	0.0012180
Vanadium	292.4	-0.002127	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.2	-0.001296	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

USEPA - CLP

10B-IN
ICP-AES INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

ICP-AES Instrument ID: ICAPP02 Date: 03/27/2012

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ni	K	V	Zn	
Aluminum	396.1	0.0000000	0.0000000	0.0000000	0.0000000	
Antimony	206.8	0.0000000	0.0000000	0.0000000	0.0000000	
Arsenic	189	0.0000000	0.0000000	0.0000000	0.0000000	
Barium	455.4	0.0000000	0.0000000	0.0000000	0.0000000	
Beryllium	313.1	0.0000000	0.0000000	0.0000000	0.0000000	
Cadmium	214.4	0.0000000	0.0000000	0.0000000	0.0000000	
Calcium	318.1	0.0000000	0.0000000	0.0000000	0.0000000	
Chromium	267.7	0.0000000	0.0000000	0.0000000	0.0000000	
Cobalt	228.6	0.0000000	0.0000000	0.0000000	0.0000000	
Copper	324.7	0.0000000	0.0000000	0.0000000	0.0000000	
Iron	238.2	0.0000000	0.0000000	0.0000000	0.0000000	
Lead	220.3	0.0000000	0.0000000	0.0000000	0.0000000	
Magnesium	279	0.0000000	0.0000000	0.0000000	0.0000000	
Manganese	257.6	0.0000000	0.0000000	0.0000000	0.0000000	
Nickel	231.6	0.0000000	0.0000000	0.0000000	0.0000000	
Potassium	766.4	0.0000000	0.0000000	0.0000000	0.0000000	
Selenium	196	0.0000000	0.0000000	0.0000000	0.0000000	
Silver	328	0.0000000	0.0000000	-0.003597	0.0000000	
Sodium	589.5	0.0000000	0.0000000	0.0000000	0.0000000	
Thallium	190.8	0.0000000	0.0000000	-0.019948	0.0000000	
Vanadium	292.4	0.0000000	0.0000000	0.0000000	0.0000000	
Zinc	206.2	0.0000000	0.0000000	0.0000000	0.0000000	

Comments:

USEPA - CLP

11-IN
INTERNAL STANDARD ASSOCIATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

ICP-MS Instrument ID: ICPMS01 Date: 06/05/2012

Analyte	Assoc. Internal Std 1	Assoc. Internal Std 2
Lead	Ho	Bi
Arsenic	Rh	
Barium	Sc	Tb
Beryllium	Li	Sc
Cadmium	Sc	Tb
Chromium	Rh	
Antimony	Sc	Tb
Copper	Sc	Tb
Zinc	Sc	Tb
Manganese	Rh	
Nickel	Sc	Tb
Selenium	Rh	
Silver	Sc	Tb
Thallium	Ho	Bi
Vanadium	Rh	
Cobalt	Sc	Tb

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Preparation Method: 3050B

EPA Sample No.	Preparation Date	Initial Weight/Volume (g) or (mL)	Final Volume (mL)
LCS01	06/01/2012	1.00	100.00
MF5WA0	06/01/2012	1.00	100.00
MF5WA1	06/01/2012	1.00	100.00
MF5WA2	06/01/2012	1.00	100.00
MF5WA3	06/01/2012	1.00	100.00
MF5WA4	06/01/2012	1.00	100.00
MF5WA5	06/01/2012	1.00	100.00
MF5WA6	06/01/2012	1.00	100.00
MF5WA7	06/01/2012	1.00	100.00
MF5WA8	06/01/2012	1.00	100.00
MF5WA8D	06/01/2012	1.00	100.00
MF5WA8S	06/01/2012	1.00	100.00
MF5WA9	06/01/2012	1.00	100.00
MF5WB0	06/01/2012	1.00	100.00
MF5WB1	06/01/2012	1.00	100.00
MF5WB2	06/01/2012	1.00	100.00
MF5WB3	06/01/2012	1.00	100.00
MF5WB6	06/01/2012	1.00	100.00
MF5WB7	06/01/2012	1.00	100.00
PBS01	06/01/2012	1.00	100.00

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Preparation Method: 3050B

EPA Sample No.	Preparation Date	Initial Weight/Volume (g) or (mL)	Final Volume (mL)
LCS01	06/01/2012	1.00	100.00
MF5WA0	06/01/2012	1.00	100.00
MF5WA1	06/01/2012	1.00	100.00
MF5WA2	06/01/2012	1.00	100.00
MF5WA3	06/01/2012	1.00	100.00
MF5WA4	06/01/2012	1.00	100.00
MF5WA5	06/01/2012	1.00	100.00
MF5WA6	06/01/2012	1.00	100.00
MF5WA7	06/01/2012	1.00	100.00
MF5WA8	06/01/2012	1.00	100.00
MF5WA8D	06/01/2012	1.00	100.00
MF5WA8S	06/01/2012	1.00	100.00
MF5WA9	06/01/2012	1.00	100.00
MF5WB0	06/01/2012	1.00	100.00
MF5WB1	06/01/2012	1.00	100.00
MF5WB2	06/01/2012	1.00	100.00
MF5WB3	06/01/2012	1.00	100.00
MF5WB6	06/01/2012	1.00	100.00
MF5WB7	06/01/2012	1.00	100.00
PBS01	06/01/2012	1.00	100.00

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Preparation Method: 7471B

EPA Sample No.	Preparation Date	Initial Weight/Volume (g) or (mL)	Final Volume (mL)
S0	06/05/2012	0.50	100.00
S0.2	06/05/2012	0.50	100.00
S0.5	06/05/2012	0.50	100.00
S1	06/05/2012	0.50	100.00
S2	06/05/2012	0.50	100.00
S6	06/05/2012	0.50	100.00
ICV01	06/05/2012	0.50	100.00
ICB01	06/05/2012	0.50	100.00
CCV01	06/05/2012	0.50	100.00
CCB01	06/05/2012	0.50	100.00
PBS01	06/05/2012	0.50	100.00
MF5WA4	06/05/2012	0.50	100.00
CCV02	06/05/2012	0.50	100.00
CCB02	06/05/2012	0.50	100.00
MF5WA5	06/05/2012	0.50	100.00
MF5WA6	06/05/2012	0.50	100.00
MF5WA7	06/05/2012	0.50	100.00
MF5WA8	06/05/2012	0.50	100.00
MF5WA8D	06/05/2012	0.50	100.00
MF5WA8S	06/05/2012	0.50	100.00
MF5WB0	06/05/2012	0.50	100.00
MF5WA0	06/05/2012	0.50	100.00
MF5WA1	06/05/2012	0.50	100.00
MF5WA2	06/05/2012	0.50	100.00
MF5WA3	06/05/2012	0.50	100.00
MF5WA9	06/05/2012	0.50	100.00
MF5WB1	06/05/2012	0.50	100.00
MF5WB2	06/05/2012	0.50	100.00
MF5WB3	06/05/2012	0.50	100.00
MF5WB6	06/05/2012	0.50	100.00
MF5WB7	06/05/2012	0.50	100.00
CCV03	06/05/2012	0.50	100.00

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Preparation Method: 7471B

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
CCB03	06/05/2012	0.50	100.00

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Preparation Method: Midi-distillation

EPA Sample No.	Preparation Date	Initial Weight/Volume (g) or (mL)	Final Volume (mL)
S0	05/23/2012	1.00	50.00
S5	05/23/2012	1.00	50.00
S10	05/23/2012	1.00	50.00
S50	05/23/2012	1.00	50.00
S100	05/23/2012	1.00	50.00
S250	05/23/2012	1.00	50.00
S500	05/23/2012	1.00	50.00
ICV01	05/23/2012	1.00	50.00
ICB01	05/23/2012	1.00	50.00
CCV01	05/23/2012	1.00	50.00
CCB01	05/23/2012	1.00	50.00
BASELINE01	05/23/2012	1.00	50.00
PBS01	05/23/2012	1.00	50.00
MF5WA4	05/23/2012	1.00	50.00
MF5WA5	05/23/2012	1.00	50.00
MF5WA6	05/23/2012	1.00	50.00
MF5WA7	05/23/2012	1.00	50.00
MF5WA8	05/23/2012	1.00	50.00
MF5WA8D	05/23/2012	1.00	50.00
MF5WA8S	05/23/2012	1.00	50.00
MF5WB0	05/23/2012	1.00	50.00
MF5WA0	05/23/2012	1.00	50.00
MF5WA1	05/23/2012	1.00	50.00
MF5WA2	05/23/2012	1.00	50.00
MF5WA3	05/23/2012	1.00	50.00
MF5WA9	05/23/2012	1.00	50.00
MF5WB1	05/23/2012	1.00	50.00
MF5WB2	05/23/2012	1.00	50.00
MF5WB3	05/23/2012	1.00	50.00
MF5WB6	05/23/2012	1.00	50.00
MF5WB7	05/23/2012	1.00	50.00
CCV02	05/23/2012	1.00	50.00

USEPA - CLP

12-IN
PREPARATION LOG

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Preparation Method: Midi-distillation

EPA Sample No.	Preparation Date	Initial Weight/Volume (g) or (mL)	Final Volume (mL)
CCB02	05/23/2012	1.00	50.00
BASELINE02	05/23/2012	1.00	50.00

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: ICAPP02 Analysis Method: P

Start Date: 06/03/2012 End Date: 06/03/2012

EPA Sample NO.	D/F	Time	Analytes																									
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	CN		
S0	1.0	1135	X						X				X		X				X			X						
S	1.0	1139	X						X				X		X				X			X						
S	1.0	1143	X						X				X		X				X			X						
S	1.0	1147	X						X				X		X				X			X						
S	1.0	1151	X						X				X		X				X			X						
S	1.0	1156	X						X				X		X				X			X						
S	1.0	1200	X						X				X		X				X			X						
S	1.0	1204	X						X						X				X			X						
S	1.0	1209											X															
S	1.0	1213																										
ICV01	1.0	1218	X						X				X		X				X			X						
ICB01	1.0	1222	X						X				X		X				X			X						
ICSA01	1.0	1226	X						X				X		X				X			X						
ICSAB01	1.0	1230	X						X				X		X				X			X						
CCV01	1.0	1235	X						X				X		X				X			X						
CCB01	1.0	1239	X						X				X		X				X			X						
CCV02	1.0	1252	X						X				X		X				X			X						
CCB02	1.0	1256	X						X				X		X				X			X						
CCV03	1.0	1318	X						X				X		X				X			X						
CCB03	1.0	1322	X						X				X		X				X			X						
PBS01	1.0	1327	X						X				X		X				X			X						
LCS01	1.0	1331	X						X				X		X				X			X						
MF5WA4	1.0	1335	X										X		X				X			X						
MF5WA5	1.0	1340	X						X				X		X				X			X						
MF5WA6	1.0	1344	X										X		X				X			X						
MF5WA7	1.0	1348	X						X						X				X			X						
MF5WA8	1.0	1352	X						X				X		X				X			X						
MF5WA8S	1.0	1356	X						X				X		X				X			X						
MF5WA8D	1.0	1401	X										X		X				X			X						
MF5WA8L	5.0	1405	X						X				X		X				X			X						
MF5WB0	1.0	1409	X										X		X				X			X						
MF5WA0	1.0	1414	X						X				X		X				X			X						
MF5WA1	1.0	1418	X						X				X		X				X			X						
MF5WA2	1.0	1422	X						X				X		X				X			X						
MF5WA3	1.0	1427	X						X				X		X				X			X						
MF5WA9	1.0	1431	X										X		X				X			X						

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13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: ICAPP02 Analysis Method: P

Start Date: 06/03/2012 End Date: 06/03/2012

EPA Sample NO.	D/F	Time	Analytes																									
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	CN		
MF5WB1	1.0	1435	X										X		X				X			X						
MF5WB2	1.0	1440	X						X				X		X				X			X						
MF5WB3	1.0	1444	X						X				X		X				X			X						
MF5WB6	1.0	1448	X						X				X		X				X			X						
MF5WB7	1.0	1452	X						X				X		X				X			X						
CCV04	1.0	1457	X						X				X		X				X			X						
CCB04	1.0	1501	X						X				X		X				X			X						
MF5WA4	3.0	1505							X																			
MF5WA6	3.0	1509							X																			
MF5WA8D	3.0	1514							X																			
MF5WB0	3.0	1518							X																			
MF5WA9	4.0	1522							X																			
MF5WB1	6.0	1526							X																			
CCV05	1.0	1531	X						X				X		X				X			X						
CCB05	1.0	1535	X						X				X		X				X			X						

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13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: ICAPP02 Analysis Method: P

Start Date: 06/05/2012 End Date: 06/05/2012

EPA Sample NO.	D/F	Time	Analytes																								
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	CN		
S0	1.0	0720											X															
S	1.0	0724											X															
S	1.0	0728											X															
S	1.0	0732											X															
S	1.0	0737											X															
S	1.0	0741											X															
S	1.0	0745											X															
S	1.0	0749																										
S	1.0	0754											X															
S	1.0	0758																										
ICV01	1.0	0803											X															
ICB01	1.0	0807											X															
ICSA01	1.0	0811	X						X				X		X													
ICSAB01	1.0	0816	X						X				X		X													
CCV01	1.0	0820											X															
CCB01	1.0	0824											X															
CCV02	1.0	0937											X															
CCB02	1.0	0942											X															
CCV03	1.0	0954											X															
CCB03	1.0	0959											X															
MF5WA7	2.0	1021											X															
ZZZZZZ	1.0	1025																										
CCV04	1.0	1029											X															
CCB04	1.0	1034											X															

~~244~~

172A

07/17/12

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Instrument ID: ICPMS01 Analysis Method: MS

Start Date: 06/05/2012 End Date: 06/06/2012

EPA Sample NO.	D/F	Time	Analytes																									
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	CN		
TUNE01	1.0	2246																										
S0	1.0	2259		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
S	1.0	2303		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
S	1.0	2307		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
S	1.0	2311		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
S	1.0	2316		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
S	1.0	2320		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
S	1.0	2324				X																			X			
ICV01	20.0	2328		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
ICB01	20.0	2332		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
ICSA01	20.0	2336		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
ICSAB01	20.0	2341		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
CCV01	20.0	2345		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
CCB01	20.0	2349		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
PBS01	20.0	2353		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
LCS01	20.0	2357		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WA4	20.0	0001		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WA5	20.0	0005		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WA6	20.0	0010		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WA7	20.0	0014		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WA8	20.0	0018		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WA8S	20.0	0022		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WA8D	20.0	0026		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WA8L	100.	0030		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WB0	20.0	0034		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WA0	20.0	0039		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WA1	20.0	0043		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WA2	20.0	0047		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WA3	20.0	0051		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WA9	20.0	0055		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WB1	20.0	0059		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WB2	20.0	0103		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WB3	20.0	0107		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WB6	20.0	0112		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
MF5WB7	20.0	0116		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			
CCV02	20.0	0120		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			

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13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: ICPMS01 Analysis Method: MS

Start Date: 06/05/2012 End Date: 06/06/2012

EPA Sample NO.	D/F	Time	Analytes																									
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	CN		
CCB02	20.0	0124		X	X	X	X	X		X	X	X		X		X		X		X	X		X	X	X			

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13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: LM01 Analysis Method: CV

Start Date: 06/05/2012 End Date: 06/05/2012

EPA Sample NO.	D/F	Time	Analytes																									
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	CN		
S0	1.0	1217															X											
S0.2	1.0	1219															X											
S0.5	1.0	1221															X											
S1	1.0	1223															X											
S2	1.0	1225															X											
S6	1.0	1227															X											
ICV01	1.0	1229															X											
ICB01	1.0	1231															X											
CCV01	1.0	1233															X											
CCB01	1.0	1236															X											
PBS01	1.0	1238															X											
MF5WA4	1.0	1240															X											
CCV02	1.0	1242															X											
CCB02	1.0	1244															X											
MF5WA5	1.0	1247															X											
MF5WA6	1.0	1249															X											
MF5WA7	1.0	1252															X											
MF5WA8	1.0	1254															X											
MF5WA8D	1.0	1256															X											
MF5WA8S	1.0	1258															X											
MF5WB0	1.0	1300															X											
MF5WA0	1.0	1302															X											
MF5WA1	1.0	1304															X											
MF5WA2	1.0	1306															X											
MF5WA3	1.0	1308															X											
MF5WA9	1.0	1310															X											
MF5WB1	1.0	1313															X											
MF5WB2	1.0	1315															X											
MF5WB3	1.0	1317															X											
MF5WB6	1.0	1319															X											
MF5WB7	1.0	1321															X											
CCV03	1.0	1323															X											
CCB03	1.0	1325															X											

USEPA - CLP

13-IN
ANALYSIS RUN LOG

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: CN02 Analysis Method: AS

Start Date: 05/24/2012 End Date: 05/24/2012

EPA Sample NO.	D/F	Time	Analytes																									
			Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	Tl	V	Zn	CN		
S0	1.0	0831																								X		
S5	1.0	0832																										
S10	1.0	0834																								X		
S50	1.0	0835																								X		
S100	1.0	0837																								X		
S250	1.0	0838																								X		
S500	1.0	0839																								X		
ICV01	1.0	0841																								X		
ICB01	1.0	0842																								X		
CCV01	1.0	0844																								X		
CCB01	1.0	0845																								X		
BASELINE	1.0	0846																								X		
PBS01	1.0	0848																								X		
MF5WA4	1.0	0849																								X		
MF5WA5	1.0	0851																								X		
MF5WA6	1.0	0852																								X		
MF5WA7	1.0	0854																								X		
MF5WA8	1.0	0855																								X		
MF5WA8D	1.0	0856																								X		
MF5WA8S	1.0	0858																								X		
MF5WB0	1.0	0859																								X		
MF5WA0	1.0	0901																								X		
MF5WA1	1.0	0902																								X		
MF5WA2	1.0	0903																								X		
MF5WA3	1.0	0905																								X		
MF5WA9	1.0	0906																								X		
MF5WB1	1.0	0908																								X		
MF5WB2	1.0	0909																								X		
MF5WB3	1.0	0911																								X		
MF5WB6	1.0	0912																								X		
MF5WB7	1.0	0913																								X		
CCV02	1.0	0915																								X		
CCB02	1.0	0916																								X		
BASELINE	1.0	0918																								X		

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14-IN
ICP-MS Tune

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref No.: SDG No.: MF5WA4

ICP-MS Instrument ID: ICPMS01 Date: 06/05/12

Element - Mass	Avg. Measured Mass (amu)	Average Peak Width (amu)	%Height	%RSD
Be - 9	9.01	0.720	5.0%	0.8655
Mg - 24	23.99	0.720	5.0%	1.0124
Mg - 25	24.99	0.720	5.0%	1.1456
Mg - 26	25.98	0.720	5.0%	0.4536
Co - 59	58.93	0.770	5.0%	0.4428
In - 113	112.9	0.720	5.0%	0.5671
In - 115	114.9	0.770	5.0%	0.8993
Pb - 206	205.97	0.720	5.0%	1.0485
Pb - 207	206.98	0.720	5.0%	1.0317
Pb - 208	207.98	0.720	5.0%	0.6111

Comments:

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15-IN
ICP-MS Internal Standards Relative Intensity Summary

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

ICP-MS Instrument ID: ICPMS01 Start D 06/05/2012 End D 06/06/2012

EPA Sample NO.	Time	Internal Standards %RI For:									
		Element Li-6	Q	Element Sc-45	Q	Element Y-89	Q	Element Rh-103	Q	Element Tb-159	Q
S0	22:59	100						100		100	
S	23:03	101						103		101	
S	23:07	103						105		102	
S	23:11	103						106		103	
S	23:16	100						102		101	
S	23:20	99						103		99	
S	23:24	104						106		101	
ICV01	23:28	106						106		102	
ICB01	23:32	108						111		102	
ICSA01	23:36	79						86		77	
ICSAB01	23:41	74						85		75	
CCV01	23:45	91						107		98	
CCB01	23:49	95						111		99	
PBS01	23:53	99						112		98	
LCS01	23:57	104						116		100	
MF5WA4	0:01	103						115		99	
MF5WA5	0:05	101						114		99	
MF5WA6	0:10	100						115		97	
MF5WA7	0:14	97						112		97	
MF5WA8	0:18	101						115		97	
MF5WA8S	0:22	101						115		98	
MF5WA8D	0:26	102						116		99	
MF5WA8L	0:30	105						119		96	
MF5WB0	0:34	103						118		99	
MF5WA0	0:39	100						116		98	
MF5WA1	0:43	103						116		97	
MF5WA2	0:47	101						117		98	
MF5WA3	0:51	101						116		97	
MF5WA9	0:55	105						120		98	
MF5WB1	0:59	107						121		97	
MF5WB2	1:03	103						118		99	
MF5WB3	1:07	102						119		100	
MF5WB6	1:12	103						118		97	
MF5WB7	1:16	102						120		98	
CCV02	1:20	102						120		95	
CCB02	1:24	103						119		96	

250
76
78
07/17/12

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15-IN
ICP-MS Internal Standards Relative Intensity Summary

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

ICP-MS Instrument ID: ICPMS01 Start D 06/05/2012 End D 06/06/2012

EPA Sample NO.	Time	Internal Standards %RI For:									
		Element Ho-165	Q	Element Bi-209	Q	Element	Q	Element	Q	Element	Q
S0	22:59	100		100							
S	23:03	100		100							
S	23:07	101		100							
S	23:11	102		101							
S	23:16	100		100							
S	23:20	98		98							
S	23:24	100		97							
ICV01	23:28	101		98							
ICB01	23:32	102		98							
ICSA01	23:36	76		70							
ICSAB01	23:41	75		67							
CCV01	23:45	98		97							
CCB01	23:49	98		97							
PBS01	23:53	98		96							
LCS01	23:57	99		95							
MF5WA4	0:01	98		90							
MF5WA5	0:05	97		92							
MF5WA6	0:10	97		89							
MF5WA7	0:14	95		91							
MF5WA8	0:18	95		89							
MF5WA8S	0:22	96		89							
MF5WA8D	0:26	99		90							
MF5WA8L	0:30	96		92							
MF5WB0	0:34	96		88							
MF5WA0	0:39	96		90							
MF5WA1	0:43	96		87							
MF5WA2	0:47	96		88							
MF5WA3	0:51	96		88							
MF5WA9	0:55	96		87							
MF5WB1	0:59	95		84							
MF5WB2	1:03	97		89							
MF5WB3	1:07	98		91							
MF5WB6	1:12	94		88							
MF5WB7	1:16	97		88							
CCV02	1:20	93		91							
CCB02	1:24	94		92							

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16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: ICAPP02 Start Date: 06/03/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	0.0	24.0343000		100	112.518	-13	2000	1950.4	2
Calcium	0.0	-28.2463000		250	229.228	8	5000	5179.42	-4
Iron	0.0	1.0307100		100	94.0746	6	2000	2057.79	-3
Magnesium	0.0	35.5665000		250	277.11	-11	5000	4930.91	1
Potassium	0.0	10.0834000		250	269.817	-8	5000	4901.97	2
Sodium	0.0	13.7257000		250	256.943	-3	5000	4938.94	1

Control Limits +/- 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.:MF5WA4

Instrument ID: ICAPP02 Start Date:06/03/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	4000	3896.48	3	20000	19101	4	40000	38530.2	4
Calcium	10000	10290.4	-3	50000	51065.5	-2	100000	99652.1	0
Iron	4000	4147.2	-4	20000	20012.7	0	40000	39831	0
Magnesium	10000	9698.17	3	50000	48496	3	100000	95433.6	5
Potassium	10000	9765.89	2	50000	48603.8	3	100000	97358.7	3
Sodium	10000	9988.96	0	50000	49445.1	1	100000	97708.1	2

Control Limits +/- 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: _____ SDG No.: MF5WA4

Instrument ID: ICAPP02 Start Date: 06/03/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	200000	200369	0	400000	402141	-1			
Calcium	250000	251331	-1	500000	497502	0			
Iron	175000	171310	2				200000	203647	-2
Magnesium	250000	249239	0	500000	507175	-1			
Potassium	150000	151076	-1	300000	303274	-1			
Sodium	125000	126978	-2	250000	250934	0			

Control Limits +/- 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: ICAPP02 Start Date: 06/05/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	0.0	39.5800000		100	113.438	-13	2000	1927.63	4
Calcium	0.0	-4.2567800		250	240.529	4	5000	5083.88	-2
Iron	0.0	-9.7260600		100	89.4284	11	2000	2078.2	-4
Magnesium	0.0	61.5501000		250	287.729	-15	5000	4792.05	4

Control Limits +/- 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: ICAPP02 Start Date: 06/05/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	4000	3798.83	5	20000	19271.1	4	40000	39390.9	2
Calcium	10000	10112.9	-1	50000	50367.8	-1	100000	100484	0
Iron	4000	4176.31	-4	20000	20389.2	-2	40000	40508.3	-1
Magnesium	10000	9532.38	5	50000	47717.7	5	100000	97259.8	3

Control Limits +/- 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: ICAPP02 Start Date: 06/05/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Aluminum	200000	199911	0	400000	401687	0			
Calcium	250000	249848	0	500000	499113	0			
Iron	175000	169515	3				200000	204343	-2
Magnesium	250000	249582	0	500000	506078	-1			

Control Limits +/- 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: ICPMS01 Start Date: 06/05/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	0.0	0.0004834					2.0	1.93197	3
Arsenic	0.0	-0.0010150					1.0	1.07788	-8
Barium	0.0	0.0034212					10.0	9.43992	6
Beryllium	0.0	-0.0022592					1.0	1.0464	-5
Cadmium	0.0	-0.0001991					1.0	0.991881	1
Chromium	0.0	0.0011327					2.0	1.93025	3
Cobalt	0.0	-0.0005731					1.0	0.992649	1
Copper	0.0	-0.0121411					2.0	1.89427	5
Lead	0.0	0.0012275					1.0	0.948763	5
Manganese	0.0	0.0107463					1.0	0.928034	7
Nickel	0.0	0.3086760					1.0	0.521803	48
Selenium	0.0	-0.0149407					5.0	5.30545	-6
Silver	0.0	0.0001009					1.0	0.962957	4
Thallium	0.0	-0.0000043					1.0	0.956121	4
Vanadium	0.0	-0.0009661					5.0	4.98593	0
Zinc	0.0	0.3771430					2.0	1.49804	25

Control Limits +/- 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: ICPMS01 Start Date: 06/05/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	10.0	10.0814	-1	50.0	51.8198	-4	500	476.922	5
Arsenic	10.0	10.6792	-7	50.0	52.1427	-4	500	467.934	6
Barium	10.0	9.93765	1	50.0	50.0558	0	500	476.344	5
Beryllium	10.0	10.9854	-10	50.0	53.2865	-7	500	475.965	5
Cadmium	10.0	10.3388	-3	50.0	52.2949	-5	500	490.664	2
Chromium	10.0	10.082	-1	50.0	50.4833	-1	500	458.707	8
Cobalt	10.0	10.4568	-5	50.0	53.3822	-7	500	477.871	4
Copper	10.0	10.6251	-6	50.0	53.2267	-6	500	489.793	2
Lead	10.0	9.88799	1	50.0	52.456	-5	500	478.478	4
Manganese	10.0	10.0371	0	50.0	50.5469	-1	500	460.155	8
Nickel	10.0	11.2621	-13	50.0	50.9295	-2	500	468.23	6
Selenium	10.0	10.6939	-7	50.0	52.9325	-6	500	469.237	6
Silver	1.3	1.33482	-3	6.5	6.73523	-4	65.0	61.0633	6
Thallium	10.0	10.0746	-1	50.0	53.3797	-7	500	480.797	4
Vanadium	10.0	10.3403	-3	50.0	51.3525	-3	500	462.969	7
Zinc	10.0	9.68514	3	50.0	49.5937	1	500	465.863	7

Control Limits +/- 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: ICPMS01 Start Date: 06/05/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	1000	1021.24	-2						
Arsenic	1000	1029.17	-3						
Barium	1000	966.053	3	5000	5058.17	-1			
Beryllium	1000	1019.72	-2						
Cadmium	1000	1006.71	-1						
Chromium	1000	1040.8	-4						
Cobalt	1000	1018.3	-2						
Copper	1000	1006.47	-1						
Lead	1000	1019.23	-2						
Manganese	1000	1039.32	-4						
Nickel	1000	1029.75	-3						
Selenium	1000	1026.85	-3						
Silver	130	133.704	-3						
Thallium	1000	1015.79	-2						
Vanadium	1000	1035.35	-4						
Zinc	1000	959.256	4	5000	5075.73	-2			

Control Limits +/- 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: LM01 Start Date: 06/05/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Mercury	0.0	0.0857096		0.20	0.236388	-18	0.50	0.545324	-9

Control Limits +/- 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.:MF5WA4

Instrument ID: LM01 Start Date:06/05/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Mercury	1.0	0.943923	6	2.0	1.8372	8	6.0	6.05145	-1

Control Limits +/- 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.:MF5WA4

Instrument ID: CN02 Start Date:05/24/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	0.0	5.9500600					10.0	8.28941	17

Control Limits +/- 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.:MF5WA4

Instrument ID: CN02 Start Date:05/24/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	50.0	46.7788	6	100	99.4943	1	250	248.273	1

Control Limits +/- 30%

USEPA - CLP

16-IN
INITIAL CALIBRATION

Lab Name: Bonner Analytical Testing Contract: EPW09037

Lab Code: BONNER Case No.: 42562 Mod. Ref. No.: SDG No.: MF5WA4

Instrument ID: CN02 Start Date: 05/24/2012

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Cyanide	500	501.214	0						

Control Limits +/- 30%

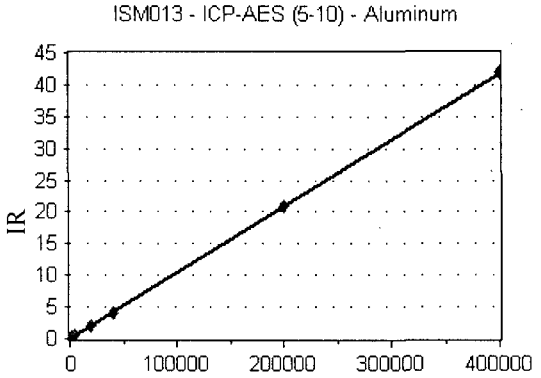
Bonner Analytical Testing

Instrument: ICAPP02
Calibration ID: B223024

Calibration Date: 06/03/2012 22:43 By MSB2
Last Edit Date: 06/05/2012 22:43 By MSB2

ISM013 - ICP-AES (5-10)

Aluminum



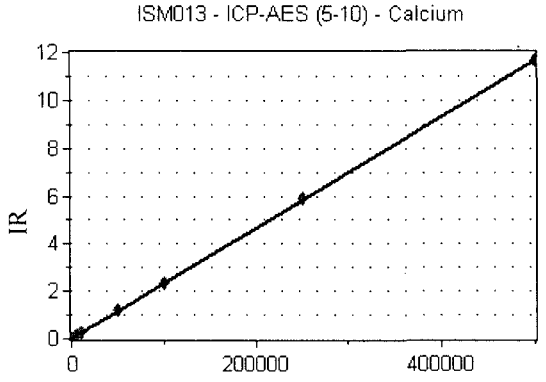
Linear Regression Weighted 1/X
r2: 0.9999481

[Y] = 1.045387E-04 * [X] + 7.074807E-04

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20514-CAL1	0	24.03	0.00322	0.00
BF20514-CAL2	100	112.52	0.01247	-12.52
BF20514-CAL3	2000	1,950.40	0.2046	2.48
BF20514-CAL4	4000	3,896.48	0.40804	2.59
BF20514-CAL5	20000	19,100.99	1.9975	4.50
BF20514-CAL6	40000	38,530.16	4.0286	3.67
BF20514-CAL7	200000	200,368.79	20.947	-0.18
BF20514-CAL8	400000	402,140.95	42.04	-0.54

ISM013 - ICP-AES (5-10)

Calcium

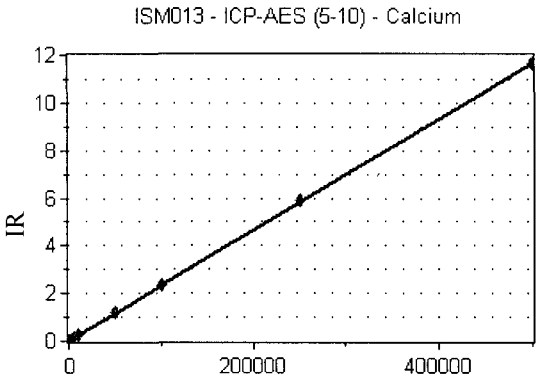


Linear Regression Weighted 1/X
r2: 0.9999571

[Y] = 2.338093E-05 * [X] + 9.404251E-04

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20514-CAL1	0	-28.25	0.00028	0.00
BF20514-CAL2	250	229.23	0.0063	8.31
BF20514-CAL3	5000	5,179.42	0.12204	-3.59
BF20514-CAL4	10000	10,290.42	0.24154	-2.90
BF20514-CAL5	50000	51,065.53	1.1949	-2.13
BF20514-CAL6	100000	99,652.13	2.3309	0.35

Calcium



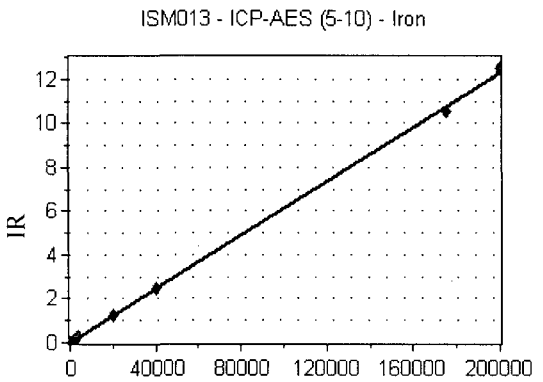
Linear Regression Weighted 1/X
r2: 0.9999571

[Y] = 2.338093E-05 * [X] + 9.404251E-04

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20514-CAL7	250000	251,331.30	5.8773	-0.53
BF20514-CAL8	500000	497,502.01	11.633	0.50

ISM013 - ICP-AES (5-10)

Iron



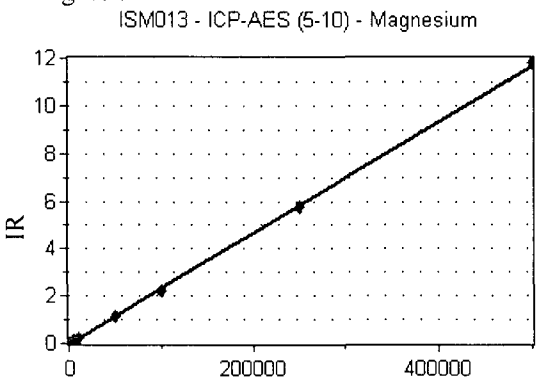
Linear Regression Weighted 1/X
r2: 0.999444

[Y] = 6.12614E-05 * [X] + 1.296857E-03

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20514-CAL1	0	1.03	0.00136	0.00
BF20514-CAL2	100	94.07	0.00706	5.93
BF20514-CAL3	2000	2,057.79	0.12736	-2.89
BF20514-CAL4	4000	4,147.20	0.25536	-3.68
BF20514-CAL5	20000	20,012.65	1.2273	-0.06
BF20514-CAL6	40000	39,831.01	2.4414	0.42
BF20514-CAL7	175000	171,310.21	10.496	2.11
BF20514-CAL9	200000	203,647.05	12.477	-1.82

ISM013 - ICP-AES (5-10)

Magnesium



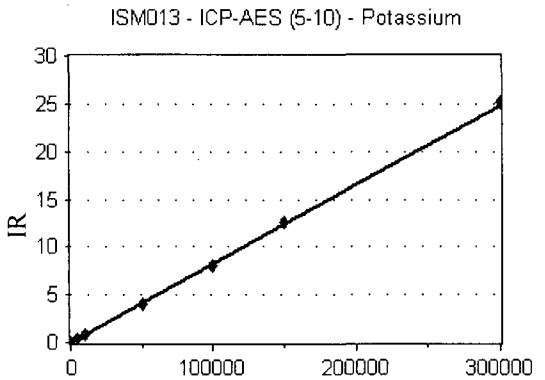
Linear Regression Weighted 1/X
r2: 0.9996672

[Y] = 2.326703E-05 * [X] + -4.575273E-04

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20514-CAL1	0	35.57	0.00037	0.00
BF20514-CAL2	250	277.11	0.00599	-10.84
BF20514-CAL3	5000	4,930.91	0.11427	1.38
BF20514-CAL4	10000	9,698.17	0.22519	3.02
BF20514-CAL5	50000	48,495.98	1.1279	3.01
BF20514-CAL6	100000	95,433.65	2.22	4.57
BF20514-CAL7	250000	249,239.27	5.7986	0.30
BF20514-CAL8	500000	507,175.07	11.8	-1.44

ISM013 - ICP-AES (5-10)

Potassium



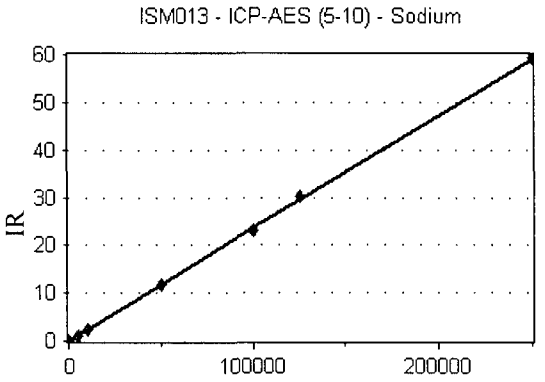
Linear Regression Weighted 1/X
r2: 0.9997373

[Y] = 8.293111E-05 * [X] + -1.866226E-03

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20514-CAL1	0	10.08	-0.00103	0.00
BF20514-CAL2	250	269.82	0.02051	-7.93
BF20514-CAL3	5000	4,901.97	0.40466	1.96
BF20514-CAL4	10000	9,765.89	0.80803	2.34
BF20514-CAL5	50000	48,603.79	4.0289	2.79
BF20514-CAL6	100000	97,358.71	8.0722	2.64
BF20514-CAL7	150000	151,075.59	12.527	-0.72
BF20514-CAL8	300000	303,274.20	25.149	-1.09

ISM013 - ICP-AES (5-10)

Sodium



Linear Regression Weighted 1/X
r2: 0.9998109

[Y] = 2.364547E-04 * [X] + 3.464503E-03

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20514-CAL1	0	13.73	0.00671	0.00
BF20514-CAL2	250	256.94	0.06422	-2.78
BF20514-CAL3	5000	4,938.94	1.1713	1.22
BF20514-CAL4	10000	9,988.96	2.3654	0.11
BF20514-CAL5	50000	49,445.14	11.695	1.11
BF20514-CAL6	100000	97,708.08	23.107	2.29
BF20514-CAL7	125000	126,977.96	30.028	-1.58
BF20514-CAL8	250000	250,934.05	59.338	-0.37

Sample Name: SEQ-CAL1@S0 Acquired: 6/3/2012 11:35:10 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00006**	**.00322**	**-.00031**	**.0087**	**.03071**	**.00005**	**.00028**
#1	.00004	.00424	-.00062	.0089	.03353	.00013	.00064
#2	.00023	.00286	-.00024	.0089	.02862	.00014	.00027
#3	-.00009	.00257	-.00008	.0082	.02999	-.00011	-.00008

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00248**	**.00259**	**.00004**	**.00298**	**.00136**	**-.00103**	**.0067**
#1	.00273	.00264	.00007	.00307	.00235	-.00134	.0068
#2	.00205	.00242	-.00002	.00275	.00091	-.00024	.0070
#3	.00267	.00271	.00008	.00311	.00082	-.00151	.0065

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00037**	**.00044**	**.0023**	**.00671**	**-.00014**	**.00294**	**.00067**
#1	.00065	.00061	.0027	.00785	-.00001	.00294	.00090
#2	.00035	.00037	.0022	.00628	-.00029	.00305	.00044
#3	.00010	.00032	.0021	.00599	-.00011	.00284	.00066

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00103**	**.0006**	**.00005**	**.00014**	**.00740**
#1	.00134	.0003	.00001	.00013	.00728
#2	.00087	.0007	.00001	.00013	.00731
#3	.00087	.0008	.00012	.00018	.00759

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4923.9**	**1163.6**	**1750.4**	**24939.**	**10673.**
#1	4925.6	1171.1	1749.8	25049.	10671.
#2	4926.3	1160.9	1749.4	25038.	10627.
#3	4919.8	1158.8	1752.1	24731.	10719.

Sample Name: SEQ-CAL2@S Acquired: 6/3/2012 11:39:26 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00045**	**.01247**	**.00315**	**.0169**	**.66399**	**.00492**	**.00630**	**.04853**
#1	.00048	.01330	.00349	.0177	.65735	.00482	.00654	.04841
#2	.00049	.01268	.00297	.0171	.66835	.00496	.00623	.04843
#3	.00037	.01142	.00298	.0158	.66626	.00498	.00612	.04875

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.02816**	**.00070**	**.02018**	**.00706**	**.02051**	**.0165**	**.00599**	**.00633**
#1	.02861	.00072	.02025	.00792	.02012	.0180	.00603	.00642
#2	.02795	.00064	.02019	.00674	.02169	.0159	.00589	.00631
#3	.02792	.00072	.02011	.00652	.01973	.0157	.00605	.00626

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0146**	**.06422**	**.03299**	**.01285**	**.00940**	**.00586**	**.0100**	**.00371**
#1	.0146	.06535	.03314	.01370	.00938	.00575	.0100	.00362
#2	.0146	.06272	.03237	.01178	.00888	.00611	.0100	.00362
#3	.0148	.06460	.03347	.01306	.00994	.00572	.0100	.00388

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.00150**	**.15417**
#1	.00151	.15399
#2	.00147	.15484
#3	.00151	.15369

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4909.5**	**1171.9**	**1755.1**	**24720.**	**10677.**
#1	4914.2	1174.7	1753.5	24811.	10710.
#2	4909.1	1171.0	1757.8	24706.	10689.
#3	4905.2	1170.1	1753.9	24643.	10633.

Sample Name: SEQ-CAL3@S Acquired: 6/3/2012 11:43:42 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00766**	**.20460**	**.06961**	**.2243**	**13.002**	**.10024**	**.12204**	**.94478**
#1	.00761	.20274	.06988	.2206	12.802	.09879	.11992	.94633
#2	.00777	.20533	.06928	.2264	13.089	.10103	.12297	.94103
#3	.00759	.20571	.06967	.2260	13.114	.10089	.12323	.94698

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.52646**	**.01366**	**.34881**	**.12736**	**.40466**	**.1925**	**.11427**	**.12150**
#1	.52602	.01344	.34822	.12595	.40025	.1901	.11262	.11976
#2	.52504	.01377	.35001	.12782	.40878	.1943	.11440	.12275
#3	.52831	.01378	.34819	.12833	.40494	.1930	.11579	.12199

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2714**	**1.1713**	**.67556**	**.20009**	**.17385**	**.10280**	**.1887**	**.07381**
#1	.2716	1.1557	.67806	.20129	.17348	.10260	.1885	.07389
#2	.2703	1.1818	.67280	.20049	.17401	.10196	.1888	.07371
#3	.2724	1.1764	.67583	.19849	.17405	.10383	.1887	.07384

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.03034**	**2.9827**
#1	.02993	3.0021
#2	.03061	2.9651
#3	.03050	2.9810

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4740.8**	**1157.3**	**1725.6**	**24589.**	**10621.**
#1	4746.2	1154.5	1725.8	24623.	10653.
#2	4746.0	1161.5	1728.0	24552.	10633.
#3	4730.3	1155.9	1723.1	24593.	10577.

Sample Name: SEQ-CAL4@S Acquired: 6/3/2012 11:47:49 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.01546**	**.40804**	**.14014**	**.4409**	**25.509**	**.20129**	**.24154**	**1.8778**
#1	.01524	.40339	.14122	.4351	25.351	.19819	.23803	1.8778
#2	.01545	.40842	.13949	.4420	25.343	.20227	.24295	1.8748
#3	.01569	.41232	.13972	.4456	25.834	.20341	.24363	1.8809

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.0447**	**.02754**	**.69515**	**.25536**	**.80803**	**.3787**	**.22519**	**.24581**
#1	1.0452	.02728	.69544	.25229	.80122	.3760	.22278	.24232
#2	1.0433	.02751	.69225	.25582	.80800	.3797	.22611	.24625
#3	1.0456	.02785	.69776	.25798	.81488	.3804	.22669	.24886

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.5435**	**2.3654**	**1.3527**	**.39392**	**.34339**	**.20235**	**.3732**	**.14741**
#1	.5450	2.3384	1.3549	.39457	.34366	.20310	.3736	.14773
#2	.5428	2.3684	1.3506	.39465	.34358	.20207	.3726	.14683
#3	.5429	2.3895	1.3525	.39254	.34292	.20189	.3733	.14767

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.06141**	**5.9698**
#1	.06054	5.9646
#2	.06173	5.9690
#3	.06196	5.9758

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4610.8**	**1133.9**	**1706.6**	**24224.**	**10548.**
#1	4617.5	1134.0	1707.0	24200.	10530.
#2	4614.9	1133.8	1706.3	24237.	10553.
#3	4600.0	1134.1	1706.4	24237.	10560.

Sample Name: SEQ-CAL5@S Acquired: 6/3/2012 11:51:55 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

101

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.07578**	**1.9975**	**.71549**	**2.218**	**124.55**	**1.0034**	**1.1949**	**8.9496**
#1	.07539	1.9742	.71727	2.178	121.45	.99357	1.1821	8.9191
#2	.07582	2.0064	.71344	2.229	125.63	1.0068	1.2034	8.9366
#3	.07615	2.0119	.71575	2.245	126.58	1.0097	1.1990	8.9931

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4.9728**	**.13867**	**3.5509**	**1.2273**	**4.0289**	**1.849**	**1.1279**	**1.2169**
#1	4.9555	.13763	3.5619	1.2147	3.9982	1.821	1.1153	1.2077
#2	4.9628	.13873	3.5439	1.2307	4.0372	1.863	1.1384	1.2166
#3	5.0002	.13965	3.5469	1.2364	4.0512	1.863	1.1299	1.2263

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.655**	**11.695**	**6.5149**	**1.8827**	**1.6720**	**.94806**	**1.796**	**.70926**
#1	2.645	11.598	6.5181	1.8833	1.6680	.94377	1.789	.70733
#2	2.650	11.711	6.5078	1.8808	1.6662	.94570	1.792	.70894
#3	2.670	11.777	6.5188	1.8839	1.6816	.95469	1.807	.71151

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.30759**	**28.676**
#1	.30499	28.681
#2	.30791	28.669
#3	.30987	28.678

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4249.0**	**1083.5**	**1667.6**	**23674.**	**10500.**
#1	4258.4	1082.9	1672.7	23618.	10501.
#2	4249.7	1084.2	1671.5	23686.	10470.
#3	4239.0	1083.4	1658.5	23718.	10529.

Sample Name: SEQ-CAL6@S Acquired: 6/3/2012 11:56:04 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.15359**	**4.0286**	**1.4225**	**4.441**	**235.72**	**1.9960**	**2.3309**	**17.296**
#1	.15322	4.0251	1.4243	4.406	233.17	1.9842	2.3289	17.281
#2	.15395	4.0199	1.4143	4.450	234.50	1.9990	2.3213	17.286
#3	.15360	4.0407	1.4289	4.467	239.49	2.0048	2.3424	17.320

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**9.6342**	**.27544**	**7.0116**	**2.4414**	**8.0722**	**3.674**	**2.2200**	**2.4768**
#1	9.6408	.27356	7.0021	2.4381	8.0895	3.669	2.2151	2.4665
#2	9.6320	.27586	7.0344	2.4366	8.0484	3.659	2.2084	2.4844
#3	9.6299	.27689	6.9982	2.4495	8.0786	3.694	2.2365	2.4794

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5.205**	**23.107**	**12.572**	**3.6066**	**3.2963**	**1.8276**	**3.480**	**1.3662**
#1	5.205	22.713	12.599	3.6117	3.3005	1.8293	3.482	1.3649
#2	5.204	23.439	12.502	3.5834	3.2916	1.8267	3.476	1.3637
#3	5.207	23.169	12.616	3.6246	3.2969	1.8268	3.482	1.3700

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.62236**	**54.644**
#1	.61918	54.679
#2	.62355	54.317
#3	.62434	54.936

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3984.1**	**1045.5**	**1615.3**	**23010.**	**10409.**
#1	3989.3	1044.6	1616.1	22952.	10349.
#2	3979.9	1050.7	1616.0	23031.	10467.
#3	3983.0	1041.1	1613.9	23047.	10410.

Sample Name: SEQ-CAL7@S Acquired: 6/3/2012 12:00:25 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Al3961	Ca3181	Fe2382	K_7664	Mg2790	Na5895	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**20.947**	**5.8773**	**10.496**	**12.527**	**5.7986**	**30.028**	**12.617**
#1	20.721	5.8373	10.404	12.461	5.7673	29.587	12.616
#2	21.006	5.8965	10.538	12.531	5.8149	30.350	12.620
#3	21.112	5.8981	10.546	12.589	5.8136	30.146	12.614

Int. Std.	Sc2273	Y_3710
Units	Cts/S	Cts/S
Avg	**903.91**	**10093.**
#1	903.56	10025.
#2	903.33	10114.
#3	904.85	10139.

Sample Name: SEQ-CAL8@S Acquired: 6/3/2012 12:04:49 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Al3961	Ca3181	Fe2382	K_7664	Mg2790	Na5895	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**42.040**	**11.633**	**19.620**	**25.149**	**11.800**	**59.338**	**26.022**
#1	40.478	11.519	19.549	25.179	11.675	58.201	25.868
#2	42.952	11.688	19.651	25.140	11.858	60.373	26.173
#3	42.690	11.692	19.659	25.128	11.866	59.439	26.026

Int. Std.	Sc2273	Y_3710
Units	Cts/S	Cts/S
Avg	**810.28**	**9922.4**
#1	813.97	9939.5
#2	807.74	9931.9
#3	809.12	9895.9

Sample Name: SEQ-CAL9@S Acquired: 6/3/2012 12:09:22 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Cr2677	Cu3247	Fe2382	Mn2576	Pb2203	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.87189**	**14.378**	**12.477**	**5.1288**	**5.0155**	**46.739**
#1	.86001	14.466	12.412	5.0684	5.0462	46.904
#2	.87615	14.325	12.497	5.1432	5.0092	46.688
#3	.87951	14.344	12.523	5.1747	4.9910	46.624

Int. Std.	Sc2273	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**1101.6**	**24300.**	**10564.**
#1	1098.3	24296.	10500.
#2	1103.3	24291.	10579.
#3	1103.3	24313.	10612.

Sample Name: SEQ-CALA@S Acquired: 6/3/2012 12:13:47 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	As1890	Cr2677	Cu3247	Fe2382	Mn2576	Pb2203	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.9669**	**1.7474**	**28.445**	**23.528**	**10.300**	**10.231**	**92.233**
#1	2.9762	1.7220	28.192	22.763	10.167	10.259	92.575
#2	2.9562	1.7612	28.669	24.046	10.361	10.197	92.092
#3	2.9681	1.7589	28.475	23.774	10.373	10.236	92.032

Int. Std.	Sc2273	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**1043.6**	**23937.**	**10418.**
#1	1041.5	24058.	10408.
#2	1045.0	23832.	10421.
#3	1044.4	23921.	10426.

Sample Name: SEQ-ICV@ICV01 Acquired: 6/3/2012 12:18:16 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**513.84**	**2544.9**	**992.83**	**-.9348**	**545.53**	**506.50**	**10880.**	**541.42**
Stddev	4.85	15.0	2.08	.2673	2.38	2.87	30.	.83
%RSD	.94414	.58882	.20917	28.60	.43564	.56754	.27879	.15366
#1	509.43	2562.0	994.44	-1.039	546.54	504.67	10912.	541.35
#2	513.06	2534.4	993.57	-1.134	542.81	505.01	10851.	540.63
#3	519.04	2538.2	990.48	-.6311	547.23	509.81	10876.	542.29

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**544.67**	**508.25**	**503.19**	**5518.5**	**10161.**	**-.0035**	**6032.8**	**516.18**
Stddev	1.75	2.01	2.47	33.8	42.	.1913	16.2	.80
%RSD	.32126	.39610	.49151	.61218	.41110	5433.	.26925	.15437
#1	543.55	507.30	502.48	5557.3	10202.	-.1943	6051.4	515.26
#2	543.77	506.89	501.14	5502.5	10118.	.1884	6021.1	516.61
#3	546.68	510.56	505.94	5495.7	10164.	-.0047	6026.0	516.67

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.5045**	**10433.**	**539.10**	**997.96**	**1036.8**	**1081.7**	F **-.5182**	**1103.0**
Stddev	.0336	45.	.58	1.96	2.0	2.2	.1457	2.2
%RSD	6.668	.42680	.10691	.19621	.19449	.20225	28.13	.19776
#1	-.5248	10471.	539.76	999.81	1034.9	1082.7	-.3627	1104.9
#2	-.4657	10384.	538.73	998.16	1036.7	1079.2	-.5401	1103.5
#3	-.5230	10443.	538.81	995.91	1038.9	1083.2	-.6517	1100.6

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**508.07**	**1056.6**
Stddev	2.69	2.3
%RSD	.53023	.22030
#1	507.32	1059.3
#2	505.83	1055.4
#3	511.06	1055.2

Sample Name: SEQ-ICV@ICV01 Acquired: 6/3/2012 12:18:16 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4717.7**	**1169.0**	**1752.9**	**24670.**	**10575.**
Stddev	8.8	.8	3.9	57.	80.
%RSD	.18658	.07092	.22395	.23139	.75761
#1	4726.8	1169.6	1757.0	24605.	10483.
#2	4717.2	1169.4	1752.5	24712.	10611.
#3	4709.2	1168.1	1749.1	24694.	10630.

Sample Name: SEQ-ICB@ICB01 Acquired: 6/3/2012 12:22:18 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.0858**	**.48499**	**.38594**	**-.9932**	**-.26603**	**.07385**	**-2.5184**	**.00058**
Stddev	.6698	8.7238	.52258	.2193	.37647	.03415	10.624	.03893
%RSD	61.682	1798.7	135.41	22.08	141.52	46.244	421.85	6765.8
#1	.92213	10.556	.08061	-.9595	.16861	.07649	7.1737	.04513
#2	.51310	-4.3672	.08786	-1.227	-.47679	.10661	-13.877	-.02685
#3	1.8223	-4.7340	.98934	-.7926	-.48990	.03846	-.8519	-.01656

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.05206**	**-.69211**	**1.0953**	**.76290**	**75.789**	**-.1017**	**2.5254**	**.07866**
Stddev	.07837	1.1240	.0783	12.644	10.604	.2313	6.8851	.39494
%RSD	150.55	162.41	7.1529	1657.4	13.992	227.4	272.63	502.08
#1	-.03234	.21683	1.0075	15.362	85.427	-.2386	10.338	.53447
#2	.06598	-.34419	1.1203	-6.6356	64.430	.1653	-2.6583	-.13690
#3	.12254	-1.9490	1.1581	-6.4382	77.510	-.2318	-.10299	-.16159

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.3075**	**21.986**	**-.28432**	**.43344**	**.49488**	**-.06573**	**-.0620**	**.17323**
Stddev	.1527	2.927	.21997	1.2197	.64966	.47920	.3204	.44214
%RSD	49.66	13.313	77.370	281.40	131.28	729.02	516.5	255.24
#1	-.3484	25.353	-.05245	.44691	1.1069	.30443	.3047	-.31317
#2	-.1385	20.554	-.49007	1.6463	-.18681	.10537	-.2879	.28206
#3	-.4357	20.050	-.31042	-.79293	.56453	-.60700	-.2029	.55078

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**-.45648**	**.41181**
Stddev	.55316	.06994
%RSD	121.18	16.984
#1	-.98679	.46041
#2	-.49965	.33165
#3	.11700	.44336

Sample Name: SEQ-ICB@ICB01 Acquired: 6/3/2012 12:22:18 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4916.4**	**1218.4**	**1780.7**	**25252.**	**10695.**
Stddev	2.2	2.1	1.3	83.	38.
%RSD	.04488	.17303	.07275	.32895	.35973
#1	4916.2	1219.3	1780.7	25296.	10689.
#2	4914.2	1219.9	1782.1	25305.	10660.
#3	4918.6	1216.0	1779.5	25156.	10736.

Sample Name: SEQ-IFA@ICSA01 Acquired: 6/3/2012 12:26:34 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.2841**	**246780.**	**-1.7512**	**15.83**	**.00025**	**.69980**	**263220.**
Stddev	1.6426	5355.	.5268	1.55	.25006	.02864	3309.
%RSD	127.91	2.1698	30.084	9.768	98491.	4.0929	1.2571
#1	2.2375	241240.	-1.1786	14.14	.28850	.66819	259770.
#2	-.61255	247150.	-1.8596	16.17	-.15853	.70718	263500.
#3	2.2275	251930.	-2.2153	17.17	-.12921	.72403	266370.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.3387**	**4.4267**	**41.953**	**22.229**	**100170.**	**86.977**	**1.573**
Stddev	.0693	.0602	.318	.055	1243.	12.038	.363
%RSD	5.1759	1.3596	.75816	.24586	1.2410	13.841	23.10
#1	-1.2951	4.4944	41.754	22.172	98979.	73.206	1.786
#2	-1.4186	4.4064	41.785	22.233	100070.	95.503	1.779
#3	-1.3024	4.3792	42.320	22.281	101460.	92.223	1.153

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**259610.**	**24.152**	**-.2022**	**847.03**	**20.940**	**6.1941**	**4.1957**
Stddev	3891.	.096	.0853	6.11	.151	2.0653	.6973
%RSD	1.4989	.39751	42.19	.72152	.72083	33.344	16.620
#1	255690.	24.150	-.1486	841.89	20.880	8.1516	4.9146
#2	259670.	24.056	-.1574	845.42	21.111	4.0356	3.5222
#3	263470.	24.248	-.3005	853.79	20.828	6.3952	4.1503

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**2.2791**	**.9649**	**2.3610**	**-1.9167**	**34.761**
Stddev	2.2624	.2810	.1729	.4851	.218
%RSD	99.267	29.12	7.3226	25.310	.62808
#1	.84090	.8975	2.5369	-2.2624	34.524
#2	4.8869	.7238	2.1914	-1.3621	34.803
#3	1.1095	1.273	2.3546	-2.1255	34.955

Sample Name: SEQ-IFA@ICSA01 Acquired: 6/3/2012 12:26:34 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3889.1**	**950.88**	**1624.5**	**22729.**	**10441.**
Stddev	7.2	4.68	3.3	23.	70.
%RSD	.18554	.49180	.20109	.10096	.66838
#1	3884.7	955.67	1627.6	22705.	10437.
#2	3897.4	946.33	1624.7	22731.	10513.
#3	3885.2	950.62	1621.1	22751.	10373.

Sample Name: SEQ-IFB@ICSAB01 Acquired: 6/3/2012 12:30:56 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**217.76**	**245350.**	**109.77**	**19.08**	**538.37**	**535.03**	**261720.**
Stddev	3.46	4164.	3.29	.75	7.87	6.81	3356.
%RSD	1.5910	1.6970	2.9934	3.950	1.4620	1.2737	1.2824
#1	213.78	240580.	109.15	18.50	529.28	527.25	257950.
#2	220.08	248260.	106.83	19.93	542.65	537.93	264370.
#3	219.42	247220.	113.32	18.81	543.16	539.92	262850.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1011.8**	**502.87**	**554.55**	**538.82**	**99330.**	**70.857**	**1.489**
Stddev	2.1	.97	9.76	1.93	738.	12.488	.810
%RSD	.21186	.19370	1.7597	.35887	.74285	17.624	54.41
#1	1010.2	501.74	543.28	537.94	98529.	85.265	2.284
#2	1011.0	503.46	560.41	541.04	99478.	63.142	1.519
#3	1014.3	503.39	559.96	537.48	99983.	64.165	.6643

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**260130.**	**544.39**	**-.4813**	**834.54**	**1158.7**	**57.238**	**623.60**
Stddev	4142.	3.53	.0695	8.10	5.5	.465	4.55
%RSD	1.5923	.64764	14.44	.97019	.47603	.81235	.72910
#1	255560.	541.49	-.5550	825.19	1155.3	57.434	619.02
#2	263630.	543.36	-.4720	839.17	1155.7	57.573	623.66
#3	261210.	548.31	-.4170	839.26	1165.0	56.707	628.12

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**56.052**	**1.131**	**106.83**	**520.94**	**1150.9**
Stddev	.708	.461	1.11	4.45	3.8
%RSD	1.2633	40.73	1.0375	.85349	.32967
#1	55.752	.6108	105.96	517.30	1149.1
#2	55.543	1.488	106.46	519.61	1148.3
#3	56.861	1.294	108.08	525.90	1155.3

Sample Name: SEQ-IFB@ICSAB01 Acquired: 6/3/2012 12:30:56 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3935.2**	**947.89**	**1627.9**	**22887.**	**10519.**
Stddev	8.2	4.25	4.0	40.	43.
%RSD	.20750	.44864	.24603	.17665	.41267
#1	3942.7	950.80	1631.8	22932.	10539.
#2	3936.3	949.86	1628.3	22853.	10470.
#3	3926.5	943.01	1623.8	22876.	10550.

Sample Name: SEQ-CCV@CCV01 Acquired: 6/3/2012 12:35:12 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**996.18**	**19105.**	**1993.5**	**1996.**	**16489.**	**409.98**	**51890.**	**1027.1**
Stddev	10.86	102.	4.6	20.	479.	4.14	365.	1.4
%RSD	1.0905	.53571	.22904	1.021	2.9074	1.0095	.70376	.13995
#1	983.64	19002.	1998.6	1974.	15939.	405.37	51474.	1026.7
#2	1002.2	19108.	1992.3	2015.	16818.	413.38	52043.	1028.7
#3	1002.7	19206.	1989.7	2000.	16710.	411.18	52154.	1025.9

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2531.1**	**2018.9**	**5048.6**	**20266.**	**48695.**	**1006.**	**49791.**	**3034.6**
Stddev	4.2	26.0	22.5	163.	81.	3.	353.	32.4
%RSD	.16625	1.2872	.44568	.80262	.16627	.2812	.70840	1.0684
#1	2527.1	1989.2	5022.7	20086.	48705.	1003.	49388.	2997.3
#2	2535.5	2037.9	5063.0	20313.	48610.	1007.	49941.	3055.8
#3	2530.8	2029.4	5060.1	20401.	48771.	1008.	50044.	3050.7

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1009.**	**49417.**	**4115.6**	**1879.2**	**4031.4**	**3567.5**	**2042.**	**4091.4**
Stddev	2.	148.	11.1	3.9	12.4	6.4	4.	8.3
%RSD	.2025	.29858	.27081	.20988	.30884	.17958	.2133	.20260
#1	1006.	49265.	4128.3	1883.7	4017.6	3560.2	2038.	4081.8
#2	1010.	49427.	4107.5	1876.4	4034.9	3571.8	2047.	4096.7
#3	1009.	49560.	4111.1	1877.5	4041.7	3570.6	2042.	4095.6

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**4028.8**	**8078.6**
Stddev	44.1	38.9
%RSD	1.0947	.48203
#1	3978.8	8123.2
#2	4062.0	8061.6
#3	4045.8	8051.1

Sample Name: SEQ-CCV@CCV01 Acquired: 6/3/2012 12:35:12 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4329.9**	**1100.4**	**1705.5**	**23767.**	**10582.**
Stddev	6.6	2.3	3.6	48.	37.
%RSD	.15349	.21021	.21039	.20062	.34554
#1	4336.3	1098.1	1709.6	23817.	10556.
#2	4330.4	1102.7	1703.5	23723.	10624.
#3	4323.0	1100.4	1703.4	23760.	10567.

Sample Name: SEQ-CCB@CCB01 Acquired: 6/3/2012 12:39:20 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.46201**	**-.42819**	**-.15113**	**1.150**	**1.0157**	**.06419**	**5.3065**	**.06189**
Stddev	1.2400	11.314	1.8989	.422	.8639	.04358	7.7275	.04847
%RSD	268.39	2642.4	1256.5	36.65	85.055	67.897	145.62	78.324
#1	1.8840	12.561	.41730	1.551	1.9535	.09250	13.418	.10801
#2	-.39403	-5.7100	-2.2694	.7102	.84117	.01400	4.4698	.01136
#3	-.10391	-8.1358	1.3987	1.191	.25237	.08608	-1.9686	.06629

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.15030**	**-.18228**	**.76063**	**5.7304**	**63.040**	**-.0277**	**14.096**	**.51302**
Stddev	.08758	.71795	.31081	13.343	9.349	.5347	19.382	.53963
%RSD	58.268	393.87	40.862	232.85	14.830	1928.	137.50	105.19
#1	.16014	.61857	1.1179	20.930	66.112	-.4154	36.273	1.1282
#2	.05821	-.39715	.61125	.31522	52.541	-.2500	5.6137	.29103
#3	.23253	-.76826	.55272	-4.0543	70.466	.5822	.40049	.11980

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.5799**	**18.727**	**-.26707**	**.17858**	**.67613**	**.35629**	**.1584**	**1.0934**
Stddev	.2485	7.332	.16010	.22999	.51606	.61206	.2084	.2096
%RSD	42.85	39.155	59.946	128.79	76.326	171.79	131.6	19.173
#1	.8508	27.189	-.11143	-.04285	.94489	.87300	.1942	1.3348
#2	.5264	14.745	-.43129	.41626	.08116	-.31966	-.0656	.98782
#3	.3625	14.246	-.25851	.16233	1.0023	.51551	.3466	.95756

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**-.43021**	**.34079**
Stddev	.58562	.04583
%RSD	136.12	13.447
#1	-.32991	.29984
#2	.09877	.39029
#3	-1.0595	.33224

Sample Name: SEQ-CCB@CCB01 Acquired: 6/3/2012 12:39:20 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4979.5**	**1221.7**	**1803.7**	**25343.**	**10833.**
Stddev	14.4	4.5	8.7	70.	30.
%RSD	.28982	.36539	.48510	.27476	.27942
#1	4990.0	1226.8	1811.6	25316.	10858.
#2	4985.5	1219.5	1805.1	25422.	10800.
#3	4963.1	1218.7	1794.3	25291.	10842.

Sample Name: SEQ-CCV@CCV02 Acquired: 6/3/2012 12:52:30 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1032.0**	**19715.**	**2076.7**	**2073.**	**17130.**	**422.59**	**53063.**	**1061.2**
Stddev	6.7	243.	5.3	20.	579.	3.19	853.	3.9
%RSD	.64474	1.2331	.25358	.9556	3.3791	.75387	1.6073	.36657
#1	1032.2	19439.	2074.1	2051.	16573.	419.14	52089.	1058.0
#2	1038.6	19897.	2073.3	2079.	17087.	425.43	53420.	1060.1
#3	1025.3	19809.	2082.8	2089.	17728.	423.20	53679.	1065.6

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2621.1**	**2073.5**	**5187.4**	**20859.**	**50306.**	**1039.**	**50717.**	**3135.0**
Stddev	10.5	19.6	9.7	192.	422.	15.	1054.	17.8
%RSD	.39949	.94431	.18795	.92040	.83952	1.481	2.0789	.56856
#1	2611.6	2051.0	5178.5	20639.	49854.	1021.	49510.	3131.3
#2	2619.5	2086.9	5186.0	20993.	50691.	1049.	51181.	3154.4
#3	2632.3	2082.6	5197.8	20945.	50372.	1046.	51460.	3119.4

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1044.**	**51218.**	**4263.7**	**1945.7**	**4194.0**	**3706.5**	**2122.**	**4236.2**
Stddev	5.	391.	14.6	8.6	21.8	18.6	10.	10.4
%RSD	.5186	.76255	.34158	.44214	.52022	.50257	.4825	.24570
#1	1041.	50869.	4271.6	1948.5	4182.4	3695.5	2114.	4238.3
#2	1042.	51640.	4246.9	1936.1	4180.4	3696.1	2118.	4224.9
#3	1051.	51146.	4272.6	1952.7	4219.2	3728.0	2133.	4245.4

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**4158.2**	**8350.9**
Stddev	25.7	27.3
%RSD	.61881	.32670
#1	4145.3	8358.1
#2	4187.9	8320.8
#3	4141.5	8373.9

Sample Name: SEQ-CCV@CCV02 Acquired: 6/3/2012 12:52:30 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4303.8**	**1094.1**	**1697.9**	**23839.**	**10641.**
Stddev	2.3	3.2	5.1	34.	94.
%RSD	.05457	.29314	.29790	.14147	.88215
#1	4301.1	1091.7	1701.1	23842.	10748.
#2	4305.7	1097.8	1700.5	23804.	10603.
#3	4304.5	1092.9	1692.1	23871.	10573.

Sample Name: SEQ-CCB@CCB02 Acquired: 6/3/2012 12:56:43 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.4774**	**4.2490**	**.46491**	**1.959**	**4.8744**	**.10616**	**17.846**	**.36658**
Stddev	1.2580	4.8005	1.0981	.409	.5268	.03858	11.974	.04871
%RSD	85.152	112.98	236.20	20.90	10.807	36.344	67.097	13.288
#1	2.7003	9.7592	1.1346	1.993	5.4590	.15043	30.867	.37706
#2	.18699	.97073	1.0626	2.351	4.7272	.07967	7.3091	.40919
#3	1.5449	2.0171	-.80240	1.534	4.4369	.08838	15.361	.31348

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.95309**	**.25152**	**1.1099**	**3.0509**	**103.79**	**.4227**	**18.636**	**.84208**
Stddev	.08935	1.3959	.1946	11.050	1.65	.8352	6.186	.27663
%RSD	9.3750	555.01	17.530	362.19	1.5926	197.6	33.192	32.850
#1	1.0504	1.3270	1.1051	15.801	105.70	.9607	25.611	1.1464
#2	.87467	-1.3260	.91773	-3.7415	102.89	.8468	16.484	.60581
#3	.93423	.75361	1.3068	-2.9070	102.78	-.5394	13.814	.77406

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.9780**	**45.066**	**1.3337**	**-.01050**	**1.3989**	**2.4526**	**1.109**	**2.5122**
Stddev	.2023	6.231	.0862	.68128	1.2316	.2474	.268	.1332
%RSD	20.68	13.826	6.4601	6491.1	88.037	10.086	24.19	5.3025
#1	1.211	51.777	1.4051	.77554	2.3180	2.2567	1.349	2.6645
#2	.8702	43.955	1.3580	-.43091	-.00042	2.3704	1.160	2.4172
#3	.8524	39.465	1.2380	-.37612	1.8792	2.7306	.8195	2.4550

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.85056**	**2.7996**
Stddev	.59441	.2121
%RSD	69.885	7.5773
#1	.66909	2.6848
#2	1.5146	3.0444
#3	.36804	2.6696

Sample Name: SEQ-CCB@CCB02 Acquired: 6/3/2012 12:56:43 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4974.7**	**1210.0**	**1799.9**	**25207.**	**10857.**
Stddev	18.3	5.1	5.9	80.	37.
%RSD	.36875	.42545	.32606	.31802	.34406
#1	4987.8	1211.1	1805.2	25151.	10868.
#2	4982.5	1214.6	1801.0	25171.	10816.
#3	4953.7	1204.4	1793.6	25299.	10888.

Sample Name: SEQ-CCV@CCV03 Acquired: 6/3/2012 13:18:40 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1035.9**	**19817.**	**2102.3**	**2095.**	**17069.**	**431.19**	**54041.**	**1076.0**
Stddev	3.5	183.	5.8	21.	473.	2.80	549.	2.5
%RSD	.34133	.92444	.27799	1.011	2.7737	.65032	1.0160	.23456
#1	1031.9	19611.	2106.5	2071.	16524.	427.95	53414.	1075.6
#2	1037.8	19880.	2104.8	2113.	17308.	432.95	54274.	1078.7
#3	1038.2	19960.	2095.6	2100.	17376.	432.66	54436.	1073.7

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2644.4**	**2109.6**	**5335.1**	**20880.**	**50551.**	**1052.**	**52265.**	**3146.2**
Stddev	8.2	16.0	24.4	180.	162.	7.	459.	14.8
%RSD	.31084	.75686	.45686	.86402	.31968	.6305	.87907	.46928
#1	2635.6	2091.4	5349.5	20694.	50388.	1045.	51737.	3130.5
#2	2651.9	2121.4	5307.0	20892.	50555.	1054.	52487.	3148.4
#3	2645.8	2116.0	5349.0	21055.	50711.	1058.	52572.	3159.7

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1057.**	**50973.**	**4329.0**	**1977.2**	**4236.5**	**3734.8**	**2149.**	**4284.3**
Stddev	2.	208.	11.3	7.6	6.7	11.6	5.	14.4
%RSD	.2100	.40891	.26141	.38397	.15837	.31149	.2123	.33595
#1	1055.	50753.	4339.2	1982.2	4233.0	3727.1	2148.	4268.4
#2	1059.	51001.	4331.0	1981.0	4244.3	3748.2	2154.	4296.4
#3	1058.	51167.	4316.8	1968.5	4232.3	3729.2	2145.	4288.2

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**4192.4**	**8516.4**
Stddev	23.4	38.6
%RSD	.55902	.45295
#1	4165.6	8547.4
#2	4202.3	8528.5
#3	4209.3	8473.2

Sample Name: SEQ-CCV@CCV03 Acquired: 6/3/2012 13:18:40 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4282.7**	**1083.6**	**1684.9**	**23448.**	**10482.**
Stddev	15.0	2.3	1.1	77.	25.
%RSD	.35008	.20911	.06757	.32969	.24288
#1	4299.4	1081.2	1686.0	23361.	10467.
#2	4278.1	1083.9	1683.7	23509.	10512.
#3	4270.5	1085.6	1685.1	23473.	10468.

Sample Name: SEQ-CCB@CCB03 Acquired: 6/3/2012 13:22:52 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.22286**	**1.3233**	**.33789**	**2.508**	**4.9691**	**.11418**	**22.588**	**.40231**
Stddev	1.6310	6.4798	.49201	.736	.6690	.02341	2.014	.04369
%RSD	731.82	489.67	145.61	29.35	13.464	20.498	8.9162	10.860
#1	-.79043	8.3881	-.03453	3.185	5.6984	.11861	21.087	.35246
#2	-.64526	-.07511	.15255	2.615	4.8250	.08888	24.877	.42049
#3	2.1043	-4.3431	.89566	1.724	4.3838	.13506	21.800	.43398

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.0952**	**-.14200**	**1.2015**	**2.9180**	**98.259**	**-.0567**	**15.226**	**.89680**
Stddev	.1980	.61887	.1593	13.502	7.968	.3925	5.645	.45049
%RSD	18.079	435.82	13.262	462.72	8.1089	692.5	37.074	50.234
#1	.88929	.40483	1.0225	18.500	97.741	-.4684	21.420	1.4132
#2	1.2842	-.01699	1.2544	-4.4197	106.47	.3132	13.886	.69260
#3	1.1120	-.81383	1.3277	-5.3266	90.563	-.0149	10.371	.58456

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.080**	**50.726**	**1.7709**	**.85680**	**1.7566**	**2.1831**	**1.151**	**3.0091**
Stddev	.089	3.140	.3047	.70851	.8789	.5720	.269	.6562
%RSD	8.287	6.1901	17.205	82.692	50.034	26.203	23.37	21.807
#1	1.133	53.247	1.4639	.37306	2.5626	2.2433	.9090	3.6145
#2	1.131	51.723	2.0733	1.6701	.81954	2.7227	1.103	3.1011
#3	.9770	47.209	1.7754	.52729	1.8877	1.5834	1.441	2.3118

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**1.1169**	**3.3153**
Stddev	1.2076	.2804
%RSD	108.12	8.4591
#1	.43931	3.0475
#2	2.5112	3.6069
#3	.40028	3.2916

Sample Name: SEQ-CCB@CCB03 Acquired: 6/3/2012 13:22:52 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4964.0**	**1205.6**	**1794.8**	**25129.**	**10774.**
Stddev	3.7	1.0	1.2	43.	23.
%RSD	.07416	.07943	.06814	.16995	.21717
#1	4967.5	1206.6	1794.0	25143.	10778.
#2	4960.2	1205.6	1796.2	25081.	10749.
#3	4964.4	1204.7	1794.3	25163.	10796.

Sample Name: 2052220-BLK1 Acquired: 6/3/2012 13:27:11 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: PBS01 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.9605**	**-2.4679**	**-2.2766**	**-.2050**	**-2.4251**	**-.03057**	**9.1262**	**-.27052**
Stddev	.1894	6.0546	.9498	.3146	.4125	.01609	3.5585	.03477
%RSD	9.6596	245.33	41.720	153.5	17.008	52.641	38.992	12.854
#1	1.7437	4.3219	-1.9216	.1541	-1.9779	-.04860	12.102	-.28379
#2	2.0443	-7.3057	-1.5554	-.3372	-2.5069	-.01768	5.1844	-.29670
#3	2.0936	-4.4200	-3.3527	-.4319	-2.7906	-.02542	10.092	-.23107

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.70546**	**.42763**	**-1.0609**	**-7.3196**	**54.995**	**-.6795**	**-5.2039**	**-.31837**
Stddev	.17501	.20138	.0571	11.921	16.661	.5400	9.2966	.35884
%RSD	24.808	47.093	5.3851	162.87	30.294	79.46	178.65	112.71
#1	-.60088	.19669	-1.0026	6.3114	67.564	-.4990	4.9241	.07746
#2	-.60799	.51958	-1.0632	-12.472	61.325	-.2530	-7.1867	-.41022
#3	-.90750	.56663	-1.1168	-15.798	36.098	-1.287	-13.349	-.62236

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.1605**	**23.105**	**-1.0075**	**.14812**	**.77731**	**1.7312**	**5.584**	**-2.8781**
Stddev	.0971	4.173	.1574	1.0719	.70586	1.2345	.298	.3118
%RSD	60.52	18.060	15.626	723.66	90.808	71.313	5.331	10.835
#1	-.0842	26.882	-.82617	1.3511	-.01365	3.1401	5.727	-2.7329
#2	-.2699	23.807	-1.1090	-.70547	1.3432	1.2142	5.784	-2.6653
#3	-.1275	18.626	-1.0874	-.20128	1.0024	.83911	5.242	-3.2360

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**-1.1602**	**.78656**
Stddev	.5966	.04751
%RSD	51.421	6.0400
#1	-1.8131	.73172
#2	-.64341	.81538
#3	-1.0242	.81257

Sample Name: 2052220-BLK1 Acquired: 6/3/2012 13:27:11 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: PBS01 SDG: MF5WA4 CASE: 42562
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4948.7**	**1148.3**	**1780.5**	**25526.**	**10824.**
Stddev	5.7	4.5	2.0	70.	26.
%RSD	.11435	.39225	.10999	.27539	.23746
#1	4950.9	1143.2	1778.6	25454.	10795.
#2	4952.9	1149.9	1780.3	25532.	10836.
#3	4942.3	1151.7	1782.5	25594.	10842.

Sample Name: 2052220-BS1 Acquired: 6/3/2012 13:31:29 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: LCS01 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**16.542**	**364.24**	**16.131**	**-1.015**	**402.86**	**9.4713**	**10039.**	**9.6704**
Stddev	.158	9.64	1.071	1.011	6.41	.0799	169.	.0723
%RSD	.95594	2.6479	6.6409	99.66	1.5922	.84354	1.6803	.74817
#1	16.655	353.47	16.735	-.5908	395.62	9.4082	9844.8	9.6796
#2	16.361	367.15	14.895	-.2845	405.16	9.4445	10119.	9.5939
#3	16.610	372.09	16.765	-2.169	407.82	9.5611	10152.	9.7378

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**100.19**	**17.671**	**45.881**	**189.66**	**9324.6**	**-.4988**	**9263.3**	**28.031**
Stddev	.35	.162	.386	6.27	149.3	.9093	135.7	.190
%RSD	.34955	.91402	.84054	3.3049	1.6009	182.3	1.4649	.67682
#1	100.45	17.679	45.515	196.89	9154.2	-.5227	9108.0	27.831
#2	99.792	17.506	45.844	185.76	9387.2	.4221	9322.9	28.054
#3	100.33	17.829	46.283	186.32	9432.3	-1.396	9359.0	28.209

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.2920**	**9552.5**	**82.553**	**19.657**	**113.53**	**64.250**	**5.104**	**46.227**
Stddev	.1618	152.2	.405	.550	.67	.766	.025	.765
%RSD	55.42	1.5932	.49001	2.7975	.58953	1.1922	.4908	1.6541
#1	-.2544	9381.5	83.017	20.285	113.35	64.928	5.131	45.570
#2	-.1523	9603.2	82.273	19.262	112.96	64.402	5.082	46.044
#3	-.4693	9672.9	82.369	19.423	114.26	63.419	5.097	47.067

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**94.235**	**119.69**
Stddev	1.225	.52
%RSD	1.2998	.43277
#1	93.028	120.29
#2	94.199	119.46
#3	95.477	119.33

Sample Name: 2052220-BS1 Acquired: 6/3/2012 13:31:29 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: LCS01 SDG: MF5WA4 CASE: 42562
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4750.8**	**1114.9**	**1756.7**	**25035.**	**10799.**
Stddev	8.9	3.9	5.8	53.	49.
%RSD	.18689	.34687	.32817	.21181	.45330
#1	4748.4	1110.4	1753.0	25026.	10853.
#2	4760.7	1117.2	1763.3	25092.	10758.
#3	4743.4	1117.1	1753.8	24987.	10786.

Sample Name: 1205240-01 Acquired: 6/3/2012 13:35:43 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA4 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**47.435**	**225190.**	**43.085**	**95.57**	**1053.3**	**6.4612**
#1	47.464	220780.	43.383	91.43	1042.8	6.3692
#2	47.697	226060.	44.120	97.16	1058.3	6.5057
#3	47.144	228730.	41.750	98.13	1058.9	6.5088

Elem	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2382
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F **632740.**	**.01397**	**66.758**	**208.08**	**84.726**	**132790.**
#1	626530.	-.01618	66.795	205.91	84.090	132230.
#2	636560.	.01222	66.654	208.44	85.437	133160.
#3	635110.	.04587	66.825	209.89	84.651	132980.

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**20895.**	**139.7**	**24175.**	**4672.9**	**-1.332**	**483.96**
#1	20842.	138.6	23895.	4621.9	-1.584	484.10
#2	20942.	140.2	24325.	4695.1	-1.318	486.01
#3	20903.	140.4	24306.	4701.9	-1.093	481.77

Elem	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**171.88**	**120.42**	**4.5607**	**7.6021**	**8.763**	**-.83877**
#1	170.65	121.51	5.0567	8.5403	8.573	-1.2246
#2	173.05	119.99	5.0282	8.1687	8.724	-.82806
#3	171.95	119.75	3.5972	6.0974	8.991	-.46361

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**459.76**	**605.16**
#1	454.21	603.16
#2	464.10	605.22
#3	460.97	607.09

Sample Name: 1205240-01 Acquired: 6/3/2012 13:35:43 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA4 SDG: MF5WA4 CASE: 42562
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3800.0**	**929.17**	**2047.9**	**28169.**	**13252.**
#1	3804.9	929.74	2049.4	28242.	13202.
#2	3799.6	929.86	2050.9	28100.	13254.
#3	3795.5	927.89	2043.4	28166.	13301.

Sample Name: 1205240-02 Acquired: 6/3/2012 13:40:02 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA5 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**596.75**	**141770.**	**43.043**	**101.9**	**940.02**	**3.5294**	**463200.**
#1	590.61	140080.	42.925	99.19	931.34	3.5309	459130.
#2	592.68	142030.	42.869	103.5	943.28	3.4877	465670.
#3	606.96	143190.	43.335	103.1	945.45	3.5697	464820.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**8.1875**	**306.79**	**352.40**	**407.36**	**115790.**	**18883.**	**109.8**
#1	8.1475	306.51	347.17	409.15	114370.	18678.	108.4
#2	8.2237	306.57	351.65	405.13	116200.	18957.	109.9
#3	8.1914	307.30	358.38	407.79	116790.	19013.	111.3

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**17864.**	**3825.5**	**3.784**	**724.46**	**148.95**	**1958.2**	**16.014**
#1	17698.	3766.2	3.876	720.96	148.54	1959.4	17.076
#2	18045.	3814.8	3.738	724.34	148.55	1956.9	16.022
#3	17849.	3895.6	3.739	728.07	149.75	1958.2	14.945

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**6.5180**	**28.04**	**-2.4485**	**307.52**	**11231.**
#1	6.7590	27.44	-2.3090	302.72	11224.
#2	5.8424	28.15	-1.2510	307.69	11213.
#3	6.9527	28.53	-3.7856	312.15	11255.

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3994.2**	**957.59**	**1988.9**	**27494.**	**12945.**
#1	3993.9	957.54	1992.5	27451.	12883.
#2	3997.3	956.52	1985.6	27581.	12913.
#3	3991.3	958.71	1988.7	27449.	13040.

Sample Name: 1205240-03 Acquired: 6/3/2012 13:44:09 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA6 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**77.852**	**167710.**	**53.060**	**99.95**	**846.06**	**5.4349**
#1	78.665	165090.	54.015	99.43	835.21	5.3844
#2	76.566	169550.	51.029	98.81	853.14	5.3975
#3	78.327	168490.	54.137	101.6	849.83	5.5229

Elem	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2382
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F **584960.**	**1.7385**	**62.798**	**201.27**	**91.387**	**132750.**
#1	576010.	1.8512	62.602	198.89	90.437	130350.
#2	590070.	1.6604	62.898	199.92	91.375	134180.
#3	588810.	1.7039	62.893	205.01	92.349	133710.

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**17277.**	**111.3**	**21112.**	**4342.3**	**.0775**	**545.85**
#1	17068.	110.1	20815.	4278.3	.1709	538.32
#2	17459.	112.5	21287.	4346.5	.1145	552.01
#3	17304.	111.3	21235.	4402.0	-.0529	547.21

Elem	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**158.79**	**142.78**	**3.7125**	**7.5208**	**8.681**	**-2.0515**
#1	158.90	142.82	3.3489	7.3623	8.737	-2.5728
#2	159.09	143.47	4.2722	7.1644	8.556	-1.1497
#3	158.38	142.04	3.5164	8.0359	8.750	-2.4321

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**381.54**	**890.05**
#1	375.66	885.99
#2	381.69	890.68
#3	387.26	893.47

Sample Name: 1205240-03 Acquired: 6/3/2012 13:44:09 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA6 SDG: MF5WA4 CASE: 42562
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3898.6**	**936.34**	**1996.5**	**27486.**	**12831.**
#1	3902.9	938.82	2003.4	27465.	12846.
#2	3895.2	933.81	1991.9	27638.	12771.
#3	3897.7	936.40	1994.3	27356.	12876.

Sample Name: 1205240-04 Acquired: 6/3/2012 13:48:19 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA7 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**3.9874**	**176570.**	**46.841**	**264.0**	**793.24**	**6.0022**	**43740.**
#1	4.3130	175190.	46.007	252.6	782.86	5.8629	43157.
#2	4.1074	178120.	47.586	263.8	796.92	6.0471	44027.
#3	3.5419	176400.	46.929	275.7	799.93	6.0966	44035.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.74958**	**52.908**	**293.72**	**195.81**	**255230.**	**15837.**	**104.3**
#1	.78688	53.046	289.87	197.12	256900.	15730.	103.0
#2	.56209	52.876	294.65	195.35	257580.	15881.	104.8
#3	.89976	52.804	296.62	194.96	251200.	15899.	105.1

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**20157.**	**2629.3**	**-.3884**	**230.41**	**181.27**	**585.27**	**10.579**
#1	19830.	2589.8	-.3989	230.26	180.99	583.60	10.474
#2	20326.	2639.7	-.3141	228.63	181.37	585.92	10.468
#3	20315.	2658.6	-.4521	232.34	181.44	586.28	10.796

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**9.9479**	**11.87**	**-1.6848**	**411.94**	**11149.**
#1	9.9456	12.24	-.30812	404.07	11108.
#2	10.986	11.67	-1.0207	412.50	11186.
#3	8.9122	11.70	-3.7256	419.26	11153.

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4297.8**	**1012.1**	**2132.3**	**29481.**	**13311.**
#1	4296.6	1017.4	2133.8	29494.	13242.
#2	4302.2	1009.8	2135.7	29506.	13302.
#3	4294.6	1009.0	2127.5	29442.	13389.

Sample Name: 1205240-05 Acquired: 6/3/2012 13:52:38 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA8 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2.2388**	**187180.**	**52.904**	**93.42**	**971.22**	**6.1250**	**494470.**
#1	2.0152	182030.	56.002	91.62	961.16	6.0932	490650.
#2	2.2180	188830.	51.973	94.98	977.37	6.1890	495280.
#3	2.4831	190680.	50.736	93.66	975.14	6.0928	497470.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.58936**	**61.920**	**182.10**	**78.250**	**123420.**	**20646.**	**119.1**
#1	.64253	61.902	180.18	78.490	122680.	20536.	117.9
#2	.57566	61.892	183.12	77.608	123450.	20707.	119.8
#3	.54987	61.965	183.01	78.651	124120.	20695.	119.7

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**22888.**	**4281.7**	**-.8513**	**397.42**	**163.13**	**145.46**	**4.9355**
#1	22657.	4239.8	-.8038	394.34	163.53	147.09	4.1568
#2	22952.	4304.6	-1.101	397.12	163.63	146.54	5.4834
#3	23057.	4300.6	-.6489	400.80	162.22	142.76	5.1664

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**7.7008**	**8.591**	**-1.5684**	**427.96**	**1676.5**
#1	5.8716	8.404	-1.8149	424.22	1681.9
#2	8.2531	8.529	-.06481	430.11	1679.1
#3	8.9777	8.840	-2.8256	429.54	1668.4

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3898.8**	**948.06**	**2053.6**	**28205.**	**13218.**
#1	3891.8	944.52	2051.9	28122.	13127.
#2	3900.5	948.34	2056.3	28265.	13304.
#3	3903.9	951.33	2052.4	28228.	13223.

Sample Name: 2052220-MS1 Acquired: 6/3/2012 13:56:56 Type: RQC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA8S SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**81.878**	**201790.**	**137.40**	**100.0**	**4131.0**	**89.331**	**521820.**
Stddev	1.743	6123.	2.36	.8	112.6	.790	2303.
%RSD	2.1286	3.0341	1.7206	.7590	2.7255	.88414	.44135
#1	81.950	194740.	135.38	100.4	4002.3	88.428	519680.
#2	83.584	205770.	136.81	99.14	4211.2	89.893	521510.
#3	80.100	204860.	140.00	100.5	4179.5	89.672	524260.
Check ?	Chk Pass	None	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							
Recovery	79.639	None	84.492	None	3159.8	83.206	None
% Recovery	79.639%		105.62%		78.994%	83.206%	

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F **72.921**	F **785.67**	**503.67**	**471.43**	**127860.**	**21275.**	**126.4**
Stddev	.103	2.59	5.53	1.30	291.	16.	.5
%RSD	.14098	.32917	1.0974	.27595	.22781	.07709	.3938
#1	72.937	788.13	497.58	470.91	127590.	21282.	125.9
#2	72.811	782.97	508.38	470.47	127830.	21287.	126.7
#3	73.015	785.91	505.05	472.91	128170.	21257.	126.7
Check ?	Chk Fail	Chk Fail	Chk Pass	Chk Pass	None	None	None
Value	100.00	1000.0					
Range	-25.000%	-25.000%					
Recovery	72.332	723.75	321.57	393.18	None	None	None
% Recovery	72.332%	72.375%	80.392%	78.636%			

Sample Name: 2052220-MS1 Acquired: 6/3/2012 13:56:56 Type: RQC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA8S SDG: MF5WA4 CASE: 42562
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**23866.**	F **5026.5**	**-1.186**	**419.12**	**1198.8**	**186.78**	F **59.884**
Stddev	187.	35.8	.075	5.95	1.4	2.50	.848
%RSD	.78406	.71315	6.301	1.4198	.11408	1.3385	1.4165
#1	23699.	4988.4	-1.175	424.43	1198.3	189.54	59.563
#2	23832.	5059.5	-1.266	412.69	1197.8	186.13	59.243
#3	24068.	5031.6	-1.117	420.25	1200.4	184.67	60.846
Check ?	None	Chk Fail	None	None	Chk Pass	Chk Pass	Chk Fail
Value		1000.0					200.00
Range		-24.999%					-25.000%
Recovery	None	744.84	None	None	1035.7	41.321	54.949
% Recovery		74.484%			103.57%	103.30%	27.474%

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	F **75.172**	**7.518**	**88.549**	**1229.5**	**2706.1**
Stddev	1.381	.223	1.292	8.1	1.5
%RSD	1.8371	2.965	1.4588	.66244	.05400
#1	73.650	7.447	89.319	1220.3	2705.0
#2	76.346	7.339	87.057	1236.0	2707.7
#3	75.519	7.768	89.269	1232.1	2705.6
Check ?	Chk Fail	None	Chk Pass	Chk Pass	Chk Pass
Value	100.00				
Range	-25.000%				
Recovery	67.471	None	90.117	801.50	1029.6
% Recovery	67.471%		90.117%	80.150%	102.96%

Sample Name: 2052220-MS1 Acquired: 6/3/2012 13:56:56 Type: RQC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA8S SDG: MF5WA4 CASE: 42562
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3897.0**	**949.80**	**2083.9**	**28718.**	**13562.**
Stddev	3.8	1.46	5.8	69.	52.
%RSD	.09744	.15394	.27725	.23953	.38647
#1	3894.1	948.40	2077.8	28790.	13516.
#2	3895.6	951.32	2089.4	28652.	13619.
#3	3901.3	949.69	2084.5	28713.	13551.

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iCAPP02
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140-149

Sample Name: 2052220-DUP1 Acquired: 6/3/2012 14:01:22 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA8D SDG: MF5WA4 CASE: 42562
Comment:

07/17/12

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2.0392**	**196490.**	**54.746**	**101.2**	**1082.2**	**6.6102**
#1	2.8468	191480.	56.210	97.60	1069.7	6.5717
#2	1.8453	197140.	53.855	100.9	1085.5	6.6611
#3	1.4256	200850.	54.174	105.0	1091.4	6.5980

Elem	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2382
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F **552190.**	**.70520**	**68.793**	**192.40**	**82.907**	**125340.**
#1	547180.	.77655	68.762	189.81	83.515	124920.
#2	553310.	.62787	68.679	192.69	82.455	125670.
#3	556080.	.71120	68.938	194.69	82.752	125430.

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**21324.**	**127.2**	**23807.**	**4726.1**	**-1.056**	**415.76**
#1	21285.	127.0	23512.	4721.4	-.9837	420.20
#2	21321.	126.9	23859.	4737.9	-1.025	411.31
#3	21366.	127.6	24048.	4719.0	-1.158	415.77

Elem	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**175.33**	**154.46**	**3.8240**	**7.7680**	**8.180**	**-1.1583**
#1	174.10	155.92	4.2898	9.4299	8.627	-2.1223
#2	175.90	153.24	4.0502	6.3728	7.987	.95217
#3	176.00	154.21	3.1319	7.5015	7.926	-2.3049

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**452.22**	**1632.7**
#1	448.66	1627.6
#2	454.63	1633.1
#3	453.37	1637.5

Sample Name: 2052220-DUP1 Acquired: 6/3/2012 14:01:22 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA8D SDG: MF5WA4 CASE: 42562
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3899.2**	**939.97**	**2087.2**	**28559.**	**13583.**
#1	3895.9	941.97	2089.0	28472.	13552.
#2	3902.2	939.81	2087.7	28602.	13627.
#3	3899.3	938.11	2085.0	28603.	13571.

Sample Name: SEQ-SRD1 Acquired: 6/3/2012 14:05:40 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA8L SDG: MF5WA4 CASE: 42562
Comment: @5X

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.03311**	**43192.**	**9.1165**	**19.12**	**224.06**	**1.3611**	**117950.**
#1	1.7658	42502.	8.8084	18.68	221.70	1.3955	116370.
#2	-.52204	43473.	7.6852	20.49	225.78	1.3000	118790.
#3	-1.1445	43602.	10.856	18.18	224.70	1.3878	118700.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.01608**	**14.961**	**41.190**	**17.328**	**29975.**	**4683.1**	**26.54**
#1	.04341	14.966	40.829	17.342	29515.	4628.6	26.20
#2	-.02250	15.006	41.367	17.225	30198.	4700.2	27.17
#3	-.06914	14.912	41.373	17.418	30212.	4720.6	26.26

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**5622.9**	**957.75**	**-.9086**	**83.264**	**31.028**	**26.977**	**.27425**
#1	5543.5	942.27	-.8433	85.450	31.004	26.954	1.1023
#2	5655.4	957.11	-.9598	83.681	30.829	27.426	-.56055
#3	5669.8	973.87	-.9227	80.662	31.251	26.551	.28095

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**1.0575**	**1.600**	**.52673**	**95.033**	**327.27**
#1	.55418	1.628	.32247	93.598	326.51
#2	.70527	1.485	.72329	95.181	327.84
#3	1.9131	1.686	.53443	96.321	327.46

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4579.2**	**1109.0**	**1860.4**	**25657.**	**11448.**
#1	4589.4	1113.4	1864.0	25762.	11479.
#2	4578.4	1106.7	1861.3	25753.	11423.
#3	4569.6	1106.9	1855.8	25457.	11443.

Sample Name: 1205240-06 Acquired: 6/3/2012 14:09:53 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WB0 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.86731**	**200070.**	**54.053**	**97.75**	**978.18**	**6.5626**
#1	.59512	194750.	55.270	94.63	968.27	6.5507
#2	-.40256	203180.	53.782	97.98	983.02	6.5808
#3	2.4094	202290.	53.107	100.6	983.25	6.5563

Elem	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2382
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F **577910.**	**.60127**	**61.008**	**193.35**	**86.504**	**126320.**
#1	572050.	.73370	60.789	191.38	86.943	125900.
#2	581460.	.49450	61.323	194.62	86.606	126870.
#3	580220.	.57559	60.913	194.06	85.964	126190.

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**20916.**	**128.0**	**24127.**	**3986.0**	**-1.047**	**474.65**
#1	20892.	127.3	23838.	3963.2	-.8674	478.52
#2	20939.	128.1	24253.	4000.1	-.9968	473.68
#3	20916.	128.6	24291.	3994.8	-1.278	471.75

Elem	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**170.84**	**151.51**	**3.3165**	**8.0779**	**8.434**	**-2.2189**
#1	170.78	153.28	4.1400	8.5295	7.807	-1.4509
#2	170.90	153.04	2.8297	6.7003	8.500	-1.9498
#3	170.84	148.22	2.9798	9.0038	8.994	-3.2559

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**456.33**	**1425.6**
#1	452.25	1427.7
#2	458.50	1427.2
#3	458.24	1421.9

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~~317~~
153

Sample Name: 1205240-06 Acquired: 6/3/2012 14:09:53 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WB0 SDG: MF5WA4 CASE: 42562
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3879.8**	**941.29**	**2077.0**	**28408.**	**13449.**
#1	3881.2	939.84	2079.1	28394.	13411.
#2	3878.8	940.17	2072.4	28399.	13442.
#3	3879.6	943.85	2079.4	28432.	13493.

Sample Name: 1205240-07 Acquired: 6/3/2012 14:14:09 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA0 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.5073**	**227530.**	**55.587**	**98.20**	**1174.1**	**7.5321**	**222000.**
#1	2.5660	219710.	58.348	97.13	1168.8	7.3737	220860.
#2	-.06983	229960.	55.616	100.4	1178.2	7.5804	221860.
#3	2.0259	232940.	52.799	97.04	1175.2	7.6423	223270.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.28524**	**74.196**	**221.02**	**93.698**	**144550.**	**25080.**	**141.3**
#1	.34619	74.119	217.78	93.413	143550.	24959.	139.4
#2	.22500	74.266	221.27	93.688	144200.	25149.	141.9
#3	.28453	74.204	224.01	93.994	145880.	25131.	142.4

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**26858.**	**5353.8**	**-1.369**	**277.98**	**197.34**	**145.97**	**4.3099**
#1	26734.	5293.1	-1.341	273.52	198.80	148.12	3.5809
#2	26819.	5373.6	-1.337	276.96	196.36	145.66	4.4553
#3	27022.	5394.8	-1.429	283.45	196.86	144.13	4.8936

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**9.4220**	**8.793**	**-1.1150**	**492.24**	**591.59**
#1	7.8366	8.826	-2.1828	489.13	590.95
#2	9.9969	8.920	.02364	491.65	590.94
#3	10.433	8.632	-1.1857	495.95	592.88

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4069.9**	**988.61**	**2203.9**	**30351.**	**14033.**
#1	4074.1	988.60	2204.4	30308.	13952.
#2	4069.4	988.95	2202.2	30391.	14104.
#3	4066.1	988.30	2205.0	30355.	14043.

Sample Name: 1205240-08 Acquired: 6/3/2012 14:18:25 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA1 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2.2551**	**225470.**	**58.907**	**100.5**	**1155.0**	**6.9956**	**431910.**
#1	3.0833	219930.	57.885	100.8	1152.7	6.9814	429440.
#2	1.4820	227490.	58.649	100.9	1154.7	6.9542	432580.
#3	2.1999	229000.	60.189	99.89	1157.7	7.0512	433710.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.22861**	**67.627**	**214.47**	**89.955**	**143670.**	**21549.**	**143.5**
#1	.30714	67.696	210.42	89.709	142370.	21508.	142.9
#2	.18683	67.820	216.23	90.201	144060.	21561.	143.7
#3	.19185	67.366	216.77	89.953	144580.	21579.	143.8

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**26712.**	**5166.0**	**-1.146**	**498.30**	**187.83**	**145.05**	**4.7097**
#1	26587.	5107.5	-1.082	498.12	188.00	149.13	4.2774
#2	26739.	5198.7	-1.085	498.00	187.28	142.33	4.3376
#3	26811.	5191.8	-1.271	498.79	188.22	143.69	5.5139

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**9.1568**	**9.105**	**-1.8805**	**492.48**	**586.81**
#1	7.9412	9.596	-1.5975	488.47	585.84
#2	11.435	8.871	-.93934	494.03	587.40
#3	8.0945	8.847	-3.1046	494.93	587.20

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3940.0**	**962.98**	**2135.8**	**29313.**	**13579.**
#1	3931.1	961.73	2127.5	29301.	13523.
#2	3943.9	962.44	2137.0	29279.	13619.
#3	3944.8	964.77	2142.9	29358.	13596.

Sample Name: 1205240-09 Acquired: 6/3/2012 14:22:42 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA2 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.9237**	**222260.**	**48.670**	**96.53**	**1101.1**	**6.7958**	**434660.**
#1	2.8864	213940.	51.313	95.98	1099.1	6.8071	432790.
#2	1.5339	225640.	46.533	96.81	1097.4	6.7413	435020.
#3	1.3508	227200.	48.165	96.80	1106.7	6.8390	436170.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.06068**	**63.074**	**209.13**	**81.729**	**136950.**	**19358.**	**136.6**
#1	.06319	62.939	206.81	81.260	136010.	19318.	136.2
#2	.12875	63.247	210.67	82.150	137360.	19356.	136.4
#3	-.00991	63.036	209.89	81.777	137480.	19401.	137.0

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**25098.**	**4585.0**	**-1.351**	**347.39**	**173.18**	**122.45**	**4.9293**
#1	24951.	4550.6	-1.448	344.68	173.61	122.04	3.7266
#2	25149.	4598.7	-1.225	349.41	173.02	123.11	6.5452
#3	25195.	4605.6	-1.379	348.08	172.92	122.20	4.5162

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**6.8723**	**9.257**	**-1.3082**	**458.02**	**537.54**
#1	6.1680	9.629	-1.7184	454.40	538.37
#2	6.7195	9.310	-1.8507	459.38	537.11
#3	7.7294	8.832	-.35536	460.27	537.13

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3985.0**	**967.43**	**2157.8**	**29415.**	**13841.**
#1	3986.1	965.76	2154.7	29343.	13771.
#2	3985.6	968.69	2157.5	29483.	13884.
#3	3983.2	967.82	2161.2	29419.	13866.

Sample Name: 1205240-10 Acquired: 6/3/2012 14:27:00 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA3 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**8.6046**	**218720.**	**54.426**	**104.9**	**1141.0**	**6.7079**	**457570.**
#1	9.3780	214840.	56.767	103.1	1130.1	6.6683	454930.
#2	8.5705	218410.	50.981	104.9	1144.9	6.7339	457950.
#3	7.8654	222900.	55.529	106.7	1148.0	6.7215	459830.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.44853**	**66.054**	**218.67**	**91.238**	**138010.**	**20319.**	**138.6**
#1	.56850	66.164	217.17	91.438	137130.	20175.	137.4
#2	.45719	65.902	219.18	90.920	138430.	20389.	139.1
#3	.31992	66.095	219.65	91.354	138460.	20391.	139.2

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**25458.**	**5080.2**	**-1.289**	**379.09**	**180.96**	**166.04**	**4.9725**
#1	25202.	5046.3	-1.534	378.54	181.97	164.22	7.0701
#2	25559.	5094.5	-1.182	378.28	181.03	167.19	2.4648
#3	25612.	5099.8	-1.150	380.46	179.87	166.70	5.3827

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**8.9238**	**9.322**	**-1.9318**	**490.35**	**772.40**
#1	9.0466	9.078	-.62852	485.85	773.83
#2	9.4144	9.746	-2.8508	492.89	770.87
#3	8.3104	9.142	-2.3161	492.30	772.50

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3953.5**	**963.86**	**2136.7**	**29173.**	**13652.**
#1	3941.0	961.35	2130.3	29101.	13626.
#2	3958.4	964.53	2140.8	29254.	13679.
#3	3961.1	965.71	2139.1	29164.	13650.

Sample Name: 1205240-11 Acquired: 6/3/2012 14:31:18 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA9 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.1139**	**192320.**	**48.069**	**117.9**	**915.88**	**6.0899**
#1	.43989	187310.	46.853	114.9	910.66	5.9887
#2	1.4675	193490.	48.242	118.4	919.92	6.1245
#3	1.4343	196160.	49.111	120.2	917.05	6.1565

Elem	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2382
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F **756140.**	**2.4731**	**52.728**	**200.65**	**150.22**	**132300.**
#1	753110.	2.4722	52.731	198.70	149.97	131870.
#2	757340.	2.4691	52.583	200.34	150.24	132490.
#3	757970.	2.4780	52.869	202.90	150.44	132550.

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**21912.**	**136.2**	**25105.**	**3828.9**	**.4081**	**644.14**
#1	21855.	136.8	24922.	3779.0	.6547	649.54
#2	21976.	135.9	25194.	3855.3	.0519	643.54
#3	21904.	136.1	25198.	3852.4	.5178	639.35

Elem	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**172.02**	**254.51**	**4.3176**	**9.4103**	**11.05**	**-1.1296**
#1	171.10	252.98	4.7687	8.3036	11.32	-1.8316
#2	172.08	253.61	3.1683	11.232	10.47	-1.1955
#3	172.89	256.95	5.0160	8.6950	11.35	-.36170

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**408.80**	**1185.4**
#1	402.48	1182.4
#2	413.73	1183.4
#3	410.20	1190.5

Sample Name: 1205240-11 Acquired: 6/3/2012 14:31:18 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA9 SDG: MF5WA4 CASE: 42562
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3810.3**	**934.16**	**2016.6**	**27682.**	**13127.**
#1	3814.2	934.83	2016.2	27711.	13024.
#2	3814.5	935.82	2020.6	27705.	13186.
#3	3802.1	931.82	2013.1	27631.	13172.

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~~324~~

160

Sample Name: 1205240-12 Acquired: 6/3/2012 14:35:37 Type: Unk

Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000

User: MSB2 EPA ID: MF5WB1 SDG: MF5WA4 CASE: 42562

Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.4967**	**180270.**	**40.835**	**82.77**	**775.22**	**5.1271**
#1	3.4879	179160.	40.598	81.46	769.80	5.0306
#2	.19277	181960.	41.072	81.29	778.18	5.1187
#3	.80944	179690.	40.835	85.56	777.67	5.2318

Elem	Ca3181	Cd2144	Co2286	Cr2677	Cu3247	Fe2382
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	F **1302800.**	**.40233**	**33.262**	**151.99**	**46.224**	**106060.**
#1	1279000.	.43072	33.257	149.17	46.565	105780.
#2	1312200.	.30046	33.196	152.98	45.975	106350.
#3	1317400.	.47582	33.331	153.83	46.131	106060.

Elem	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**15425.**	**123.5**	**20502.**	**2437.9**	**-1.236**	**826.18**
#1	15354.	122.5	20415.	2406.2	-1.307	823.37
#2	15516.	124.0	20474.	2458.5	-1.202	834.68
#3	15406.	124.1	20616.	2449.1	-1.200	820.49

Elem	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**124.74**	**75.916**	**3.0171**	**5.7707**	**7.727**	**-1.8530**
#1	124.42	76.881	3.7876	5.9942	7.311	-1.3983
#2	125.55	75.767	2.3504	7.7237	7.791	-.14845
#3	124.25	75.099	2.9134	3.5942	8.079	-4.0122

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**383.82**	**351.84**
#1	376.68	350.76
#2	387.76	352.32
#3	387.03	352.44

Sample Name: 1205240-12 Acquired: 6/3/2012 14:35:37 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WB1 SDG: MF5WA4 CASE: 42562
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3589.3**	**903.73**	**1944.4**	**26734.**	**12736.**
#1	3584.2	905.80	1941.9	26723.	12617.
#2	3592.7	903.34	1948.6	26731.	12792.
#3	3590.9	902.05	1942.8	26748.	12800.

Sample Name: 1205240-13 Acquired: 6/3/2012 14:40:01 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WB2 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.0523**	**189460.**	**51.868**	**86.75**	**1152.1**	**7.1088**	**109880.**
#1	.55493	185040.	50.948	87.78	1147.6	7.0635	109050.
#2	.94105	193790.	52.042	86.31	1154.7	7.1468	110200.
#3	1.6610	189540.	52.613	86.17	1154.0	7.1163	110390.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.13915**	**68.651**	**190.15**	**96.605**	**141340.**	**20291.**	**113.8**
#1	.19148	68.745	188.34	96.275	139710.	20218.	113.6
#2	.12713	68.342	190.34	96.494	141780.	20302.	113.4
#3	.09885	68.866	191.78	97.046	142530.	20353.	114.5

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**25129.**	**5037.3**	**-.4809**	**251.38**	**175.28**	**174.09**	**5.5423**
#1	25022.	4969.6	-.4612	252.06	175.98	177.68	4.3391
#2	25237.	5058.9	-.4638	248.22	175.07	171.96	6.9229
#3	25128.	5083.4	-.5177	253.86	174.80	172.63	5.3649

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**7.1931**	**8.887**	**-.65642**	**411.20**	**572.45**
#1	7.4552	8.908	-.52559	404.95	573.30
#2	6.5692	9.168	-.11926	411.69	571.43
#3	7.5549	8.586	-1.3244	416.95	572.62

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4224.8**	**1033.2**	**2197.3**	**30246.**	**13778.**
#1	4207.9	1031.5	2193.8	30180.	13710.
#2	4242.2	1036.0	2203.6	30230.	13784.
#3	4224.4	1032.2	2194.4	30329.	13842.

Sample Name: 1205240-14 Acquired: 6/3/2012 14:44:19 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WB3 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.61091**	**177680.**	**48.844**	**74.33**	**1044.0**	**6.7000**	**109990.**
#1	1.1777	174830.	49.721	74.82	1035.7	6.6833	108840.
#2	1.1863	178520.	48.104	74.69	1049.1	6.7023	110390.
#3	-.53120	179680.	48.706	73.49	1047.2	6.7144	110750.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.14230**	**59.386**	**176.50**	**89.644**	**126000.**	**18531.**	**106.4**
#1	.19521	59.292	175.15	89.805	124470.	18412.	105.4
#2	.11175	59.277	176.59	89.598	126810.	18633.	107.3
#3	.11995	59.590	177.76	89.530	126730.	18549.	106.5

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**24153.**	**4206.0**	**-.7161**	**245.75**	**154.05**	**161.57**	**5.2274**
#1	23941.	4174.2	-.6289	244.84	154.96	158.05	4.3925
#2	24253.	4211.6	-.8851	246.69	153.70	163.93	5.7888
#3	24265.	4232.3	-.6344	245.72	153.48	162.72	5.5008

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**8.1142**	**8.492**	**-.20188**	**368.61**	**505.99**
#1	6.7355	8.064	-.69756	365.47	504.45
#2	10.972	8.463	-.31093	367.37	507.76
#3	6.6350	8.949	.40285	373.00	505.77

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4276.7**	**1050.3**	**2209.4**	**30368.**	**13689.**
#1	4281.7	1049.2	2206.2	30275.	13691.
#2	4274.8	1049.5	2215.5	30427.	13647.
#3	4273.7	1052.3	2206.6	30401.	13730.

Sample Name: 1205240-15 Acquired: 6/3/2012 14:48:36 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WB6 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.12766**	**179170.**	**49.134**	**77.92**	**827.07**	**5.7586**	**419260.**
#1	.02779	177330.	50.349	77.19	814.01	5.7074	411800.
#2	.26920	179210.	47.371	79.55	835.63	5.8001	424080.
#3	-.67996	180970.	49.682	77.03	831.57	5.7681	421900.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.67961**	**58.850**	**177.81**	**115.70**	**125710.**	**18171.**	**113.0**
#1	.70682	58.958	175.30	115.33	123600.	17944.	110.9
#2	.74731	59.086	178.21	115.30	126560.	18292.	114.1
#3	.58470	58.507	179.91	116.46	126960.	18278.	114.1

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**20961.**	**3142.2**	**-.7482**	**583.19**	**152.75**	**159.24**	**5.2710**
#1	20535.	3095.0	-.8429	577.26	153.18	159.88	5.0321
#2	21282.	3145.6	-.7457	587.04	151.79	158.14	5.0821
#3	21068.	3185.9	-.6560	585.28	153.27	159.71	5.6989

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**7.4883**	**9.051**	**-2.2675**	**400.63**	**593.23**
#1	6.5566	9.123	-2.8331	395.18	596.69
#2	8.9203	9.068	-1.0820	399.97	588.60
#3	6.9881	8.961	-2.8872	406.75	594.39

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3996.4**	**1000.7**	**2093.8**	**28733.**	**13264.**
#1	3994.6	996.46	2089.6	28689.	13270.
#2	3996.0	1006.2	2092.3	28793.	13217.
#3	3998.6	999.43	2099.5	28716.	13306.

Sample Name: 1205240-16 Acquired: 6/3/2012 14:52:52 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WB7 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.10465**	**179400.**	**50.143**	**84.40**	**938.73**	**5.6969**	**437690.**
#1	.85085	179270.	48.819	83.25	924.59	5.6191	430900.
#2	-.04089	180530.	50.836	85.63	947.28	5.7183	440170.
#3	-.49600	178400.	50.775	84.33	944.32	5.7531	441990.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.3751**	**70.257**	**183.83**	**117.02**	**137930.**	**18249.**	**113.7**
#1	1.4118	70.047	179.89	117.46	135840.	18049.	112.0
#2	1.3458	70.455	185.95	116.58	138200.	18319.	114.5
#3	1.3677	70.269	185.66	117.01	139750.	18380.	114.7

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**21099.**	**4837.8**	**-.7566**	**600.96**	**170.06**	**174.96**	**4.1473**
#1	20739.	4753.6	-.8575	596.20	170.12	175.94	3.7310
#2	21254.	4855.9	-.7162	602.56	169.78	174.37	3.6504
#3	21305.	4903.8	-.6961	604.13	170.29	174.56	5.0605

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**7.9712**	**14.83**	**.02236**	**410.47**	**620.35**
#1	6.9408	14.60	-1.0158	403.40	622.67
#2	7.0309	14.80	.69005	413.68	620.49
#3	9.9421	15.07	.39287	414.32	617.89

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4004.3**	**1002.8**	**2092.8**	**28622.**	**13204.**
#1	4002.9	999.59	2089.7	28623.	13168.
#2	3999.1	1004.5	2094.9	28662.	13241.
#3	4010.9	1004.3	2093.9	28580.	13202.

Sample Name: SEQ-CCV@CCV04 Acquired: 6/3/2012 14:57:09 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**990.67**	**19464.**	**1982.2**	**2009.**	**16543.**	**411.57**	**53952.**	**1049.7**
Stddev	14.53	115.	9.3	22.	444.	5.74	249.	1.6
%RSD	1.4663	.58990	.46800	1.115	2.6810	1.3946	.46103	.15365
#1	976.20	19333.	1986.3	1985.	16122.	405.25	53995.	1050.0
#2	990.57	19550.	1971.6	2013.	17006.	413.03	54177.	1048.0
#3	1005.2	19508.	1988.7	2029.	16500.	416.44	53685.	1051.2

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2593.7**	**2050.9**	**4980.4**	**21249.**	**49702.**	**1018.**	**51003.**	**3079.6**
Stddev	3.2	22.4	4.2	67.	105.	3.	249.	40.2
%RSD	.12272	1.0935	.08473	.31653	.21208	.3425	.48838	1.3043
#1	2596.5	2026.3	4984.1	21212.	49626.	1014.	51048.	3035.0
#2	2590.2	2056.2	4981.3	21327.	49822.	1020.	51227.	3091.0
#3	2594.4	2070.3	4975.8	21209.	49659.	1020.	50735.	3112.8

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1027.**	**51143.**	**4071.3**	**1851.6**	**4068.2**	**3637.5**	**2086.**	**4163.5**
Stddev	2.	205.	11.0	4.5	7.4	3.4	5.	1.6
%RSD	.2279	.40002	.26907	.24248	.18156	.09415	.2475	.03755
#1	1029.	50942.	4077.0	1855.4	4076.1	3637.5	2089.	4162.2
#2	1024.	51351.	4058.6	1846.6	4067.0	3641.0	2089.	4163.1
#3	1028.	51136.	4078.2	1852.8	4061.5	3634.1	2080.	4165.2

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**4087.9**	**8006.3**
Stddev	56.9	25.1
%RSD	1.3911	.31311
#1	4027.2	8015.9
#2	4096.4	7977.8
#3	4140.0	8025.1

Sample Name: SEQ-CCV@CCV04 Acquired: 6/3/2012 14:57:09 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4411.3**	**1165.9**	**1763.9**	**24705.**	**10780.**
Stddev	10.2	3.4	2.6	23.	112.
%RSD	.23114	.28938	.14594	.09321	1.0351
#1	4413.5	1164.9	1762.7	24730.	10675.
#2	4420.2	1169.6	1766.9	24701.	10768.
#3	4400.2	1163.0	1762.2	24684.	10897.

Sample Name: SEQ-CCB@CCB04 Acquired: 6/3/2012 15:01:22 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.71438**	**7.7869**	**.13350**	**1.295**	**6.9547**	**.14396**	**35.540**	**.11600**
Stddev	1.0243	8.8149	.98609	.469	.2654	.06295	5.952	.05451
%RSD	143.39	113.20	738.66	36.27	3.8167	43.725	16.747	46.995
#1	-.08948	14.418	-.61587	.7524	7.1144	.21614	37.632	.16768
#2	1.8677	11.159	-.23426	1.566	6.6483	.10048	40.162	.12127
#3	.36487	-2.2163	1.2506	1.565	7.1014	.11526	28.824	.05904

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.57031**	**.83943**	**.76726**	**10.806**	**55.049**	**.9551**	**28.115**	**1.1635**
Stddev	.31310	.50817	.51952	12.694	16.945	.5002	3.657	.3554
%RSD	54.900	60.538	67.712	117.47	30.781	52.37	13.007	30.544
#1	.32695	.73381	1.3670	25.331	67.903	.4112	31.829	1.5707
#2	.46044	.39237	.47868	5.2462	61.399	1.395	27.998	1.0045
#3	.92353	1.3921	.45608	1.8401	35.847	1.059	24.518	.91541

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.4189**	**23.064**	**.31993**	**.47914**	**.63402**	**.95729**	**.9016**	**1.7435**
Stddev	.1161	1.822	.10135	.16518	.51106	.92926	.4034	.1153
%RSD	27.71	7.8995	31.677	34.474	80.606	97.072	44.74	6.6154
#1	.5509	24.758	.30302	.41316	1.2225	.31446	1.289	1.8497
#2	.3325	23.297	.22811	.66711	.37807	2.0228	.9325	1.6208
#3	.3735	21.136	.42867	.35715	.30150	.53466	.4836	1.7599

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.48489**	**1.1821**
Stddev	.30410	.0457
%RSD	62.715	3.8650
#1	.52985	1.2105
#2	.76400	1.1294
#3	.16081	1.2063

Sample Name: SEQ-CCB@CCB04 Acquired: 6/3/2012 15:01:22 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5050.5**	**1252.7**	**1845.4**	**25602.**	**10846.**
Stddev	2.7	2.8	2.8	62.	13.
%RSD	.05378	.22383	.15256	.24232	.11765
#1	5047.4	1253.5	1842.5	25610.	10833.
#2	5052.6	1255.0	1848.1	25660.	10859.
#3	5051.4	1249.6	1845.5	25536.	10847.

Sample Name: 1205240-01RE1 Acquired: 6/3/2012 15:05:41 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA4 SDG: MF5WA4 CASE: 42562
Comment: @3X Ca

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**19.311**	**87733.**	**14.313**	**35.22**	**413.81**	**2.4446**	**257750.**
#1	17.802	86286.	14.822	34.36	408.41	2.4340	253800.
#2	21.437	88344.	14.429	36.10	418.32	2.4701	260930.
#3	18.695	88568.	13.689	35.20	414.69	2.4296	258510.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.15989**	**27.631**	**80.976**	**32.569**	**55064.**	**8089.0**	**53.40**
#1	-.13174	27.514	79.834	32.553	54187.	7996.5	53.34
#2	-.17773	27.626	82.283	32.687	55451.	8129.0	53.19
#3	-.17021	27.755	80.811	32.466	55553.	8141.5	53.67

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**10043.**	**1802.3**	**-.8365**	**174.35**	**57.649**	**38.623**	**1.3421**
#1	9900.4	1771.2	-.7517	178.99	57.524	39.188	2.9591
#2	10184.	1805.8	-.9080	171.29	57.788	39.503	.80784
#3	10044.	1829.9	-.8496	172.77	57.635	37.179	.25942

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**4.1260**	**3.281**	**.12980**	**178.62**	**206.11**
#1	5.1792	3.449	.08609	175.77	207.26
#2	3.0440	3.228	.44175	179.91	205.49
#3	4.1547	3.167	-.13845	180.16	205.58

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4318.9**	**1066.3**	**1908.3**	**26059.**	**11860.**
#1	4322.9	1063.7	1912.3	26043.	11845.
#2	4323.3	1068.4	1909.5	26025.	11782.
#3	4310.7	1066.9	1903.0	26109.	11955.

Sample Name: 1205240-03RE1 Acquired: 6/3/2012 15:09:56 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA6 SDG: MF5WA4 CASE: 42562
Comment: @3X Ca

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**27.644**	**58273.**	**15.673**	**30.74**	**294.08**	**1.8186**	**213370.**
#1	27.262	57254.	16.627	29.76	290.16	1.7748	210500.
#2	27.246	58881.	15.267	31.08	295.84	1.7966	214760.
#3	28.423	58683.	15.124	31.37	296.26	1.8843	214860.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.45734**	**23.728**	**71.480**	**30.965**	**50241.**	**6020.4**	**38.55**
#1	.47400	23.512	71.673	30.641	49450.	5963.4	38.29
#2	.43862	23.939	72.097	30.990	50733.	6061.1	39.89
#3	.45939	23.732	70.671	31.264	50540.	6036.8	37.47

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**7786.0**	**1517.0**	**-.4973**	**185.58**	**48.339**	**43.462**	**1.4558**
#1	7671.4	1494.9	-.4862	190.13	47.888	44.634	.81452
#2	7834.8	1531.8	-.3975	186.18	48.125	42.402	1.6557
#3	7851.7	1524.3	-.6082	180.44	49.003	43.350	1.8972

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**3.1594**	**2.753**	**.99176**	**133.58**	**275.07**
#1	2.8543	2.667	1.5156	132.74	274.37
#2	1.5921	2.869	.78512	133.58	274.21
#3	5.0317	2.722	.67453	134.43	276.64

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4351.3**	**1072.4**	**1855.5**	**25632.**	**11550.**
#1	4363.3	1075.6	1860.7	25627.	11547.
#2	4361.1	1074.7	1858.0	25651.	11545.
#3	4329.5	1066.8	1847.9	25618.	11559.

Sample Name: 2052220-DUP2 Acquired: 6/3/2012 15:14:12 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA8D SDG: MF5WA4 CASE: 42562
Comment: @3X Ca

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.61562**	**78182.**	**18.113**	**34.20**	**419.24**	**2.4724**	**225220.**
#1	2.1138	76914.	16.742	33.30	412.82	2.4419	222030.
#2	.26918	78857.	19.808	33.60	422.01	2.4467	226910.
#3	-.53611	78775.	17.790	35.71	422.88	2.5287	226720.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.10113**	**28.729**	**74.818**	**30.886**	**53276.**	**8326.7**	**47.99**
#1	.15886	28.976	73.128	30.909	52480.	8222.9	47.16
#2	.04385	28.353	75.877	30.721	53836.	8380.4	48.30
#3	.10069	28.859	75.450	31.029	53511.	8376.6	48.50

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**9753.7**	**1827.5**	**-.8856**	**154.48**	**58.213**	**49.629**	**.66586**
#1	9607.2	1792.4	-1.102	155.41	58.279	48.871	.99540
#2	9837.9	1836.4	-.7132	152.38	57.984	50.198	.49052
#3	9815.8	1853.8	-.8418	155.67	58.375	49.818	.51165

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**1.9930**	**3.142**	**-.24920**	**173.58**	**547.39**
#1	2.6595	2.972	.68568	170.39	552.71
#2	1.3468	3.226	-.10281	173.18	547.58
#3	1.9727	3.228	-1.3305	177.15	541.88

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4345.3**	**1078.3**	**1912.7**	**26388.**	**11902.**
#1	4341.3	1070.7	1910.2	26397.	11852.
#2	4343.3	1077.4	1915.1	26505.	11896.
#3	4351.2	1086.9	1912.9	26262.	11957.

Sample Name: 1205240-06RE1 Acquired: 6/3/2012 15:18:27 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WB0 SDG: MF5WA4 CASE: 42562
Comment: @3X Ca

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.0705**	**81403.**	**18.272**	**34.08**	**391.93**	**2.5355**	**243600.**
#1	2.2541	80107.	21.548	33.79	386.92	2.4776	240290.
#2	.33756	81838.	17.078	34.46	394.36	2.5711	244630.
#3	.61974	82263.	16.189	34.00	394.51	2.5579	245870.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.00409**	**26.297**	**78.885**	**33.221**	**55371.**	**8405.7**	**50.94**
#1	.05342	26.385	76.395	32.891	54545.	8341.0	51.01
#2	-.02363	26.287	81.543	33.570	55576.	8415.4	51.18
#3	-.04207	26.220	78.718	33.203	55993.	8460.6	50.61

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**10170.**	**1581.3**	**-1.023**	**184.88**	**58.490**	**50.964**	**1.6291**
#1	10046.	1551.1	-1.030	186.91	58.691	50.542	1.9813
#2	10215.	1600.8	-.9940	182.78	57.981	52.796	1.3392
#3	10249.	1592.1	-1.046	184.95	58.798	49.553	1.5667

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**3.6314**	**3.348**	**-.06647**	**179.07**	**494.06**
#1	2.4419	3.420	-.03152	176.32	495.06
#2	5.6070	3.167	.28896	180.27	493.12
#3	2.8454	3.457	-.45684	180.63	493.99

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4262.8**	**1065.5**	**1889.7**	**26120.**	**11707.**
#1	4268.3	1067.3	1891.3	26127.	11656.
#2	4267.8	1065.5	1888.8	26014.	11736.
#3	4252.3	1063.8	1889.0	26220.	11728.

Sample Name: 1205240-11RE1 Acquired: 6/3/2012 15:22:42 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA9 SDG: MF5WA4 CASE: 42562
Comment: @4X Ca

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2.1128**	**53948.**	**10.682**	**27.77**	**255.12**	**1.6246**	**222940.**
#1	.78186	53298.	10.717	26.74	253.63	1.6159	220990.
#2	1.3010	53924.	11.194	28.24	255.40	1.6057	223480.
#3	4.2554	54622.	10.136	28.33	256.34	1.6522	224360.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.56607**	**15.720**	**56.498**	**40.247**	**40267.**	**6047.8**	**36.44**
#1	.61622	15.816	56.542	40.457	39734.	6023.6	36.30
#2	.54485	15.760	55.762	40.112	40348.	6033.7	36.66
#3	.53713	15.583	57.188	40.173	40717.	6086.1	36.35

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**7491.7**	**1044.7**	**-.4613**	**172.83**	**39.932**	**60.138**	**-.11500**
#1	7446.5	1028.5	-.5255	178.62	39.907	59.992	-.00311
#2	7485.7	1048.9	-.4196	167.70	39.917	59.868	.37020
#3	7543.0	1056.8	-.4388	172.15	39.973	60.555	-.71209

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**2.4409**	**2.707**	**.27255**	**110.16**	**279.95**
#1	3.0419	2.908	-.30340	108.60	279.78
#2	2.1929	2.609	.43998	111.46	279.59
#3	2.0879	2.603	.68105	110.43	280.47

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4372.5**	**1102.1**	**1851.8**	**25564.**	**11361.**
#1	4369.4	1102.9	1852.2	25527.	11295.
#2	4381.0	1104.6	1857.6	25527.	11378.
#3	4367.1	1099.0	1845.7	25637.	11408.

Sample Name: 1205240-12RE1 Acquired: 6/3/2012 15:26:58 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WB1 SDG: MF5WA4 CASE: 42562
Comment: @6X Ca

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.41550**	**31294.**	**5.0299**	**10.92**	**135.35**	**.80183**	**248610.**
#1	1.6933	30657.	4.4890	10.39	133.86	.79863	244410.
#2	-.98566	31537.	4.0419	11.56	136.11	.79601	250110.
#3	-1.9542	31690.	6.5588	10.82	136.08	.81086	251320.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.11193**	**6.1400**	**26.929**	**6.9382**	**20608.**	**2693.5**	**20.64**
#1	-.09985	6.0643	27.322	6.8152	20158.	2674.7	20.89
#2	-.13147	6.0451	27.289	6.9346	20727.	2712.2	20.43
#3	-.10447	6.3106	26.175	7.0647	20939.	2693.7	20.60

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**3902.4**	**426.33**	**-.8013**	**133.06**	**17.678**	**11.228**	**-1.0079**
#1	3837.6	419.80	-.8853	134.49	16.910	12.562	-1.6648
#2	3931.2	428.40	-.6826	128.85	18.137	9.6444	-.35925
#3	3938.3	430.78	-.8358	135.83	17.987	11.476	-.99972

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**.94288**	**1.110**	**-.22596**	**65.392**	**50.992**
#1	.58769	1.085	-.40583	64.632	50.899
#2	1.5770	.8827	-.62184	64.808	51.277
#3	.66399	1.363	.34978	66.737	50.800

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4383.8**	**1113.4**	**1811.6**	**25172.**	**11128.**
#1	4385.2	1112.2	1808.9	25134.	11159.
#2	4383.7	1110.9	1817.2	25198.	11136.
#3	4382.5	1116.9	1808.7	25184.	11089.

176

Sample Name: SEQ-CCV@CCV02 Acquired: 6/3/2012 15:31:16 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1020.2**	**19661.**	**2048.8**	**2060.**	**16727.**	**426.39**	**54149.**	**1069.6**
Stddev	9.0	171.	7.9	17.	312.	3.98	440.	1.5
%RSD	.87918	.86821	.38455	.8239	1.8646	.93288	.81166	.13972
#1	1012.7	19464.	2053.7	2041.	16460.	422.06	53642.	1071.2
#2	1017.7	19759.	2039.7	2068.	16651.	427.22	54421.	1068.3
#3	1030.1	19760.	2052.9	2071.	17070.	429.88	54384.	1069.2

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2634.6**	**2102.2**	**5172.6**	**21196.**	**50164.**	**1035.**	**51588.**	**3149.2**
Stddev	2.3	18.9	13.5	243.	179.	5.	336.	37.2
%RSD	.08906	.90010	.26108	1.1459	.35590	.5004	.65084	1.1807
#1	2633.7	2082.5	5182.2	20917.	49971.	1029.	51203.	3108.7
#2	2632.9	2103.8	5157.2	21315.	50324.	1039.	51822.	3156.9
#3	2637.3	2120.2	5178.5	21357.	50198.	1038.	51739.	3181.9

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1047.**	**51297.**	**4209.2**	**1913.6**	**4163.5**	**3708.7**	**2132.**	**4239.8**
Stddev	1.	345.	12.9	10.8	8.8	9.2	3.	3.3
%RSD	.1082	.67316	.30741	.56368	.21175	.24925	.1295	.07695
#1	1046.	50905.	4220.1	1921.2	4162.9	3701.8	2131.	4243.5
#2	1046.	51556.	4194.9	1901.3	4155.1	3705.2	2129.	4238.1
#3	1048.	51429.	4212.6	1918.4	4172.7	3719.2	2135.	4237.7

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**4183.1**	**8293.0**
Stddev	47.2	33.4
%RSD	1.1284	.40288
#1	4129.9	8326.9
#2	4199.0	8260.1
#3	4220.2	8291.9

07/19/12

Sample Name: SEQ-CCV@CCV02 Acquired: 6/3/2012 15:31:16 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4348.3**	**1128.0**	**1726.5**	**24017.**	**10687.**
Stddev	7.0	3.2	1.1	50.	22.
%RSD	.16050	.28201	.06466	.20931	.20583
#1	4345.9	1124.8	1725.3	24031.	10669.
#2	4342.8	1131.1	1727.6	24059.	10682.
#3	4356.2	1127.9	1726.6	23962.	10711.

Sample Name: SEQ-CCB@CCB02 Acquired: 6/3/2012 15:35:29 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.07477**	**5.5708**	**1.0663**	**1.652**	**5.8507**	**.16369**	**29.056**	**.43721**
Stddev	1.3356	12.754	.3689	.607	.2704	.07632	4.525	.04657
%RSD	1786.3	228.94	34.596	36.77	4.6218	46.626	15.574	10.651
#1	1.4144	20.264	.75014	1.004	6.1629	.24684	27.520	.48820
#2	-1.1668	-2.6355	.97710	1.743	5.6913	.09681	25.498	.42648
#3	-.47193	-.91651	1.4716	2.208	5.6979	.14743	34.149	.39694

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.1162**	**-.21583**	**1.5848**	**6.4123**	**54.431**	**.6550**	**21.886**	**.87537**
Stddev	.1953	1.3524	.0804	14.041	6.709	.0807	1.241	.53275
%RSD	17.498	626.60	5.0738	218.97	12.326	12.32	5.6717	60.860
#1	1.2809	1.3431	1.6672	22.382	60.496	.7481	21.242	1.4879
#2	1.1672	-1.0740	1.5806	.85377	47.224	.6111	23.316	.61825
#3	.90040	-.91659	1.5066	-3.9986	55.571	.6057	21.098	.51996

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.7028**	**19.338**	**1.6674**	**.85573**	**1.3745**	**2.4330**	**1.066**	**2.2938**
Stddev	.1616	1.097	.3155	1.2905	.6728	1.3668	.092	.5116
%RSD	22.99	5.6710	18.920	150.80	48.953	56.179	8.678	22.303
#1	.7982	20.419	1.8280	2.3444	1.0645	.95683	.9798	2.8473
#2	.7938	19.369	1.3039	.16678	.91245	2.6873	1.164	1.8383
#3	.5162	18.226	1.8702	.05596	2.1464	3.6547	1.055	2.1957

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**1.0320**	**3.3517**
Stddev	.4349	.3639
%RSD	42.141	10.856
#1	.93494	3.7373
#2	1.5073	3.3034
#3	.65387	3.0144

Sample Name: SEQ-CCB@CCB02 Acquired: 6/3/2012 15:35:29 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4962.5**	**1230.8**	**1813.3**	**25143.**	**10695.**
Stddev	12.4	5.1	4.2	90.	48.
%RSD	.25059	.41083	.23056	.35717	.45053
#1	4948.3	1225.2	1808.5	25117.	10738.
#2	4971.3	1232.6	1816.2	25243.	10704.
#3	4968.0	1234.8	1815.1	25069.	10643.

Sample Name: SEQ-CCV@CCV Acquired: 6/3/2012 15:39:47 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**974.48**	**18726.**	**1941.8**	**1967.**	**16188.**	**405.47**	**51631.**	**1025.7**
Stddev	5.32	289.	9.9	21.	654.	3.70	969.	1.6
%RSD	.54550	1.5438	.50898	1.080	4.0388	.91371	1.8760	.15647
#1	969.58	18393.	1940.9	1949.	15483.	401.71	50513.	1025.6
#2	973.73	18882.	1932.5	1961.	16775.	405.60	52230.	1024.2
#3	980.13	18904.	1952.2	1990.	16305.	409.11	52149.	1027.4

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2521.3**	**1995.0**	**4922.2**	**20173.**	**47937.**	**991.2**	**49523.**	**2990.9**
Stddev	2.8	26.4	13.6	363.	431.	11.0	951.	29.5
%RSD	.11238	1.3231	.27579	1.8000	.89959	1.112	1.9213	.98523
#1	2518.5	1967.8	4930.5	19753.	47440.	978.5	48425.	2961.8
#2	2521.2	1996.8	4906.6	20385.	48207.	997.5	50047.	2990.3
#3	2524.2	2020.5	4929.6	20380.	48166.	997.7	50097.	3020.7

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**999.8**	**48859.**	**4012.6**	**1828.4**	**3957.9**	**3546.7**	**2032.**	**4073.3**
Stddev	1.8	527.	13.1	8.2	10.4	9.7	3.	12.1
%RSD	.1760	1.0780	.32649	.44640	.26249	.27269	.1381	.29656
#1	1000.	48255.	4018.3	1830.7	3953.8	3539.6	2032.	4066.6
#2	997.9	49222.	3997.6	1819.4	3950.1	3542.9	2030.	4066.2
#3	1001.	49100.	4021.9	1835.2	3969.7	3557.7	2035.	4087.3

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**3972.4**	**7928.8**
Stddev	37.0	29.3
%RSD	.93034	.36905
#1	3936.0	7943.4
#2	3971.1	7895.1
#3	4009.9	7948.0

Sample Name: SEQ-CCV@CCV Acquired: 6/3/2012 15:39:47 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4405.3**	**1146.7**	**1747.5**	**24288.**	**10764.**
Stddev	13.0	5.1	5.8	42.	104.
%RSD	.29517	.44749	.32970	.17418	.96783
#1	4417.9	1146.6	1750.1	24315.	10878.
#2	4406.1	1151.8	1751.5	24310.	10673.
#3	4392.0	1141.6	1740.9	24240.	10741.

Sample Name: SEQ-CCB@CCB Acquired: 6/3/2012 15:43:55 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1.3513**	**2.7185**	**-.47601**	**.7950**	**2.3059**	**.07564**	**9.6146**	**.06959**
Stddev	.5156	11.651	.98306	.7419	.3081	.03693	4.4923	.03594
%RSD	38.154	428.59	206.52	93.32	13.363	48.828	46.724	51.649
#1	1.0805	16.052	-.72797	1.317	1.9636	.04643	14.723	.10635
#2	1.0276	-2.3964	.60851	-.0542	2.3929	.11715	6.2802	.06789
#3	1.9459	-5.5002	-1.3086	1.122	2.5611	.06333	7.8406	.03452

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.17674**	**-.02770**	**.67006**	**6.5872**	**56.784**	**.3190**	**20.028**	**.54578**
Stddev	.17813	.58375	.19993	10.895	12.081	.5476	9.320	.20317
%RSD	100.79	2107.1	29.838	165.39	21.276	171.7	46.536	37.226
#1	.38153	-.01515	.84664	19.006	67.859	-.2753	27.271	.76766
#2	.05780	.54967	.71054	2.1194	58.592	.8032	23.299	.50083
#3	.09088	-.61763	.45298	-1.3635	43.901	.4290	9.5130	.36884

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.6232**	**8.0060**	**.20591**	**.02118**	**1.1549**	**.42852**	**.4401**	**.86999**
Stddev	.0562	2.3293	.35363	.11834	1.1133	.43650	.2458	.31014
%RSD	9.013	29.094	171.74	558.88	96.396	101.86	55.84	35.649
#1	.5810	8.5681	-.10371	-.01981	2.0059	.04369	.5607	1.0550
#2	.6870	5.4471	.13016	-.07123	-.10500	.90283	.1574	.51193
#3	.6017	10.003	.59128	.15456	1.5638	.33905	.6023	1.0430

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**-.94340**	**.69701**
Stddev	.69144	.13580
%RSD	73.292	19.483
#1	-1.1083	.85331
#2	-1.5375	.60796
#3	-.18441	.62976

Sample Name: SEQ-CCB@CCB Acquired: 6/3/2012 15:43:55 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5022.3**	**1261.3**	**1838.1**	**25463.**	**10756.**
Stddev	16.4	6.3	4.8	31.	51.
%RSD	.32611	.49810	.26385	.12251	.47053
#1	5027.5	1262.5	1838.6	25483.	10763.
#2	5035.4	1266.9	1842.6	25427.	10803.
#3	5003.9	1254.5	1833.0	25479.	10702.

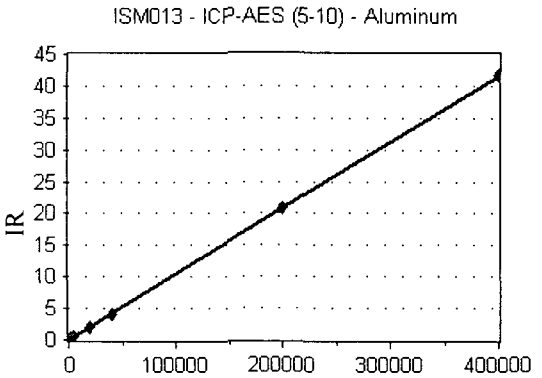
Bonner Analytical Testing

Instrument: ICAPP02
Calibration ID: B223025

Calibration Date: 06/05/2012 23:07 By MSB2
Last Edit Date: 06/05/2012 23:23 By MSB2

ISM013 - ICP-AES (5-10)

Aluminum



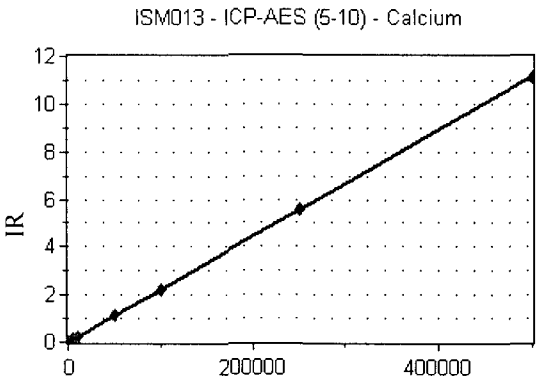
Linear Regression Weighted 1/X
r2: 0.9999743

[Y] = 1.038479E-04 * [X] + 1.639699E-03

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20515-CAL1	0	39.58	0.00575	0.00
BF20515-CAL2	100	113.44	0.01342	-13.44
BF20515-CAL3	2000	1,927.63	0.20182	3.62
BF20515-CAL4	4000	3,798.83	0.39614	5.03
BF20515-CAL5	20000	19,271.07	2.0029	3.64
BF20515-CAL6	40000	39,390.88	4.0923	1.52
BF20515-CAL7	200000	199,911.22	20.762	0.04
BF20515-CAL8	400000	401,687.09	41.716	-0.42

ISM013 - ICP-AES (5-10)

Calcium

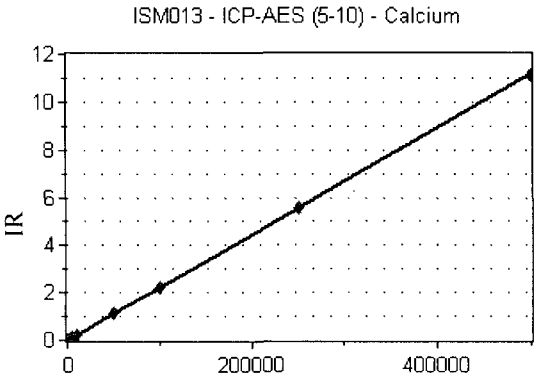


Linear Regression Weighted 1/X
r2: 0.9999945

[Y] = 2.23461E-05 * [X] + -2.248776E-04

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20515-CAL1	0	-4.26	-0.00032	0.00
BF20515-CAL2	250	240.53	0.00515	3.79
BF20515-CAL3	5000	5,083.88	0.11338	-1.68
BF20515-CAL4	10000	10,112.94	0.22576	-1.13
BF20515-CAL5	50000	50,367.84	1.1253	-0.74
BF20515-CAL6	100000	100,483.97	2.2452	-0.48

Calcium



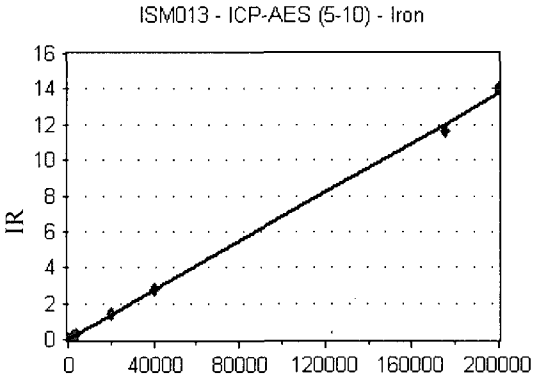
Linear Regression Weighted 1/X
r2: 0.9999945

[Y] = 2.23461E-05 * [X] + -2.248776E-04

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20515-CAL7	250000	249,847.84	5.5829	0.06
BF20515-CAL8	500000	499,112.82	11.153	0.18

ISM013 - ICP-AES (5-10)

Iron



Linear Regression Weighted 1/X
r2: 0.9989763

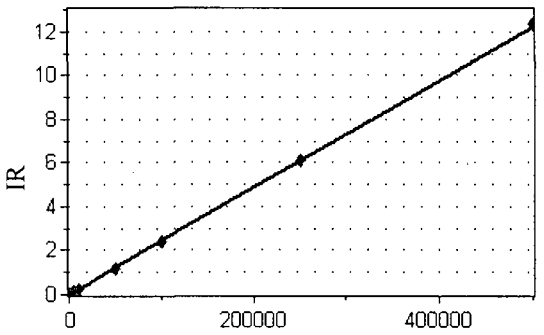
[Y] = 6.868074E-05 * [X] + 1.557993E-03

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20515-CAL1	0	-9.73	0.00089	0.00
BF20515-CAL2	100	89.43	0.0077	10.57
BF20515-CAL3	2000	2,078.20	0.14429	-3.91
BF20515-CAL4	4000	4,176.31	0.28839	-4.41
BF20515-CAL5	20000	20,389.15	1.4019	-1.95
BF20515-CAL6	40000	40,508.33	2.7837	-1.27
BF20515-CAL7	175000	169,515.38	11.644	3.13
BF20515-CAL9	200000	204,343.20	14.036	-2.17

ISM013 - ICP-AES (5-10)

Magnesium

ISM013 - ICP-AES (5-10) - Magnesium



Linear Regression Weighted 1/X

r2: 0.9997778

[Y] = 2.440547E-05 * [X] + -1.072159E-03

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20515-CAL1	0	61.55	0.00043	0.00
BF20515-CAL2	250	287.73	0.00595	-15.09
BF20515-CAL3	5000	4,792.05	0.11588	4.16
BF20515-CAL4	10000	9,532.38	0.23157	4.68
BF20515-CAL5	50000	47,717.67	1.1635	4.56
BF20515-CAL6	100000	97,259.84	2.3726	2.74
BF20515-CAL7	250000	249,582.25	6.0901	0.17
BF20515-CAL8	500000	506,078.03	12.35	-1.22

Sample Name: SEQ-CAL1@S0 Acquired: 6/5/2012 7:20:11 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00002**	**.00575**	**-.00037**	**.0068**	**.02301**	**-.00005**	**-.00032**
#1	-.00005	.00849	-.00009	.0072	.02490	-.00008	-.00021
#2	-.00005	.00530	-.00013	.0061	.02306	-.00003	-.00037
#3	.00002	.00346	-.00089	.0072	.02108	-.00003	-.00040

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00150**	**.00219**	**.00006**	**.00247**	**.00089**	**-.00160**	**.0072**
#1	.00144	.00233	.00007	.00252	.00106	-.00019	.0080
#2	.00149	.00246	.00000	.00242	.00096	-.00245	.0064
#3	.00158	.00177	.00010	.00246	.00066	-.00217	.0073

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00043**	**.00032**	**.0006**	**.00032**	**-.00094**	**.00079**	**.00055**
#1	.00062	.00034	.0008	-.00035	-.00119	.00246	.00043
#2	.00049	.00029	.0006	.00076	-.00129	.00052	.00057
#3	.00018	.00032	.0003	.00055	-.00035	-.00061	.00066

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00106**	**.0006**	**.00007**	**.00008**	**.00438**
#1	.00108	.0007	.00003	.00001	.00513
#2	.00092	.0004	.00006	.00014	.00370
#3	.00117	.0007	.00010	.00010	.00431

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4263.7**	**1000.8**	**1536.8**	**22485.**	**9542.1**
#1	4249.5	1000.7	1536.3	22421.	9142.6
#2	4255.4	996.25	1532.2	22492.	9713.6
#3	4286.3	1005.4	1541.8	22544.	9770.2

Sample Name: SEQ-CAL2@S Acquired: 6/5/2012 7:24:27 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00039**	**.01342**	**.00334**	**.0192**	**.75110**	**.00530**	**.00515**	**.05020**
#1	.00050	.01412	.00349	.0184	.74899	.00530	.00542	.05028
#2	.00036	.01371	.00360	.0196	.75532	.00533	.00494	.05003
#3	.00032	.01242	.00295	.0196	.74900	.00528	.00509	.05031

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.03106**	**.00081**	**.02131**	**.00770**	**.01991**	**.0164**	**.00595**	**.00754**
#1	.03094	.00090	.02166	.00819	.01979	.0161	.00584	.00765
#2	.03108	.00075	.02115	.00775	.01959	.0165	.00601	.00752
#3	.03114	.00077	.02111	.00715	.02034	.0166	.00602	.00744

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0153**	**.06812**	**.03561**	**.01120**	**.01001**	**.00651**	**.0106**	**.00398**
#1	.0150	.06694	.03611	.01029	.00963	.00641	.0106	.00390
#2	.0155	.06868	.03587	.01123	.00982	.00682	.0106	.00400
#3	.0153	.06873	.03485	.01208	.01059	.00631	.0104	.00405

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.00177**	**.15649**
#1	.00172	.15739
#2	.00180	.15601
#3	.00180	.15609

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4302.0**	**1015.5**	**1559.5**	**22600.**	**9928.5**
#1	4306.3	1016.6	1562.0	22613.	9954.7
#2	4298.0	1015.4	1558.7	22580.	9850.5
#3	4301.8	1014.3	1557.8	22607.	9980.3

Sample Name: SEQ-CAL3@S Acquired: 6/5/2012 7:28:43 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00814**	**.20182**	**.07651**	**.2529**	**14.633**	**.10707**	**.11338**	**.98309**
#1	.00807	.20150	.07627	.2515	14.576	.10606	.11318	.98318
#2	.00811	.20237	.07649	.2546	14.664	.10752	.11393	.98242
#3	.00823	.20159	.07676	.2527	14.658	.10764	.11303	.98366

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.57309**	**.01561**	**.37355**	**.14429**	**.44220**	**.2138**	**.11588**	**.14462**
#1	.57145	.01544	.37474	.14407	.44114	.2125	.11535	.14362
#2	.57261	.01570	.37184	.14432	.44268	.2141	.11644	.14505
#3	.57522	.01570	.37406	.14449	.44277	.2149	.11585	.14518

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2943**	**1.3509**	**.71919**	**.19593**	**.18556**	**.10858**	**.1962**	**.07993**
#1	.2937	1.3488	.71825	.19745	.18489	.10837	.1958	.07938
#2	.2940	1.3552	.71885	.19462	.18588	.10830	.1959	.07985
#3	.2951	1.3486	.72046	.19573	.18591	.10908	.1970	.08055

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.03400**	**3.0230**
#1	.03367	3.0154
#2	.03410	3.0301
#3	.03423	3.0235

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4159.3**	**1008.1**	**1542.5**	**22368.**	**9828.2**
#1	4174.7	1012.1	1548.1	22393.	9798.4
#2	4154.3	1006.1	1541.7	22351.	9830.2
#3	4148.9	1005.9	1537.6	22360.	9856.0

Sample Name: SEQ-CAL4@S Acquired: 6/5/2012 7:32:50 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.01632**	**.39614**	**.15479**	**.5049**	**28.707**	**.21418**	**.22576**	**1.9645**
#1	.01628	.39589	.15437	.5036	28.534	.21355	.22534	1.9660
#2	.01650	.39691	.15484	.5044	28.752	.21454	.22613	1.9651
#3	.01617	.39561	.15518	.5069	28.836	.21445	.22582	1.9625

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.1496**	**.03144**	**.74190**	**.28839**	**.89650**	**.4226**	**.23157**	**.28645**
#1	1.1475	.03158	.74259	.28825	.90073	.4227	.23088	.28681
#2	1.1503	.03158	.74112	.28955	.89492	.4213	.23200	.28687
#3	1.1510	.03116	.74201	.28738	.89384	.4240	.23184	.28566

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.5931**	**2.7109**	**1.4531**	**.39636**	**.37012**	**.21517**	**.3919**	**.16240**
#1	.5920	2.7195	1.4481	.39574	.36862	.21414	.3916	.16279
#2	.5934	2.7159	1.4511	.39782	.37070	.21531	.3914	.16198
#3	.5939	2.6973	1.4602	.39553	.37105	.21605	.3925	.16243

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.06898**	**6.0752**
#1	.06912	6.0682
#2	.06881	6.0620
#3	.06901	6.0955

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4031.4**	**984.59**	**1522.0**	**22213.**	**9713.9**
#1	4028.2	987.08	1524.7	22217.	9715.7
#2	4037.9	986.94	1522.9	22187.	9695.9
#3	4028.3	979.74	1518.4	22235.	9730.2

Sample Name: SEQ-CAL5@S Acquired: 6/5/2012 7:37:02 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.08304**	**2.0029**	**.82074**	**2.595**	**141.60**	**1.1031**	**1.1253**	**9.6324**
#1	.08205	1.9867	.81948	2.561	140.17	1.0872	1.1231	9.6270
#2	.08381	2.0208	.81955	2.614	142.50	1.1075	1.1307	9.6265
#3	.08326	2.0012	.82318	2.611	142.13	1.1145	1.1220	9.6437

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5.5876**	**.16025**	**3.9085**	**1.4019**	**4.5958**	**2.116**	**1.1635**	**1.4643**
#1	5.5820	.15806	3.8884	1.3952	4.6151	2.113	1.1580	1.4409
#2	5.5907	.16141	3.9217	1.4147	4.5814	2.118	1.1738	1.4783
#3	5.5901	.16128	3.9154	1.3959	4.5910	2.118	1.1587	1.4737

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.975**	**13.766**	**7.3049**	**1.9673**	**1.8612**	**1.0465**	**1.937**	**.79351**
#1	2.972	13.721	7.2943	1.9682	1.8516	1.0432	1.934	.79335
#2	2.971	13.842	7.3070	1.9631	1.8600	1.0481	1.936	.79404
#3	2.981	13.734	7.3134	1.9707	1.8721	1.0481	1.940	.79312

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.35611**	**30.589**
#1	.35229	30.565
#2	.35608	30.606
#3	.35994	30.597

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3677.5**	**918.62**	**1467.4**	**21437.**	**9718.9**
#1	3676.5	919.08	1468.0	21509.	9643.4
#2	3679.9	918.71	1468.5	21406.	9711.7
#3	3676.1	918.08	1465.7	21396.	9801.7

Sample Name: SEQ-CAL6@S Acquired: 6/5/2012 7:41:13 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.16976**	**4.0923**	**1.6531**	**5.279**	**272.25**	**2.2121**	**2.2452**	**18.900**
#1	.16836	4.0755	1.6505	5.226	265.87	2.1937	2.2427	18.911
#2	.17025	4.1022	1.6592	5.289	274.83	2.2261	2.2549	18.869
#3	.17068	4.0993	1.6496	5.322	276.06	2.2167	2.2378	18.919

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**10.910**	**.31941**	**7.9400**	**2.7837**	**9.0873**	**4.225**	**2.3726**	**2.9834**
#1	10.898	.31681	7.9506	2.7782	9.0779	4.213	2.3710	2.9599
#2	10.897	.32055	7.9725	2.7921	9.0930	4.231	2.3823	3.0004
#3	10.933	.32086	7.8968	2.7808	9.0909	4.232	2.3646	2.9899

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5.901**	**27.236**	**14.295**	**3.7911**	**3.7184**	**2.0510**	**3.795**	**1.5298**
#1	5.893	27.001	14.286	3.7909	3.7044	2.0423	3.794	1.5300
#2	5.895	27.350	14.344	3.7958	3.7238	2.0558	3.797	1.5278
#3	5.913	27.357	14.255	3.7867	3.7269	2.0550	3.794	1.5316

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.70770**	**59.403**
#1	.70205	59.473
#2	.70938	59.554
#3	.71167	59.184

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3475.2**	**888.39**	**1423.4**	**20862.**	**9639.4**
#1	3472.6	888.86	1425.3	20857.	9584.8
#2	3479.4	886.60	1425.0	20820.	9640.4
#3	3473.7	889.70	1419.8	20909.	9693.1

Sample Name: SEQ-CAL7@S Acquired: 6/5/2012 7:45:32 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Al3961	Ca3181	Fe2382	K_7664	Mg2790	Na5895	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**20.762**	**5.5829**	**11.644**	**13.803**	**6.0901**	**34.554**	**13.053**
#1	20.626	5.5489	11.564	13.778	6.0547	34.295	12.970
#2	20.790	5.5948	11.658	13.807	6.1008	34.222	13.070
#3	20.869	5.6051	11.711	13.824	6.1149	35.145	13.118

Int. Std.	Sc2273	Y_3710
Units	Cts/S	Cts/S
Avg	**769.99**	**9428.3**
#1	776.13	9446.6
#2	767.47	9436.0
#3	766.38	9402.4

Sample Name: SEQ-CAL8@S Acquired: 6/5/2012 7:49:58 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Al3961	Ca3181	Fe2382	K_7664	Mg2790	Na5895	Pb2203
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**41.716**	**11.153**	**22.265**	**28.227**	**12.350**	**70.529**	**26.668**
#1	40.993	11.110	22.244	28.220	12.318	70.945	26.657
#2	42.015	11.141	22.253	28.203	12.339	70.221	26.597
#3	42.141	11.208	22.299	28.259	12.394	70.422	26.750

Int. Std.	Sc2273	Y_3710
Units	Cts/S	Cts/S
Avg	**691.79**	**9013.2**
#1	691.87	9034.0
#2	695.94	9040.7
#3	687.55	8964.9

Sample Name: SEQ-CAL9@S Acquired: 6/5/2012 7:54:32 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Cr2677	Cu3247	Fe2382	Mn2576	Pb2203	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.97405**	**14.948**	**14.036**	**5.9088**	**5.1740**	**49.349**
#1	.96406	14.802	13.904	5.8479	5.1725	49.452
#2	.98113	15.010	14.195	5.9564	5.1659	49.371
#3	.97697	15.032	14.008	5.9222	5.1835	49.224

Int. Std.	Sc2273	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**949.83**	**22355.**	**9716.9**
#1	948.61	22413.	9722.7
#2	950.24	22309.	9675.3
#3	950.63	22344.	9752.7

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196

Sample Name: SEQ-CALA@S Acquired: 6/5/2012 7:58:56 Type: Cal
Method: ISM1.3_2th_MDLs_2012(v12) Mode: IR Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	As1890	Cr2677	Cu3247	Fe2382	Mn2576	Pb2203	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.3883**	**1.9420**	**29.797**	**25.897**	**11.797**	**10.661**	**99.448**
#1	3.3800	1.9117	29.400	25.304	11.624	10.653	99.086
#2	3.3746	1.9539	29.618	25.671	11.865	10.653	99.497
#3	3.4102	1.9603	30.374	26.715	11.903	10.676	99.760

Int. Std.	Sc2273	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S
Avg	**892.41**	**22239.**	**9848.4**
#1	893.60	22356.	9878.5
#2	894.28	22228.	9946.0
#3	889.34	22134.	9720.7

Sample Name: SEQ-ICV@ICV01 Acquired: 6/5/2012 8:03:25 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**497.71**	**2455.8**	**972.86**	**-.6040**	**533.60**	**496.09**	**10639.**	**530.92**
Stddev	4.16	25.9	2.62	.4318	4.75	3.63	47.	2.29
%RSD	.83561	1.0560	.26963	71.48	.88933	.73219	.44230	.43214
#1	496.85	2428.6	970.34	-.4049	529.26	494.12	10585.	532.63
#2	494.04	2458.6	972.65	-1.099	532.87	493.86	10663.	531.82
#3	502.23	2480.3	975.57	-.3077	538.67	500.28	10669.	528.31

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**529.17**	**510.40**	**511.02**	**5433.5**	**9780.2**	**.1461**	**5966.6**	**524.30**
Stddev	1.01	3.29	2.50	43.2	34.6	.4852	35.7	4.31
%RSD	.19171	.64363	.48945	.79427	.35363	332.1	.59769	.82219
#1	529.45	507.55	511.96	5384.0	9751.2	.5725	5925.6	524.10
#2	530.01	509.67	508.19	5453.4	9771.0	.2476	5983.3	520.09
#3	528.04	513.99	512.91	5463.2	9818.5	-.3818	5990.8	528.70

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.0894**	**9940.7**	**530.47**	**987.84**	**995.61**	**1040.9**	F **-.1483**	**1070.6**
Stddev	.0857	74.4	1.07	1.44	1.29	2.4	.4968	1.6
%RSD	95.89	.74820	.20117	.14575	.12995	.22732	335.1	.15371
#1	-.1849	9882.0	529.24	987.01	996.39	1043.0	.4071	1069.1
#2	-.0191	9915.6	530.93	987.01	994.11	1041.2	-.5504	1070.3
#3	-.0641	10024.	531.22	989.50	996.31	1038.3	-.3015	1072.4

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**494.71**	**1053.9**
Stddev	4.19	4.6
%RSD	.84607	.43673
#1	494.75	1053.9
#2	490.50	1058.6
#3	498.87	1049.4

Sample Name: SEQ-ICV@ICV01 Acquired: 6/5/2012 8:03:25 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4143.8**	**994.19**	**1563.4**	**22300.**	**9813.5**
Stddev	8.9	3.35	3.7	80.	38.3
%RSD	.21466	.33646	.23852	.35701	.39049
#1	4146.2	997.30	1562.6	22212.	9830.9
#2	4133.9	990.65	1560.2	22368.	9769.5
#3	4151.2	994.61	1567.5	22319.	9840.0

Sample Name: SEQ-ICB@ICB01 Acquired: 6/5/2012 8:07:27 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.37223**	**-17.212**	**.40955**	**.2050**	**.43649**	**.07604**	**-9.2170**	**.03183**
Stddev	.76154	7.168	.68355	.4098	.12014	.03496	6.2674	.01450
%RSD	204.59	41.648	166.90	199.9	27.524	45.980	67.998	45.544
#1	.10297	-9.6063	.49664	-.2397	.56464	.11034	-11.888	.01649
#2	-1.2506	-23.843	1.0454	.5674	.41840	.07733	-13.707	.04530
#3	.03094	-18.185	-.31337	.2874	.32642	.04045	-2.0566	.03371

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.06118**	**-.10491**	**.97233**	**13.109**	**55.424**	**-.1140**	**-.26083**	**.60386**
Stddev	.09281	.95982	.23300	6.923	7.193	.1642	5.4680	.29446
%RSD	151.70	914.90	23.963	52.813	12.978	144.0	2096.4	48.762
#1	.02613	-.43527	1.2376	21.103	62.232	-.1247	4.4678	.93817
#2	-.00899	-.85592	.80072	8.9929	47.900	-.2726	-6.2486	.49043
#3	.16641	.97646	.87869	9.2325	56.141	.0552	.99837	.38299

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.1000**	**29.438**	**-.19208**	**1.6973**	**.00329**	**-.66161**	**.1107**	**-.02906**
Stddev	.2291	2.979	.08340	.4161	.24530	.85554	.2721	.51226
%RSD	229.1	10.119	43.417	24.516	7455.8	129.31	245.9	1763.0
#1	-.1325	26.885	-.19311	2.1090	-.15680	-1.4907	.0344	.41913
#2	.3254	32.711	-.10818	1.2769	-.11902	.21817	-.1152	.08115
#3	.1071	28.718	-.27496	1.7060	.28569	-.71233	.4127	-.58745

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**-.12040**	**.81260**
Stddev	.76845	.10737
%RSD	638.27	13.214
#1	-1.0066	.91546
#2	.28426	.70122
#3	.36117	.82111

Sample Name: SEQ-ICB@ICB01 Acquired: 6/5/2012 8:07:27 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4340.8**	**1039.4**	**1593.5**	**22913.**	**9798.8**
Stddev	4.4	1.2	2.9	124.	54.0
%RSD	.10038	.11220	.18021	.54058	.55069
#1	4344.6	1038.1	1596.7	22831.	9849.8
#2	4336.0	1040.2	1592.4	23056.	9804.2
#3	4341.6	1039.9	1591.3	22853.	9742.3

Sample Name: SEQ-IFA@ICSA01 Acquired: 6/5/2012 8:11:43 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.19322**	**239050.**	**.02978**	**-1.377**	**1.5769**	**.70163**	**255630.**
Stddev	.88076	2063.	.75252	.571	.1197	.03882	1305.
%RSD	455.82	.86301	2526.7	41.51	7.5918	5.5323	.51039
#1	.86210	236820.	.10303	-.7855	1.6549	.65920	254280.
#2	.52225	239410.	.74300	-1.419	1.6368	.71034	255720.
#3	-.80468	240900.	-.75669	-1.926	1.4391	.73536	256890.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.97476**	**4.6623**	**41.220**	**22.988**	**99219.**	**61.229**	**1.156**
Stddev	.08747	.1275	1.656	.434	492.	.599	.341
%RSD	8.9739	2.7356	4.0185	1.8888	.49624	.97803	29.45
#1	-.89004	4.8095	39.945	22.790	98674.	61.389	1.479
#2	-.96950	4.5840	43.092	22.688	99349.	60.566	.8003
#3	-1.0648	4.5934	40.623	23.486	99633.	61.731	1.190

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**254990.**	**25.402**	**.2147**	**813.21**	**21.069**	**18.557**	**4.1910**
Stddev	1904.	.307	.1809	2.86	.225	2.717	1.0516
%RSD	.74650	1.2103	84.26	.35155	1.0679	14.644	25.091
#1	252940.	25.133	.2945	814.11	20.813	16.906	5.3843
#2	255330.	25.335	.0076	815.51	21.158	21.693	3.3995
#3	256700.	25.737	.3420	810.01	21.236	17.071	3.7893

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**4.2963**	**1.420**	**1.7949**	**.89725**	**35.088**
Stddev	2.1752	.472	1.0929	.63490	.148
%RSD	50.629	33.21	60.889	70.760	.42124
#1	2.4178	1.622	3.0387	.30545	35.151
#2	3.7916	.8812	1.3581	1.5679	34.919
#3	6.6794	1.757	.98797	.81842	35.194

Sample Name: SEQ-IFA@ICSA01 Acquired: 6/5/2012 8:11:43 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3425.4**	**816.76**	**1457.0**	**20789.**	**9396.5**
Stddev	7.7	1.15	4.6	10.	21.6
%RSD	.22585	.14076	.31288	.04762	.22982
#1	3432.3	816.09	1453.6	20793.	9414.7
#2	3417.0	816.11	1455.3	20778.	9402.2
#3	3426.8	818.09	1462.2	20796.	9372.7

Sample Name: SEQ-IFB@ICSAB01 Acquired: 6/5/2012 8:16:06 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**205.48**	**240100.**	**106.37**	**-4.177**	**512.21**	**502.76**	**254120.**
Stddev	2.42	1470.	1.97	.819	3.01	3.13	2003.
%RSD	1.1757	.61234	1.8474	19.61	.58759	.62193	.78839
#1	203.67	239430.	108.08	-4.389	508.95	499.31	251800.
#2	204.53	241780.	104.23	-3.272	512.82	505.39	255250.
#3	208.22	239080.	106.81	-4.869	514.87	503.59	255290.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**974.81**	**487.24**	**545.15**	**526.63**	**100070.**	**52.967**	**.9202**
Stddev	1.51	.90	2.41	4.44	608.	10.846	.6787
%RSD	.15499	.18399	.44238	.84320	.60791	20.477	73.76
#1	974.70	487.50	543.41	528.15	99482.	44.787	.4373
#2	976.37	487.97	544.15	530.10	100030.	48.845	1.696
#3	973.35	486.24	547.90	521.62	100700.	65.270	.6271

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**254740.**	**539.38**	**.1837**	**813.98**	**1108.4**	**68.536**	**581.67**
Stddev	1715.	1.06	.1463	.96	2.0	.319	2.15
%RSD	.67324	.19707	79.65	.11762	.17765	.46498	.36989
#1	252850.	538.19	.0179	814.36	1106.4	68.545	579.91
#2	255180.	539.72	.2386	812.89	1110.3	68.213	584.07
#3	256190.	540.23	.2946	814.70	1108.6	68.850	581.04

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**52.395**	**1.291**	**103.12**	**500.98**	**1110.4**
Stddev	1.648	.360	1.84	3.62	4.5
%RSD	3.1448	27.87	1.7876	.72244	.40844
#1	50.599	1.583	100.99	498.73	1109.0
#2	52.748	.8891	104.13	505.15	1115.5
#3	53.837	1.403	104.24	499.05	1106.8

Sample Name: SEQ-IFB@ICSAB01 Acquired: 6/5/2012 8:16:06 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3391.4**	**809.20**	**1439.9**	**20576.**	**9352.0**
Stddev	2.4	1.17	.6	54.	5.3
%RSD	.07000	.14429	.04116	.26045	.05711
#1	3390.3	810.33	1439.7	20539.	9349.0
#2	3394.1	807.99	1439.5	20552.	9358.2
#3	3389.8	809.27	1440.6	20638.	9348.8

Sample Name: SEQ-CCV@CCV01 Acquired: 6/5/2012 8:20:21 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**992.44**	**19396.**	**1970.2**	**1953.**	**16273.**	**405.02**	**51987.**	**1033.7**
Stddev	10.57	188.	13.0	25.	604.	3.79	374.	2.8
%RSD	1.0654	.96761	.65826	1.286	3.7103	.93489	.71911	.27459
#1	982.50	19182.	1958.2	1927.	15577.	401.10	51560.	1030.4
#2	991.26	19475.	1968.4	1954.	16587.	405.29	52147.	1035.0
#3	1003.5	19532.	1984.0	1977.	16655.	408.66	52254.	1035.6

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2551.7**	**2075.7**	**5169.2**	**21141.**	**49379.**	**994.0**	**49956.**	**3149.1**
Stddev	8.4	22.4	6.6	183.	125.	6.7	421.	29.3
%RSD	.32781	1.0778	.12786	.86784	.25353	.6722	.84347	.93164
#1	2543.3	2050.5	5169.5	20929.	49253.	986.8	49473.	3117.0
#2	2551.8	2083.4	5175.6	21252.	49382.	995.1	50245.	3155.7
#3	2560.0	2093.2	5162.4	21242.	49504.	1000.	50151.	3174.6

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1010.**	**49619.**	**4090.8**	**1888.9**	**3973.7**	**3538.2**	**2047.**	**4110.6**
Stddev	4.	282.	25.2	6.3	32.6	23.4	10.	6.1
%RSD	.4053	.56851	.61688	.33415	.81918	.66065	.4771	.14937
#1	1007.	49301.	4066.5	1885.5	3940.9	3514.9	2038.	4115.0
#2	1010.	49715.	4089.1	1885.0	3974.1	3538.1	2046.	4113.3
#3	1015.	49840.	4116.9	1896.1	4006.0	3561.6	2058.	4103.6

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**4032.8**	**8097.8**
Stddev	33.6	35.3
%RSD	.83398	.43549
#1	3996.3	8062.9
#2	4039.4	8097.0
#3	4062.6	8133.5

Sample Name: SEQ-CCV@CCV01 Acquired: 6/5/2012 8:20:21 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3740.2**	**943.58**	**1504.3**	**21540.**	**9634.9**
Stddev	2.6	5.55	6.9	56.	21.0
%RSD	.06913	.58819	.45925	.26160	.21761
#1	3740.7	947.53	1510.4	21598.	9654.6
#2	3742.5	945.98	1505.8	21538.	9612.9
#3	3737.4	937.23	1496.8	21485.	9637.1

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Sample Name: SEQ-CCB@CCB01 Acquired: 6/5/2012 8:24:29 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.02597**	**-15.877**	**-.04200**	**2.589**	**.84223**	**.05764**	**1.8464**	**.03312**
Stddev	1.2656	3.995	.25441	.089	.30176	.04836	11.275	.01636
%RSD	4873.7	25.160	605.79	3.440	35.829	83.890	610.63	49.404
#1	.52236	-11.368	.17641	2.652	1.1884	.09130	14.164	.02691
#2	-1.4732	-18.974	.01894	2.487	.70398	.00223	-.66296	.05168
#3	.87295	-17.288	-.32134	2.627	.63436	.07940	-7.9622	.02078

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.10095**	**-.44083**	**.79657**	**11.011**	**45.779**	**.0048**	**2.9500**	**.47885**
Stddev	.19610	.44733	.18085	5.530	7.679	.4334	8.0155	.06218
%RSD	194.25	101.47	22.703	50.221	16.774	9000.	271.71	12.985
#1	-.07368	-.91201	.61993	17.307	45.965	-.4835	12.086	.54482
#2	.06344	-.02196	.98135	6.9424	53.363	.3439	-.33242	.47039
#3	.31310	-.38853	.78842	8.7828	38.008	.1541	-2.9033	.42133

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.1385**	**22.754**	**.30515**	**.63394**	**.33662**	**.30382**	**-.2657**	**.93222**
Stddev	.0889	1.375	.08049	1.5247	.58202	1.2580	.3307	.28529
%RSD	64.17	6.0423	26.376	240.50	172.90	414.08	124.5	30.603
#1	.1526	21.241	.30503	2.0311	.38658	1.6320	-.1261	1.0389
#2	.2195	23.093	.22472	-.99232	.89204	.14923	-.0277	1.1488
#3	.0434	23.927	.38570	.86309	-.26877	-.86979	-.6433	.60896

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.84590**	**.68591**
Stddev	1.4132	.06365
%RSD	167.07	9.2794
#1	.36500	.73045
#2	-.26411	.71427
#3	2.4368	.61301

6/5

Sample Name: SEQ-CCB@CCB01 Acquired: 6/5/2012 8:24:29 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4372.6**	**1046.0**	**1609.8**	**22976.**	**9849.1**
Stddev	3.3	2.8	.7	88.	44.5
%RSD	.07623	.26790	.04289	.38206	.45185
#1	4368.8	1044.4	1610.0	23041.	9814.9
#2	4375.0	1044.5	1610.5	22876.	9899.4
#3	4374.0	1049.3	1609.1	23011.	9832.9

Sample Name: SEQ-CCV@CCV02 Acquired: 6/5/2012 9:37:51 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**959.55**	**18942.**	**1851.1**	**1837.**	**15735.**	**392.72**	**51951.**	**1034.1**
Stddev	10.00	125.	2.2	21.	330.	4.26	186.	3.5
%RSD	1.0418	.65833	.12113	1.118	2.0955	1.0837	.35869	.33536
#1	948.62	18803.	1853.6	1817.	15390.	387.87	51736.	1037.4
#2	961.79	18981.	1849.2	1836.	16047.	394.49	52074.	1030.5
#3	968.23	19043.	1850.6	1858.	15770.	395.81	52042.	1034.5

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2537.7**	**2059.6**	**4981.5**	**21860.**	**49103.**	**972.1**	**51841.**	**3052.1**
Stddev	8.5	25.1	26.7	146.	198.	3.3	293.	35.7
%RSD	.33579	1.2195	.53613	.66963	.40336	.3372	.56499	1.1690
#1	2544.2	2030.8	4952.8	21691.	49166.	969.5	51503.	3012.9
#2	2528.1	2071.0	5005.7	21934.	49262.	975.8	52028.	3060.8
#3	2540.8	2077.0	4985.8	21954.	48881.	971.1	51992.	3082.7

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**985.8**	**49555.**	**3830.3**	**1846.3**	**3813.2**	**3463.1**	**2017.**	**4260.7**
Stddev	3.6	108.	3.4	1.0	12.6	6.5	6.	14.7
%RSD	.3630	.21819	.08748	.05175	.32969	.18892	.2967	.34389
#1	988.2	49439.	3832.4	1847.4	3815.4	3465.8	2020.	4277.0
#2	981.7	49652.	3826.4	1845.6	3799.7	3455.6	2010.	4248.6
#3	987.5	49574.	3832.1	1845.9	3824.5	3467.8	2022.	4256.5

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**3946.0**	**7727.2**
Stddev	37.9	9.1
%RSD	.95984	.11787
#1	3902.5	7733.4
#2	3963.7	7716.7
#3	3971.7	7731.5

Sample Name: SEQ-CCV@CCV02 Acquired: 6/5/2012 9:37:51 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3926.0**	**1063.2**	**1626.6**	**22617.**	**9664.6**
Stddev	12.1	2.2	5.6	29.	51.2
%RSD	.30836	.20341	.34156	.12730	.52955
#1	3915.1	1063.5	1625.2	22639.	9618.7
#2	3939.0	1065.2	1632.7	22585.	9655.1
#3	3923.9	1060.9	1621.8	22628.	9719.8

Sample Name: SEQ-CCB@CCB02 Acquired: 6/5/2012 9:42:03 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.81933**	**-23.534**	**.73361**	**1.647**	**.66056**	**.04207**	**33.232**	**-.02081**
Stddev	1.3346	9.038	.49047	.282	.26937	.03189	13.602	.04328
%RSD	162.89	38.403	66.858	17.11	40.779	75.793	40.930	207.92
#1	-1.7760	-13.309	.22186	1.711	.94575	.06826	41.589	-.03876
#2	.70535	-26.835	.77937	1.338	.41044	.05138	17.537	-.05223
#3	-1.3874	-30.456	1.1996	1.890	.62549	.00657	40.570	.02855

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.00275**	**-.51789**	**-.23998**	**5.4892**	**30.016**	**.0519**	**5.6367**	**.23040**
Stddev	.13453	.57010	.11179	8.7166	3.976	.2816	13.559	.14831
%RSD	4891.8	110.08	46.584	158.80	13.247	542.3	240.56	64.372
#1	-.07006	-.73025	-.34303	15.513	28.052	-.2014	17.887	.37973
#2	.15800	-.95134	-.12113	1.2701	27.404	.0020	7.9556	.08313
#3	-.07968	.12791	-.25578	-.31515	34.592	.3551	-8.9326	.22835

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.2981**	**12.731**	**-.01730**	**.31473**	**.17510**	**-.26890**	**-.1530**	**.01179**
Stddev	.0324	4.112	.12259	.57986	.44524	.51955	.0685	.13998
%RSD	10.86	32.300	708.74	184.24	254.28	193.22	44.79	1187.3
#1	.3279	12.690	.12207	-.19747	-.02398	-.23462	-.1562	.16848
#2	.3026	8.6403	-.06553	.19736	.68514	-.80474	-.2199	-.03220
#3	.2637	16.864	-.10843	.94430	-.13587	.23267	-.0830	-.10091

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.24579**	**-.06247**
Stddev	1.0411	.15149
%RSD	423.58	242.50
#1	-.23710	.10930
#2	1.4407	-.11973
#3	-.46621	-.17697

Sample Name: SEQ-CCB@CCB02 Acquired: 6/5/2012 9:42:03 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4552.3**	**1156.7**	**1718.5**	**24048.**	**10033.**
Stddev	6.5	1.0	4.1	22.	64.
%RSD	.14173	.08659	.24005	.09294	.63825
#1	4545.3	1156.0	1715.6	24066.	9963.7
#2	4558.0	1157.8	1723.2	24023.	10090.
#3	4553.7	1156.3	1716.7	24055.	10044.

Sample Name: SEQ-CCV@CCV03 Acquired: 6/5/2012 9:54:53 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**957.77**	**19084.**	**1845.2**	**1858.**	**16092.**	**400.46**	**52996.**	**1026.4**
Stddev	6.13	222.	10.6	15.	535.	2.20	457.	3.8
%RSD	.64002	1.1626	.57401	.8236	3.3259	.55003	.86218	.37018
#1	955.74	18840.	1856.7	1841.	15474.	398.30	52477.	1030.6
#2	964.66	19274.	1835.9	1869.	16394.	402.70	53340.	1025.6
#3	952.92	19139.	1843.0	1865.	16409.	400.37	53169.	1023.1

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2507.4**	**2077.3**	**5028.1**	**21994.**	**49013.**	**976.3**	**52674.**	**3091.3**
Stddev	6.0	16.5	32.9	273.	261.	8.7	532.	19.3
%RSD	.23774	.79558	.65375	1.2393	.53302	.8928	1.0103	.62425
#1	2514.2	2059.4	5059.4	21683.	48716.	966.3	52081.	3075.2
#2	2504.2	2091.9	5030.9	22189.	49208.	982.1	53109.	3112.7
#3	2503.6	2080.6	4993.9	22110.	49116.	980.6	52832.	3085.9

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**976.2**	**49444.**	**3825.2**	**1826.4**	**3786.9**	**3440.9**	**2010.**	**4184.0**
Stddev	3.1	420.	21.8	9.7	16.9	6.6	8.	3.4
%RSD	.3151	.85016	.56891	.53321	.44672	.19203	.3774	.08075
#1	979.7	48993.	3844.4	1834.9	3805.7	3448.4	2019.	4186.8
#2	974.9	49825.	3801.6	1815.8	3772.9	3435.9	2008.	4180.2
#3	973.9	49513.	3829.6	1828.4	3782.1	3438.4	2004.	4185.0

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**3971.4**	**7748.3**
Stddev	29.0	40.9
%RSD	.72971	.52777
#1	3939.1	7790.4
#2	3995.1	7708.7
#3	3980.2	7745.7

214

Sample Name: SEQ-CCV@CCV03 Acquired: 6/5/2012 9:54:53 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3948.0**	**1060.4**	**1629.4**	**22680.**	**9743.6**
Stddev	8.1	5.0	1.8	101.	31.0
%RSD	.20426	.46721	.10925	.44490	.31789
#1	3951.9	1060.0	1630.4	22606.	9773.9
#2	3953.4	1065.5	1630.5	22639.	9712.0
#3	3938.7	1055.7	1627.3	22795.	9745.1

Sample Name: SEQ-CCB@CCB03 Acquired: 6/5/2012 9:59:05 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-.02851**	**-24.293**	**-.41227**	**2.206**	**.58097**	**.00281**	**9.8460**	**-.04726**
Stddev	.80918	5.088	1.0127	.115	.43211	.01204	13.503	.04808
%RSD	2838.0	20.946	245.64	5.233	74.378	428.64	137.14	101.74
#1	-.78682	-24.659	-.45381	2.133	1.0416	-.00687	24.790	.00736
#2	-.12212	-19.031	.62056	2.146	.18449	-.00099	-1.4781	-.06597
#3	.82340	-29.188	-1.4036	2.339	.51686	.01629	6.2260	-.08317

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.05360**	**.01070**	**-.08666**	**1.4990**	**40.793**	**-.2215**	**1.6549**	**-.02800**
Stddev	.05361	.11895	.20538	10.840	11.714	.4314	12.440	.38755
%RSD	100.02	1112.0	236.99	723.15	28.717	194.7	751.68	1384.2
#1	.02491	.14262	-.28800	13.999	38.646	-.1332	14.471	.41923
#2	.02045	-.08838	-.09452	-5.3229	53.432	.1588	-10.370	-.26516
#3	.11546	-.02215	.12253	-4.1786	30.300	-.6902	.8637	-.23807

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.1686**	**10.178**	**.00198**	**.50447**	**-.11338**	**.41917**	**.0897**	**.62188**
Stddev	.0570	4.751	.08137	.23017	.40035	.74276	.1688	.28389
%RSD	33.80	46.673	4119.3	45.626	353.11	177.20	188.3	45.650
#1	.1676	15.619	.08418	.71245	-.46862	.87800	-.1048	.33596
#2	.2260	8.0662	-.07853	.25718	.32044	-.43777	.1755	.62598
#3	.1121	6.8503	.00028	.54377	-.19195	.81729	.1983	.90369

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.05101**	**.00396**
Stddev	.90772	.11030
%RSD	1779.4	2785.7
#1	-.93655	.13082
#2	.24065	-.04967
#3	.84894	-.06928

Sample Name: SEQ-CCB@CCB03 Acquired: 6/5/2012 9:59:05 Type: QC
Method: ISM1.3_2th_MDLs_2012(v12) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4599.4**	**1181.4**	**1739.5**	**24356.**	**10078.**
Stddev	16.3	5.0	9.2	25.	52.
%RSD	.35341	.42398	.52853	.10169	.51671
#1	4608.9	1185.4	1745.4	24371.	10086.
#2	4608.7	1183.1	1744.3	24328.	10022.
#3	4580.7	1175.8	1728.9	24370.	10126.

Sample Name: 1205240-04RE1 Acquired: 6/5/2012 10:21:22 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v14) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: MF5WA7 SDG: MF5WA4 CASE: 42562
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**2.2320**	**92531.**	**25.504**	**83.31**	**403.01**	**3.1370**	**20785.**
#1	2.4085	91380.	24.963	81.16	398.85	3.0604	20635.
#2	1.7255	92873.	26.444	83.69	404.76	3.1511	20847.
#3	2.5621	93341.	25.105	85.08	405.42	3.1997	20874.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.23244**	**28.866**	**159.39**	**103.37**	**155580.**	**8306.4**	**52.12**
#1	.31175	28.864	158.02	102.71	154360.	8286.6	51.83
#2	.16854	28.936	160.41	103.28	155970.	8316.7	51.85
#3	.21704	28.798	159.73	104.11	156420.	8315.9	52.67

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**11437.**	**1408.1**	**.0894**	**127.56**	**82.210**	**273.33**	**5.6149**
#1	11356.	1382.8	.0709	126.21	80.821	274.70	5.5151
#2	11455.	1410.6	.0077	127.37	83.218	272.34	5.6266
#3	11500.	1431.0	.1895	129.09	82.592	272.96	5.7031

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**6.1628**	**6.363**	**.06516**	**213.50**	**5385.9**
#1	7.1369	6.155	-.49678	209.70	5364.6
#2	5.5775	6.451	.07070	214.42	5410.8
#3	5.7739	6.485	.62156	216.37	5382.2

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4183.0**	**1051.1**	**1942.2**	**26300.**	**11365.**
#1	4181.2	1050.8	1938.3	26340.	11281.
#2	4189.1	1047.9	1941.9	26347.	11380.
#3	4178.6	1054.5	1946.3	26213.	11436.

Sample Name: SEQ-IBL1 Acquired: 6/5/2012 10:25:37 Type: Unk
Method: ISM1.3_2th_MDLs_2012(v14) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: ZZZZZZ SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**17.813**	**180170.**	**69.946**	**55.62**	**1211.9**	**13.697**	**430870.**
#1	18.260	176080.	69.825	55.50	1208.0	13.523	429050.
#2	17.929	182480.	71.582	54.95	1216.8	13.787	432310.
#3	17.250	181940.	68.431	56.41	1211.0	13.780	431250.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**7.8119**	**146.00**	**195.70**	**113.15**	**127110.**	**27070.**	**110.5**
#1	7.7822	145.86	194.59	112.19	126800.	27049.	110.4
#2	7.7683	145.54	196.87	114.24	127500.	27044.	110.7
#3	7.8854	146.60	195.64	113.03	127040.	27116.	110.3

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**31140.**	**4174.0**	**-.1340**	**7918.4**	**228.78**	**165.12**	**86.570**
#1	31045.	4143.6	-.1339	7910.7	228.38	165.36	87.169
#2	31215.	4211.4	-.1009	7936.0	228.81	165.02	85.822
#3	31161.	4167.2	-.1671	7908.5	229.15	164.99	86.721

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**54.940**	**7.970**	**44.149**	**476.75**	**1737.3**
#1	55.893	7.899	43.573	474.48	1743.7
#2	54.842	8.098	44.976	477.22	1734.7
#3	54.083	7.911	43.897	478.54	1733.6

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3619.7**	**926.29**	**2058.4**	**27704.**	**12551.**
#1	3619.2	924.60	2057.5	27740.	12515.
#2	3632.3	928.06	2063.8	27614.	12574.
#3	3607.6	926.21	2053.9	27759.	12563.

Sample Name: SEQ-CCV@CCV04 Acquired: 6/5/2012 10:29:57 Type: QC
Method: ISM1.3_2th_MDLs_2012(v14) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**924.83**	**18653.**	**1832.6**	**1796.**	**15693.**	**397.31**	**45786.**
Stddev	3.23	133.	5.9	5.	357.	2.29	202.
%RSD	.34942	.71412	.32272	.2976	2.2734	.57605	.44123
#1	923.24	18499.	1828.9	1792.	15282.	396.79	45585.
#2	928.54	18736.	1829.5	1802.	15884.	399.82	45989.
#3	922.69	18723.	1839.4	1794.	15914.	395.33	45783.

Elem	Cd2144	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**1036.8**	**2487.7**	**2034.6**	**4902.7**	**21755.**	**47885.**	**952.5**
Stddev	2.4	4.1	16.9	9.5	135.	199.	4.5
%RSD	.22912	.16485	.83210	.19344	.62118	.41637	.4685
#1	1035.5	2485.4	2034.3	4911.2	21599.	47921.	948.5
#2	1035.4	2485.1	2051.6	4904.3	21842.	48063.	957.3
#3	1039.6	2492.4	2017.8	4892.5	21824.	47669.	951.9

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	Pb2203	Sb2068
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**52951.**	**3038.8**	**965.4**	**48145.**	**3806.8**	F **1733.7**	**3728.7**
Stddev	257.	16.9	1.6	192.	13.9	5.4	4.2
%RSD	.48494	.55666	.1692	.39954	.36629	.31134	.11283
#1	52692.	3032.6	963.7	47950.	3793.5	1728.9	3726.8
#2	53205.	3057.9	965.8	48334.	3805.7	1732.6	3733.5
#3	52957.	3025.8	966.9	48151.	3821.3	1739.6	3725.8

Elem	Se1960	Sn1899	Tl1908	V_2924	Zn2062
Units	ppb	ppb	ppb	ppb	ppb
Avg	**3421.3**	**2012.**	**4169.1**	**3880.6**	**7875.9**
Stddev	2.8	4.	10.6	25.1	34.7
%RSD	.08169	.1763	.25494	.64618	.44027
#1	3424.5	2009.	4172.4	3874.8	7846.0
#2	3419.6	2010.	4157.2	3908.1	7867.8
#3	3419.7	2016.	4177.6	3859.0	7913.9

Sample Name: SEQ-CCV@CCV04 Acquired: 6/5/2012 10:29:57 Type: QC
Method: ISM1.3_2th_MDLs_2012(v14) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4041.7**	**1094.9**	**1677.6**	**22990.**	**9825.5**
Stddev	7.7	3.7	2.4	86.	19.2
%RSD	.19075	.33456	.14076	.37542	.19542
#1	4049.6	1099.2	1679.8	22952.	9847.6
#2	4041.1	1093.0	1675.1	22929.	9815.4
#3	4034.3	1092.7	1677.7	23089.	9813.5

Sample Name: SEQ-CCB@CCB04 Acquired: 6/5/2012 10:34:10 Type: QC
Method: ISM1.3_2th_MDLs_2012(v14) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3131	Ca3181	Cd2144
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**-1.4733**	**-13.369**	**-.12597**	**2.303**	**1.1104**	**.00450**	**-7.0470**	**.01326**
Stddev	.6253	7.826	1.1231	1.278	.4499	.01110	6.1535	.02814
%RSD	42.442	58.541	891.56	55.53	40.517	246.43	87.322	212.12
#1	-1.9015	-5.1940	.55569	3.641	1.6289	.01592	-11.810	-.01916
#2	-1.7627	-14.122	-1.4223	2.171	.87801	-.00624	-9.2320	.02769
#3	-.75573	-20.793	.48866	1.095	.82417	.00382	-.0991	.03126

Elem	Co2286	Cr2677	Cu3247	Fe2382	K_7664	Li6707	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.04684**	**-.56921**	**-.00992**	**9.4773**	**32.490**	**-.6099**	**5.5304**	**.28743**
Stddev	.09111	.65773	.09942	10.957	2.681	.1167	8.6580	.38985
%RSD	194.50	115.55	1002.0	115.61	8.2520	19.14	156.55	135.63
#1	.00287	.09714	.10487	21.879	34.477	-.7313	15.516	.69706
#2	.15161	-1.2180	-.06843	5.4448	33.553	-.6002	.11069	.24426
#3	-.01394	-.58681	-.06620	1.1083	29.441	-.4984	.96499	-.07904

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Sn1899	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avg	**.2856**	**9.1610**	**.20911**	**-.79041**	**.50998**	**-.06199**	**.1974**	**.20485**
Stddev	.0761	5.2721	.39196	.22703	.49674	.40566	.0561	.13454
%RSD	26.63	57.549	187.44	28.724	97.403	654.44	28.45	65.677
#1	.2475	14.986	.51656	-.85562	.51966	-.49803	.2488	.35902
#2	.2362	7.7791	-.23226	-.53790	.00848	.00784	.1375	.14430
#3	.3732	4.7176	.34304	-.97770	1.0018	.30423	.2059	.11123

Elem	V_2924	Zn2062
Units	ppb	ppb
Avg	**.09052**	**.39149**
Stddev	.33932	.20217
%RSD	374.85	51.642
#1	-.29451	.62455
#2	.34588	.28671
#3	.22019	.26322

Sample Name: SEQ-CCB@CCB04 Acquired: 6/5/2012 10:34:10 Type: QC
Method: ISM1.3_2th_MDLs_2012(v14) Mode: CONC Corr. Factor: 1.000000
User: MSB2 EPA ID: SDG: CASE:
Comment:

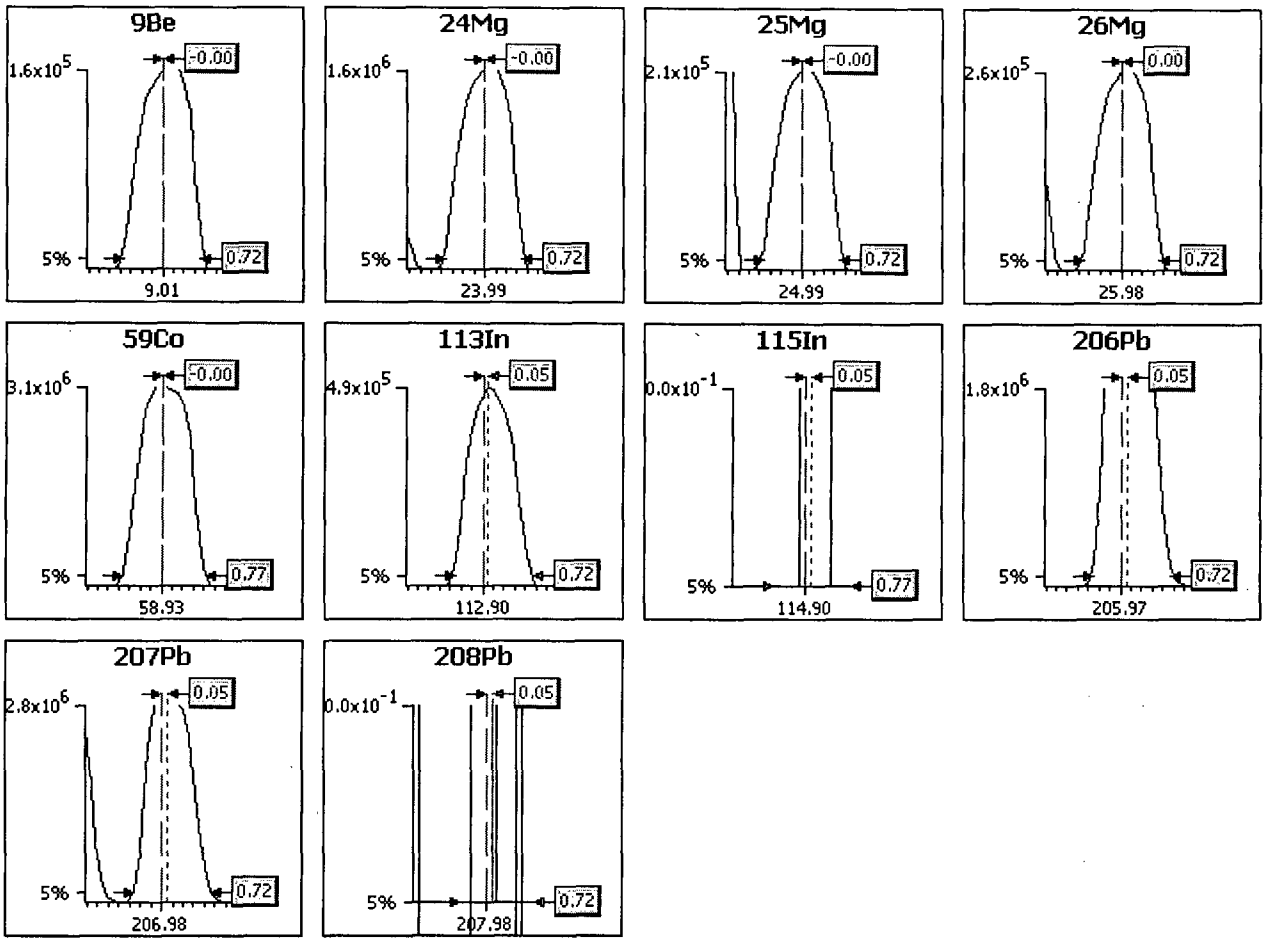
Int. Std.	In2306	Sc2273	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4709.9**	**1230.6**	**1803.7**	**24610.**	**10080.**
Stddev	11.5	6.1	8.2	20.	14.
%RSD	.24416	.49873	.45736	.08093	.13663
#1	4720.7	1234.2	1811.3	24619.	10069.
#2	4711.1	1234.0	1804.8	24625.	10096.
#3	4697.8	1223.5	1795.0	24588.	10077.

Performance Report

Sample details
Sample name : SEQ-TUN1@TUNE01
Acquired at : 6/5/2012 10:46:55 PM
Report name : 200_8 TEST [11/20/2010 12:03:08 PM]

Mass Calibration verification

Acquisition parameters
Sweeps : 30
Dwell : 10.0 mSecs
Point spacing : 0.05 amu
Peak width measured at 5% of the peak maximum



Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.85	0.65	0.10	0.72	-0.00
24Mg	0.85	0.65	0.10	0.72	-0.00
25Mg	0.85	0.65	0.10	0.72	-0.00
26Mg	0.85	0.65	0.10	0.72	0.00
59Co	0.85	0.65	0.10	0.77	-0.00
113In	0.85	0.65	0.10	0.72	0.05
115In	0.85	0.65	0.10	0.77	0.05
206Pb	0.85	0.65	0.10	0.72	0.05
207Pb	0.85	0.65	0.10	0.72	0.05
208Pb	0.85	0.65	0.10	0.72	0.05

Sample details
Sample name : SEQ-TUN1@TUNE01
Acquired at : 6/5/2012 10:46:55 PM
Report name : 200_8 TEST [11/20/2010 12:03:08 PM]

Tune conditions

Major	
Extraction	-118
Lens 1	1.2
Focus	15.5
D1	-43.1
Pole Bias	0.5
Hexapole Bias	-3.0
Nebuliser	0.83
Sampling Depth	130

Minor	
Lens 2	-26.7
Lens 3	-188.2
Forward power	1404
Horizontal	45
Vertical	499
D2	-160
DA	-29.8
Cool	13.0
Auxiliary	0.90

Global	
Standard resolution	n/a
High resolution	n/a
Analogue Detector	n/a
PC Detector	n/a

Add. Gases	
CCT 7% h2/He	0.00
Dont touch this F'n thing	0.00

Sensitivity and stability results

Acquisition parameters
Sweeps : 30

Run	Time	9Be	24Mg	25Mg	26Mg	59Co	113In	115In	206Pb	207Pb	208Pb
Dwell (mSecs)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Limits	%RSD	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
	Countrate	>20000	>50000	>30000	>30000	>50000	>50000	>50000	>50000	>50000	>50000
1	10:48:34 PM	162424.82	1591435.5	215152.88	255846.88	3301355.3	489798.52	11717441	3746459.1	3132624.0	8117324.4
2	10:48:40 PM	160311.13	1579863.4	212893.96	255257.32	3309204.5	487545.45	11605996	3716045.0	3094748.0	8050846.3
3	10:48:46 PM	159418.98	1553472.3	209025.73	254270.22	3277003.2	487257.27	11669361	3708151.5	3103633.3	8118798.6
4	10:48:51 PM	158750.77	1556681.4	209990.93	256532.47	3279345.4	493430.58	11881023	3802191.7	3176484.0	8190943.2
5	10:48:57 PM	160406.11	1568190.9	212208.20	257290.10	3301891.7	486687.95	11658773	3773301.8	3138200.0	8125317.4
x		160262.36	1569928.7	211854.34	255839.40	3293760.0	488943.95	11706519	3749229.8	3129137.9	8120646.0
σ		1387.04	15894.71	2426.92	1160.39	14585.22	2772.65	105280.56	39308.89	32284.19	49623.47
%RSD		0.8655	1.0124	1.1456	0.4536	0.4428	0.5671	0.8993	1.0485	1.0317	0.6111

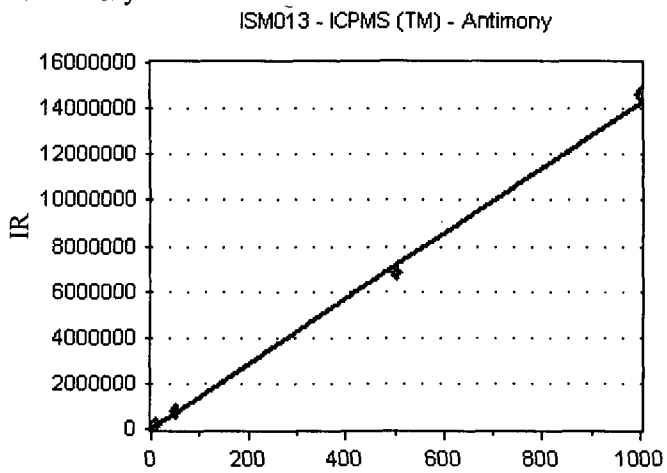
Result : The performance report passed.

Instrument: ICPMS01 Calibration Date: 06/06/2012 14:48 By BGB

Calibration ID: B223040 Last Edit Date: 06/06/2012 14:48 By BGB

ISM013 - ICPMS (TM)

Antimony

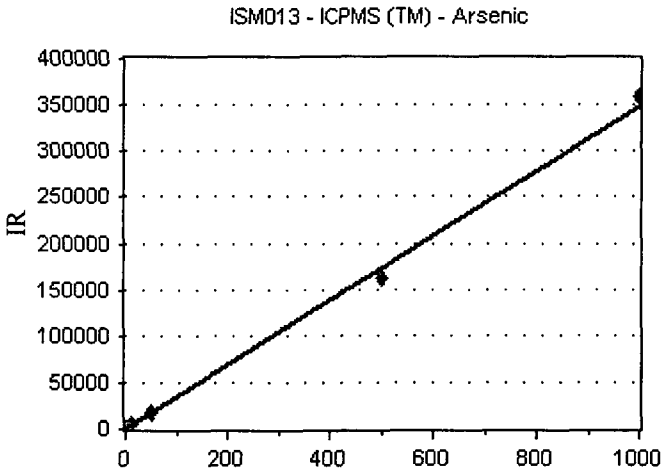


Linear Regression Weighted 1/X
r2: 0.9988624
[Y] = 14292.66 * [X] + 14.47556

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	0.02	360.0071	0.00
BF20614-CAL3	2	1.96	27964.05	2.22
BF20614-CAL4	10	10.10	144433	-1.04
BF20614-CAL5	50	51.84	740940.6	-3.68
BF20614-CAL6	500	476.91	6816327	4.62
BF20614-CAL7	1000	1,021.19	1.459555E+07	-2.12

ISM013 - ICPMS (TM)

Arsenic

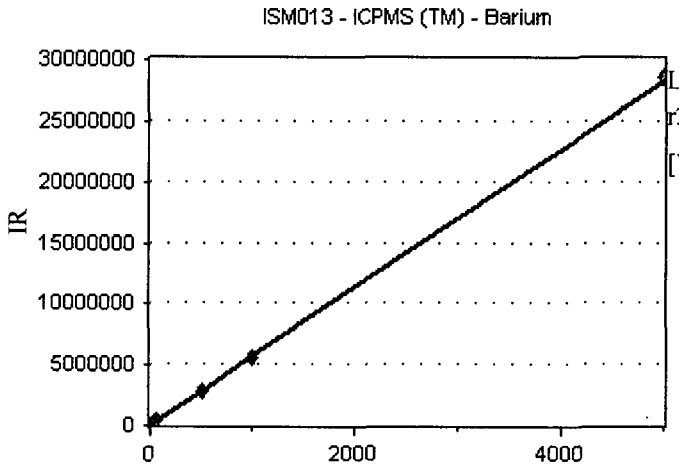


Linear Regression Weighted 1/X
r2: 0.9978329
[Y] = 347.601 * [X] + 51.22619

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	-0.14	2.5926	0.00
BF20614-CAL3	1	0.94	377.7857	6.05
BF20614-CAL4	10	10.55	3716.686	-5.45
BF20614-CAL5	50	52.03	18135.85	-4.05
BF20614-CAL6	500	468.00	162729.6	6.40
BF20614-CAL7	1000	1,029.49	357901.3	-2.95

ISM013 - ICPMS (TM)

Barium

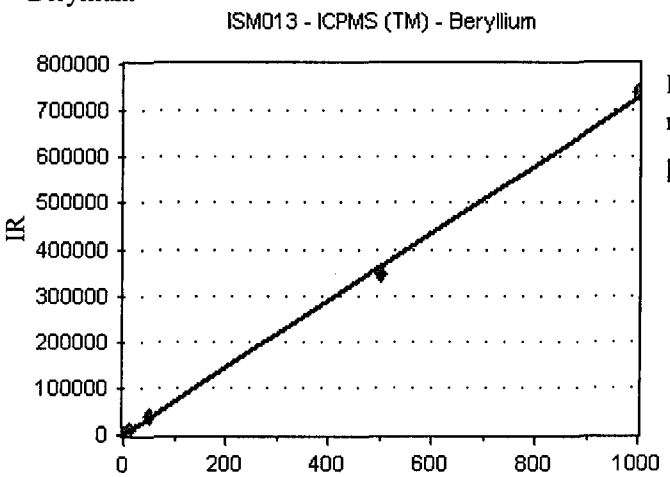


Linear Regression Weighted 1/X
r2: 0.9997652
[Y] = 5635.609 * [X] + -3261.791

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	0.60	140.0011	0.00
BF20614-CAL3	10	10.03	53291.33	-0.35
BF20614-CAL4	10	10.53	56094.77	-5.32
BF20614-CAL5	50	50.63	282061.3	-1.26
BF20614-CAL6	500	476.68	2683141	4.66
BF20614-CAL7	1000	966.12	5441435	3.39
BF20614-CAL8	5000	5,056.00	2.849036E+07	-1.12

ISM013 - ICPMS (TM)

Beryllium

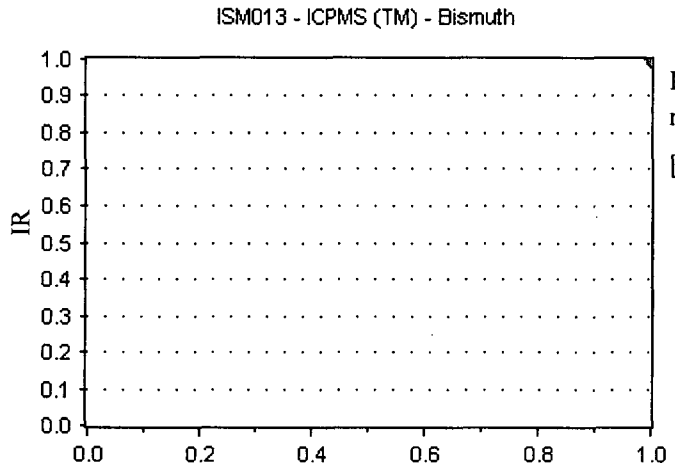


Linear Regression Weighted 1/X
r2: 0.9988568
[Y] = 724.3851 * [X] + 131.0017

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	-0.17	10	0.00
BF20614-CAL3	1	0.88	770.033	11.78
BF20614-CAL4	10	10.83	7973.497	-8.26
BF20614-CAL5	50	53.15	38631.91	-6.30
BF20614-CAL6	500	476.05	344974.9	4.79
BF20614-CAL7	1000	1,020.09	739069.9	-2.01

ISM013 - ICPMS (TM)

Bismuth

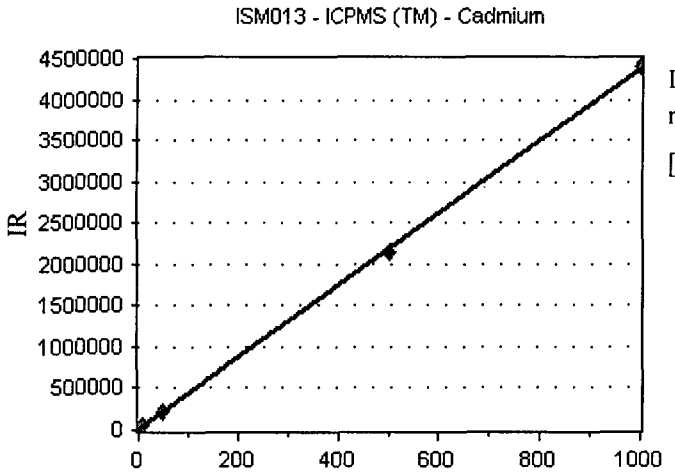


Linear Regression Weighted 1/X
r2: 0
[Y] = 8 * [X] + -7

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	10	59,595.34	476755.7	-595,853.38
BF20614-CAL3	10	59,828.91	478624.3	-598,189.13
BF20614-CAL4	10	59,557.60	476453.8	-595,476.00
BF20614-CAL5	10	60,357.65	482854.2	-603,476.50
BF20614-CAL6	10	59,405.49	475236.9	-593,954.88
BF20614-CAL7	10	58,564.51	468509.1	-585,545.13
BF20614-CAL8	10	57,944.49	463548.9	-579,344.88

ISM013 - ICPMS (TM)

Cadmium

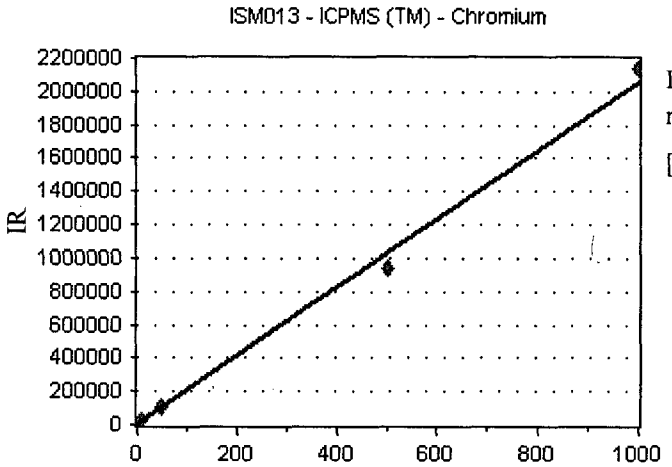


Linear Regression Weighted 1/X
r2: 0.9998374
[Y] = 4383.906 * [X] + 252.8671

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	-0.05	15.5556	0.00
BF20614-CAL3	1	0.94	4365.493	6.19
BF20614-CAL4	10	10.29	45348.39	-2.87
BF20614-CAL5	50	52.25	229311.9	-4.50
BF20614-CAL6	500	490.70	2151414	1.86
BF20614-CAL7	1000	1,006.83	4414102	-0.68

ISM013 - ICPMS (TM)

Chromium



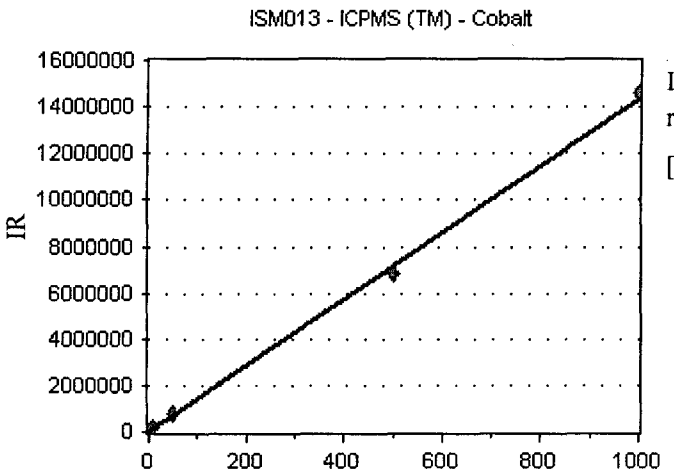
Linear Regression Weighted 1/X
r2: 0.9962264

[Y] = 2057.652 * [X] + -167.7962

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	0.10	33.7778	0.00
BF20614-CAL3	2	2.03	4001.992	-1.32
BF20614-CAL4	10	10.18	20770.37	-1.76
BF20614-CAL5	50	50.56	103876.3	-1.13
BF20614-CAL6	500	458.66	943598.3	8.27
BF20614-CAL7	1000	1,040.57	2140966	-4.06

ISM013 - ICPMS (TM)

Cobalt



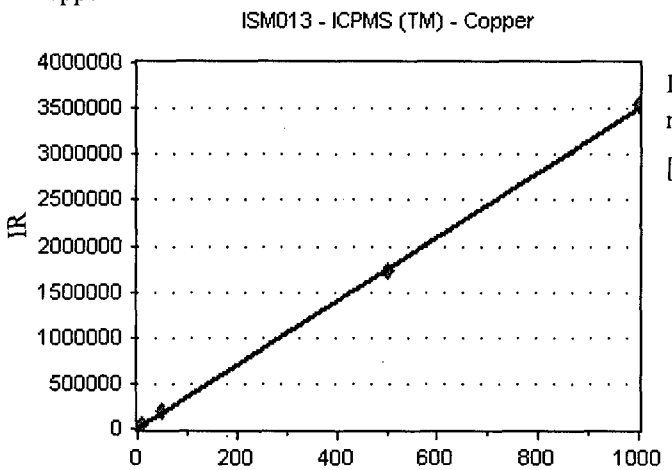
Linear Regression Weighted 1/X
r2: 0.9990261

[Y] = 14376.65 * [X] + 1163.146

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	-0.07	115.5563	0.00
BF20614-CAL3	1	0.92	14398.06	7.94
BF20614-CAL4	10	10.39	150492.1	-3.87
BF20614-CAL5	50	53.32	767758.8	-6.64
BF20614-CAL6	500	477.91	6871895	4.42
BF20614-CAL7	1000	1,018.46	1.464322E+07	-1.85

ISM013 - ICPMS (TM)

Copper



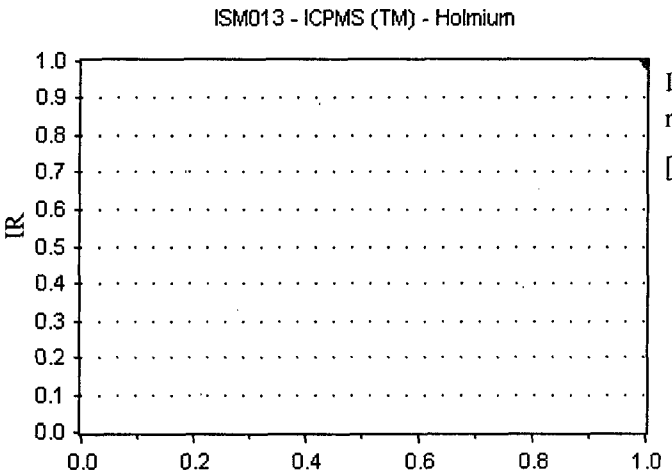
Linear Regression Weighted 1/X
r2: 0.999814

[Y] = 3510.893 * [X] + 1182.056

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	-0.11	791.1456	0.00
BF20614-CAL3	2	1.80	7486.415	10.22
BF20614-CAL4	10	10.53	38148.78	-5.29
BF20614-CAL5	50	53.14	187764.9	-6.29
BF20614-CAL6	500	489.85	1720977	2.03
BF20614-CAL7	1000	1,006.69	3535548	-0.67

ISM013 - ICPMS (TM)

Holmium



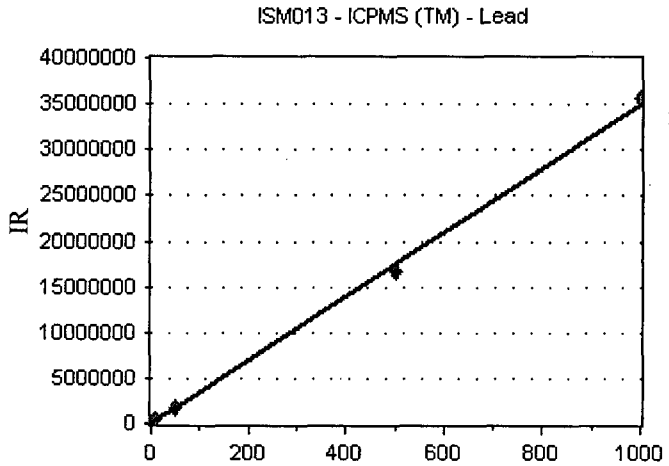
Linear Regression Weighted 1/X
r2: 0

[Y] = 8 * [X] + -7

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	10	92,716.50	741725	-927,065.00
BF20614-CAL3	10	92,980.63	743838	-929,706.25
BF20614-CAL4	10	93,356.76	746847.1	-933,467.63
BF20614-CAL5	10	94,394.01	755145.1	-943,840.13
BF20614-CAL6	10	92,258.30	738059.4	-922,483.00
BF20614-CAL7	10	90,919.60	727349.8	-909,096.00
BF20614-CAL8	10	92,397.16	739170.3	-923,871.63

ISM013 - ICPMS (TM)

Lead



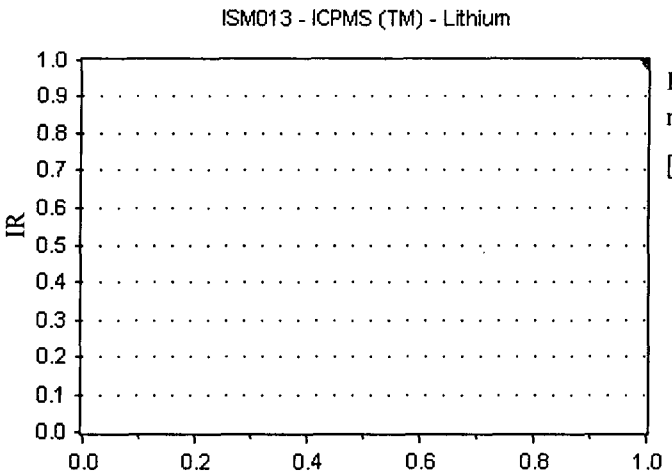
Linear Regression Weighted 1/X
r2: 0.9990316

[Y] = 34932.19 * [X] + -219.9456

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	0.03	994.499	0.00
BF20614-CAL3	1	0.98	34090.47	1.78
BF20614-CAL4	10	9.92	346323.8	0.80
BF20614-CAL5	50	52.48	1833158	-4.97
BF20614-CAL6	500	478.46	1.671345E+07	4.31
BF20614-CAL7	1000	1,019.15	3.560102E+07	-1.92

ISM013 - ICPMS (TM)

Lithium



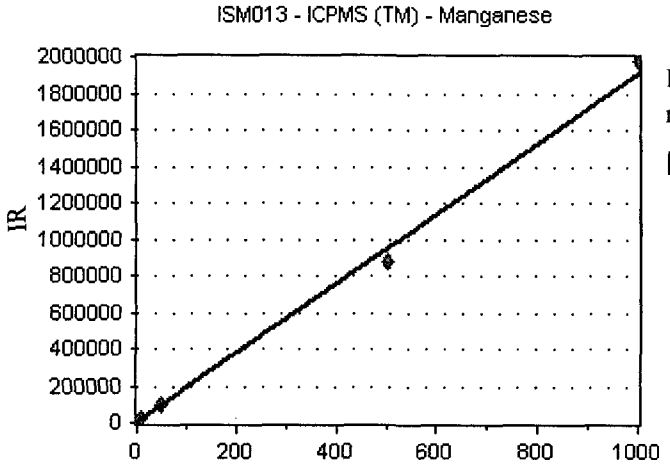
Linear Regression Weighted 1/X
r2: 0

[Y] = 8 * [X] + -7

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	70	23,119.83	184951.6	-32,928.32
BF20614-CAL3	70	23,364.19	186906.5	-33,277.41
BF20614-CAL4	70	23,920.28	191355.2	-34,071.82
BF20614-CAL5	70	23,853.05	190817.4	-33,975.79
BF20614-CAL6	70	23,069.91	184552.3	-32,857.02
BF20614-CAL7	70	22,806.34	182443.7	-32,480.48
BF20614-CAL8	70	23,936.88	191488	-34,095.54

ISM013 - ICPMS (TM)

Manganese



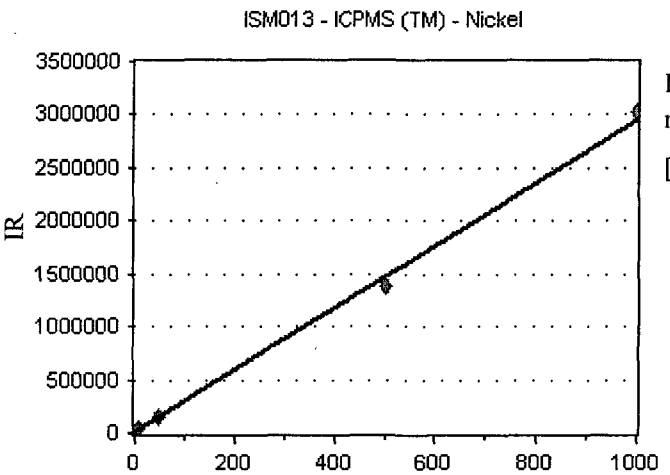
Linear Regression Weighted 1/X
r2: 0.9964844

[Y] = 1908.549 * [X] + 6.739084

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	0.10	195.5577	0.00
BF20614-CAL3	1	1.02	1945.764	-1.60
BF20614-CAL4	10	10.12	19326.08	-1.23
BF20614-CAL5	50	50.62	96619.63	-1.24
BF20614-CAL6	500	460.12	878161.3	7.98
BF20614-CAL7	1000	1,039.12	1983226	-3.91

ISM013 - ICPMS (TM)

Nickel



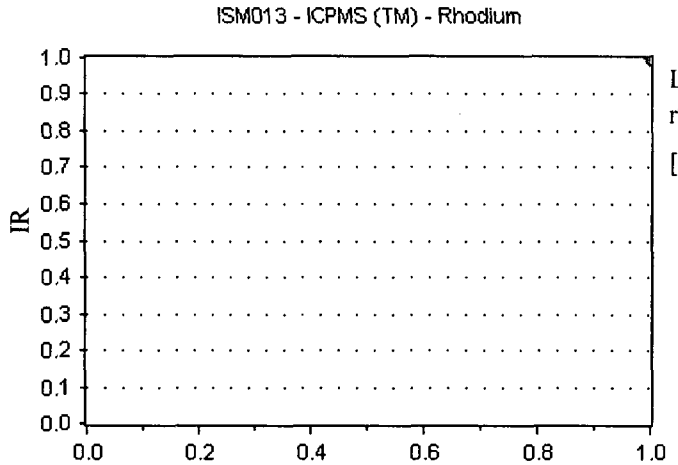
Linear Regression Weighted 1/X
r2: 0.9978615

[Y] = 2948.965 * [X] + 522.7937

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	0.64	2406.986	0.00
BF20614-CAL3	1	0.85	3034.951	14.81
BF20614-CAL4	10	11.58	34680.47	-15.83
BF20614-CAL5	50	51.22	151557.4	-2.43
BF20614-CAL6	500	468.16	1381102	6.37
BF20614-CAL7	1000	1,029.19	3035574	-2.92

ISM013 - ICPMS (TM)

Rhodium



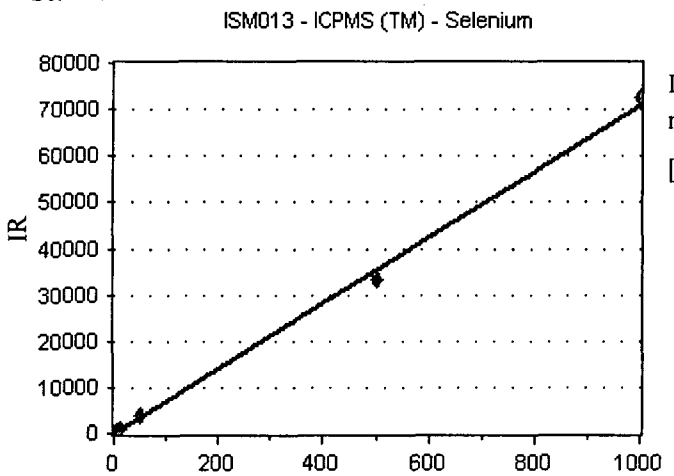
Linear Regression Weighted 1/X
r2: 0

[Y] = 8 * [X] + -7

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	10	12,976.91	103808.3	-129,669.13
BF20614-CAL3	10	13,305.95	106440.6	-132,959.50
BF20614-CAL4	10	13,683.31	109459.5	-136,733.13
BF20614-CAL5	10	13,714.94	109712.5	-137,049.38
BF20614-CAL6	10	13,185.81	105479.5	-131,758.13
BF20614-CAL7	10	13,381.00	107041	-133,710.00
BF20614-CAL8	10	13,792.40	110332.2	-137,824.00

ISM013 - ICPMS (TM)

Selenium



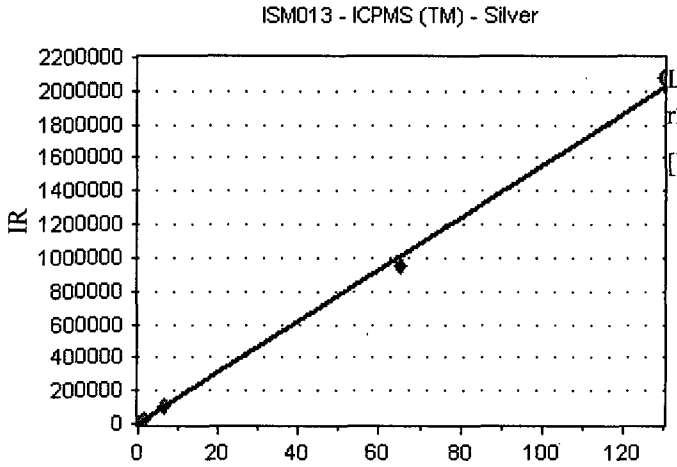
Linear Regression Weighted 1/X
r2: 0.9980265

[Y] = 70.82422 * [X] + 44.51337

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	-0.52	7.7778	0.00
BF20614-CAL3	5	4.81	385.1934	3.80
BF20614-CAL4	10	10.21	767.4398	-2.07
BF20614-CAL5	50	52.51	3763.742	-5.03
BF20614-CAL6	500	469.48	33295.32	6.10
BF20614-CAL7	1000	1,027.99	72850.77	-2.80

ISM013 - ICPMS (TM)

Silver

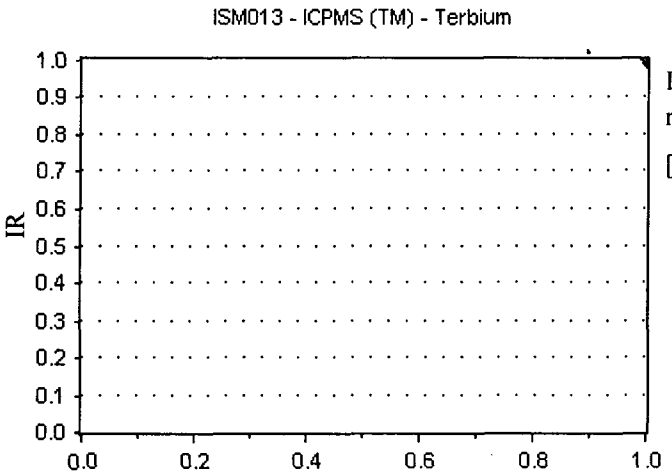


Linear Regression Weighted 1/X
r2: 0.9980154
[Y] = 15545.58 * [X] + 57.16886

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	0.00	111.1118	0.00
BF20614-CAL3	1	0.97	15078.05	3.38
BF20614-CAL4	1.3	1.34	20858.35	-2.93
BF20614-CAL5	6.5	6.74	104804	-3.66
BF20614-CAL6	65	61.06	949296.5	6.06
BF20614-CAL7	130	133.70	2078439	-2.84

ISM013 - ICPMS (TM)

Terbium

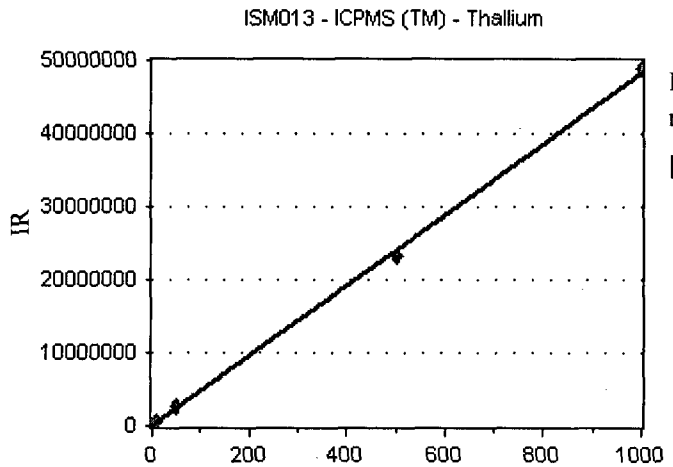


Linear Regression Weighted 1/X
r2: 0
[Y] = 8 * [X] + -7

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	10	88,890.26	711115.1	-888,802.63
BF20614-CAL3	10	90,218.76	721743.1	-902,087.63
BF20614-CAL4	10	90,502.55	724013.4	-904,925.50
BF20614-CAL5	10	91,133.61	729061.9	-911,236.13
BF20614-CAL6	10	89,438.54	715501.3	-894,285.38
BF20614-CAL7	10	87,692.60	701533.8	-876,826.00
BF20614-CAL8	10	90,166.89	721328.1	-901,568.88

ISM013 - ICPMS (TM)

Thallium



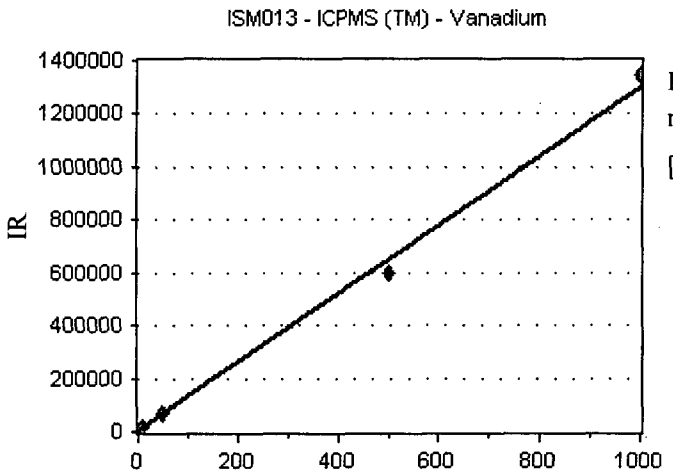
Linear Regression Weighted 1/X
r2: 0.9992674

[Y] = 48276.47 * [X] + 665.8821

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	-0.01	292.2269	0.00
BF20614-CAL3	1	0.95	46451.73	5.16
BF20614-CAL4	10	10.07	486671	-0.67
BF20614-CAL5	50	53.37	2577341	-6.75
BF20614-CAL6	500	480.80	2.321206E+07	3.84
BF20614-CAL7	1000	1,015.81	4.904038E+07	-1.58

ISM013 - ICPMS (TM)

Vanadium



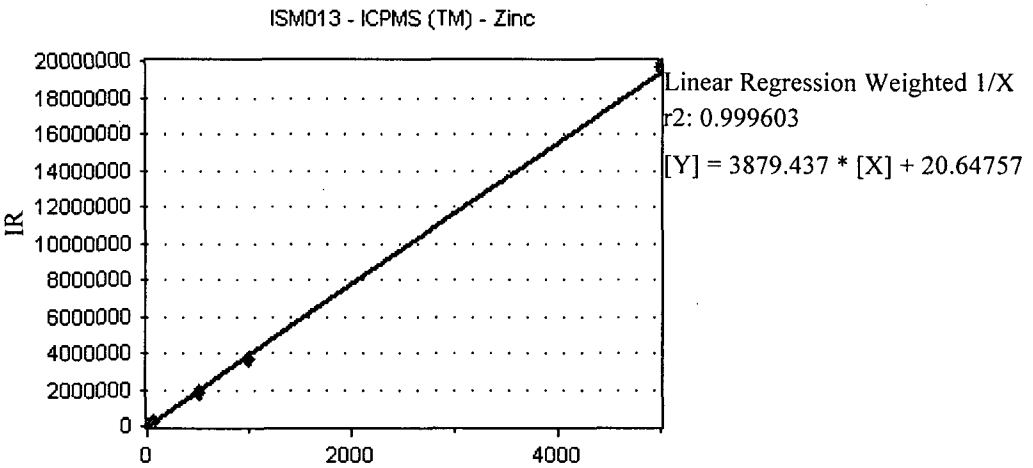
Linear Regression Weighted 1/X
r2: 0.9970143

[Y] = 1298.151 * [X] + 205.7095

Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	-0.06	121.7786	0.00
BF20614-CAL3	5	4.92	6596.837	1.53
BF20614-CAL4	10	10.28	13548.98	-2.79
BF20614-CAL5	50	51.30	66799.86	-2.60
BF20614-CAL6	500	463.00	601248.9	7.40
BF20614-CAL7	1000	1,035.50	1344441	-3.55

ISM013 - ICPMS (TM)

Zinc



Std. Name	Sataed Conc.	found Conc.	IR	Difference
BF20614-CAL1	0	1.00	3894.169	0.00
BF20614-CAL3	2	2.12	8240.401	-5.94
BF20614-CAL4	10	10.30	39985.53	-3.02
BF20614-CAL5	50	50.19	194729	-0.38
BF20614-CAL6	500	466.25	1808793	6.75
BF20614-CAL7	1000	959.39	3721904	4.06
BF20614-CAL8	5000	5,073.76	1.968334E+07	-1.48

Dilution Corrected Concentrations

SEQ-CAL1@S 6/5/2012 10:59:19 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:59:31	99.1%	0.0043	-0.0031	0.0013	-0.3191	0.0017	0.0043	0.4283	0.0225	0.6114	0.0066	0.0000	0.0107	0.0100	-0.0682	99.4%	-0.0039	0.0005
2	22:59:42	99.3%	-0.0052	-0.0157	-0.0005	0.1799	0.0034	0.0015	0.4139	0.0045	0.7257	-0.0103	0.0000	-0.0551	0.0015	0.0719	99.6%	0.0019	0.0009
3	22:59:54	101.6%	-0.0008	-0.0224	-0.0007	0.1392	-0.0039	0.0002	0.4650	0.0137	0.6259	-0.0036	0.0000	-0.0727	-0.0115	-0.0037	101.1%	0.0020	-0.0005
x		100.0%	-0.0006	-0.0138	0.0000	0.0000	0.0004	0.0020	0.4357	0.0136	0.6544	-0.0024	0.0000	-0.0391	-0.0000	-0.0000	100.0%	-0.0000	0.0003
σ		1.4%	0.0048	0.0098	0.0011	0.2771	0.0038	0.0021	0.0264	0.0090	0.0622	0.0085	0.0000	0.0440	0.0108	0.0701	0.9%	0.0034	0.0007
%RSD		1.4	824.9000	71.2300	3850.0000	0.0000	953.9000	106.2000	6.0530	66.1200	9.5080	352.3000	0.0000	112.6000	0.0000	0.0000	0.9	0.0000	238.9000

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:59:31	-0.0003	-0.0005	0.0005	-0.0011	99.7%	98.8%	0.0005	0.0243	99.2%
2	22:59:42	-0.0003	-0.0005	0.0009	-0.0005	99.7%	100.2%	-0.0004	0.0205	100.0%
3	22:59:54	0.0006	0.0010	-0.0010	0.0016	100.6%	101.1%	0.0000	0.0214	100.8%
x		0.0000	0.0000	0.0001	0.0000	100.0%	100.0%	0.0001	0.0221	100.0%
σ		0.0005	0.0009	0.0010	0.0014	0.5%	1.2%	0.0005	0.0020	0.8%
%RSD		0.0000	2375.0000	865.0000	22200.0000	0.5	1.2	787.3000	8.9800	0.8

SEQ-CAL3@S 6/5/2012 11:03:29 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:41	99.7%	0.9264	5.3040	1.9180	128.7000	0.9828	0.9803	0.6415	1.9160	1.7760	0.9864	0.1444	5.4050	0.1995	0.2102	103.6%	0.0452	0.9309
2	23:03:52	102.3%	1.1970	5.4080	2.0150	127.8000	0.9289	0.9748	0.6128	1.8740	1.7970	1.1490	0.1135	5.4860	0.2321	0.3993	102.1%	0.0417	0.9173
3	23:04:04	101.2%	1.0610	5.3010	1.9620	134.2000	0.9646	0.9657	0.6501	1.9110	1.7160	1.1820	0.1896	5.1950	0.2072	0.1320	101.9%	0.0492	0.9437
x		101.1%	1.0620	5.3380	1.9650	130.2000	0.9588	0.9736	0.6348	1.9010	1.7630	1.1060	0.1492	5.3620	0.2129	0.2472	102.5%	0.0453	0.9306
σ		1.3%	0.1356	0.0607	0.0488	3.4440	0.0274	0.0074	0.0196	0.0230	0.0421	0.1046	0.0383	0.1500	0.0171	0.1374	0.9%	0.0038	0.0132
%RSD		1.3	12.7700	1.1370	2.4840	2.6450	2.8620	0.7575	3.0800	1.2090	2.3850	9.4620	25.6600	2.7970	8.0210	55.6100	0.9	8.2760	1.4180

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:03:41	0.0346	0.9834	1.9430	9.5910	99.9%	100.2%	0.9405	0.9732	99.8%
2	23:03:52	0.0345	0.9963	1.8930	9.6330	102.7%	100.9%	0.9305	0.9752	100.7%
3	23:04:04	0.0373	0.9586	1.9210	9.4240	101.8%	99.8%	0.9590	0.9773	100.7%
x		0.0355	0.9794	1.9190	9.5490	101.5%	100.3%	0.9433	0.9752	100.4%
σ		0.0016	0.0192	0.0254	0.1104	1.4%	0.6%	0.0145	0.0020	0.5%
%RSD		4.5920	1.9560	1.3210	1.1560	1.4	0.6	1.5350	0.2068	0.5

SEQ-CAL4@S 6/5/2012 11:07:40 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:51	103.4%	10.9100	10.1700	9.9280	679.8000	10.3200	10.0300	10.7700	10.1500	9.6980	10.6100	0.3774	10.6700	0.5111	0.1948	104.9%	0.5082	1.2610
2	23:08:03	103.5%	11.1200	10.2300	10.0600	631.4000	10.2000	10.1200	10.8600	10.2200	9.9320	10.4500	0.3368	10.0600	0.4488	0.1978	106.1%	0.5291	1.3010
3	23:08:14	103.4%	10.6300	10.3100	9.9630	681.5000	10.1200	10.0300	10.7900	10.4500	9.7570	10.9300	0.3666	10.8700	0.4802	0.0567	105.4%	0.5044	1.2700
x		103.5%	10.8900	10.2400	9.9850	664.2000	10.2100	10.0600	10.8000	10.2700	9.7960	10.6600	0.3603	10.5300	0.4800	0.1498	105.4%	0.5139	1.2770
σ		0.1%	0.2425	0.0694	0.0702	28.4400	0.1015	0.0529	0.0488	0.1565	0.1219	0.2464	0.0210	0.4238	0.0312	0.0806	0.6%	0.0133	0.0213
%RSD		0.1	2.2270	0.6779	0.7025	4.2810	0.9944	0.5255	0.4520	1.5240	1.2440	2.3110	5.8400	4.0230	6.4940	53.8300	0.6	2.5810	1.6660

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:51	0.3669	10.1400	9.7500	10.0500	101.8%	99.9%	9.9700	10.0700	99.5%
2	23:08:03	0.3536	10.2600	10.1700	9.9670	100.6%	100.3%	9.9180	10.0900	99.4%
3	23:08:14	0.3470	9.9340	9.8820	9.9590	103.0%	101.8%	10.0400	10.0800	100.9%
x		0.3559	10.1100	9.9350	9.9920	101.8%	100.7%	9.9770	10.0800	99.9%
σ		0.0101	0.1664	0.2166	0.0504	1.2%	1.0%	0.0624	0.0136	0.9%
%RSD		2.8460	1.6460	2.1800	0.5046	1.2	1.0	0.6257	0.1353	0.9

SEQ-CAL5@S 6/5/2012 11:11:50 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:12:02	102.7%	52.4900	50.9700	50.1100	3407.0000	51.3600	51.0900	48.4300	51.0700	49.0500	52.3500	1.4850	50.8000	2.2020	0.3311	105.0%	2.5110	6.4230
2	23:12:13	104.0%	53.0200	50.9900	49.8100	3306.0000	51.7900	50.7000	48.1100	51.7200	48.7900	51.7800	1.3840	52.8200	2.0610	0.5978	105.4%	2.5240	6.3960
3	23:12:25	102.8%	53.3100	50.2900	49.7600	3287.0000	50.9700	51.1000	49.2500	51.0600	49.3300	51.6800	1.4760	52.7800	2.1800	0.3965	106.7%	2.5540	6.4400
x		103.2%	52.9400	50.7500	49.8900	3333.0000	51.3700	50.9600	48.6000	51.2800	49.0600	51.9400	1.4480	52.1300	2.1480	0.4418	105.7%	2.5300	6.4200
σ		0.7%	0.4187	0.3969	0.1870	64.4900	0.4111	0.2266	0.5900	0.3783	0.2700	0.3635	0.0560	1.1550	0.0761	0.1390	0.9%	0.0218	0.0224
%RSD		0.7	0.7909	0.7821	0.3747	1.9350	0.8001	0.4447	1.2140	0.7377	0.5504	0.6999	3.8680	2.2160	3.5420	31.4600	0.8	0.8625	0.3481

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:12:02	1.8080	51.0500	50.9600	50.6000	102.3%	102.0%	52.7000	51.9700	100.4%
2	23:12:13	1.7890	50.3600	50.5700	49.6500	102.3%	101.4%	51.9700	51.7200	101.3%
3	23:12:25	1.8450	51.4200	50.9800	49.9500	103.0%	102.0%	51.8600	51.5300	102.1%
x		1.8140	50.9400	50.8400	50.0700	102.5%	101.8%	52.1800	51.7400	101.3%
σ		0.0286	0.5394	0.2339	0.4824	0.4%	0.3%	0.4533	0.2229	0.8%
%RSD		1.5780	1.0590	0.4600	0.9634	0.4	0.3	0.8689	0.4308	0.8

SEQ-CAL6@S 6/5/2012 11:16:00 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:16:11	100.4%	489.6000	478.3000	471.7000	30860.0000	484.7000	↑465.7000	457.7000	492.0000	470.0000	481.8000	13.5400	474.4000	20.0300	2.6110	101.2%	23.2100	60.1700
2	23:16:23	99.9%	488.7000	473.4000	469.4000	31070.0000	489.7000	↑472.5000	462.5000	495.8000	473.5000	486.9000	13.8200	483.6000	20.2700	2.7240	101.2%	23.5600	58.9500
3	23:16:34	99.1%	488.0000	477.6000	473.5000	30920.0000	485.3000	↑469.3000	462.7000	484.4000	471.2000	485.7000	13.6600	484.8000	20.1100	2.3810	102.5%	23.3700	59.6700
x		99.8%	488.8000	476.5000	471.5000	30950.0000	486.6000	↑469.1000	460.9000	490.8000	471.6000	484.8000	13.6700	480.9000	20.1400	2.5720	101.6%	23.3800	59.6000
σ		0.7%	0.8011	2.6330	2.0270	107.5000	2.7100	↑3.3950	2.8420	5.8130	1.7380	2.6680	0.1430	5.7140	0.1256	0.1746	0.8%	0.1745	0.6124
%RSD		0.7	0.1639	0.5527	0.4298	0.3472	0.5570	↑0.7237	0.6165	1.1850	0.3684	0.5503	1.0460	1.1880	0.6239	6.7900	0.7	0.7464	1.0270

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:16:11	16.6600	489.7000	↑474.6000	481.6000	102.1%	100.1%	↑480.2000	↑482.9000	99.7%
2	23:16:23	16.7300	492.6000	↑480.3000	485.2000	99.7%	98.2%	↑476.8000	↑486.9000	98.9%
3	23:16:34	16.8900	485.5000	↑480.6000	492.9000	100.1%	100.2%	↑476.4000	↑480.7000	100.5%
x		16.7600	489.3000	↑478.5000	486.6000	100.6%	99.5%	↑477.8000	↑483.5000	99.7%
σ		0.1203	3.5400	↑3.4060	5.7840	1.3%	1.2%	↑2.0780	↑3.1780	0.8%
%RSD		0.7181	0.7236	↑0.7117	1.1890	1.3	1.2	↑0.4350	↑0.6574	0.8

SEQ-CAL7@S 6/5/2012 11:20:10 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:21	98.0%	H1057.0000	H1049.0000	H1054.0000	67970.0000	H1082.0000	TH1012.0000	H1018.0000	↑994.7000	↑984.0000	H1049.0000	30.8000	H1031.0000	43.0700	6.2810	102.4%	50.5800	H132.7000
2	23:20:33	99.5%	H1058.0000	H1042.0000	H1051.0000	66840.0000	H1068.0000	TH1012.0000	H1019.0000	↑981.5000	↑978.9000	H1036.0000	29.8500	H1022.0000	42.7700	5.3690	104.4%	51.0600	H133.1000
3	23:20:45	98.4%	H1063.0000	H1062.0000	H1058.0000	68370.0000	H1099.0000	TH1020.0000	H1038.0000	TH1005.0000	↑992.6000	H1067.0000	30.8600	H1059.0000	44.2600	4.8900	102.5%	50.6200	H132.4000
x		98.6%	H1059.0000	H1051.0000	H1054.0000	67730.0000	H1083.0000	TH1015.0000	H1025.0000	TH993.7000	↑985.2000	H1051.0000	30.5000	H1037.0000	43.3700	5.5140	103.1%	50.7500	H132.7000
σ		0.8%	H2.7690	H10.0200	H3.8430	793.7000	H15.2600	TH4.6760	H11.2000	TH11.8000	↑6.9260	H15.3500	0.5656	H19.1300	0.7846	0.7065	1.1%	0.2658	H0.3814
%RSD		0.8	H0.2613	H0.9540	H0.3645	1.1720	H1.4090	TH0.4607	H1.0920	TH1.1880	↑0.7031	H1.4610	1.8540	H1.8440	1.8090	12.8100	1.1	0.5236	H0.2873

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:20:21	35.6000	TH1011.0000	TH1032.0000	↑996.1000	99.6%	99.3%	TH1025.0000	TH1036.0000	99.1%
2	23:20:33	36.5000	TH1024.0000	TH1044.0000	↑1005.0000	97.9%	98.8%	TH1020.0000	TH1040.0000	98.7%
3	23:20:45	36.4000	TH1028.0000	TH1052.0000	↑1015.0000	98.5%	96.1%	TH1027.0000	TH1050.0000	97.0%
x		36.1700	TH1021.0000	TH1043.0000	↑1005.0000	98.7%	98.1%	TH1024.0000	TH1042.0000	98.3%
σ		0.4957	TH8.6870	TH10.0000	↑9.2720	0.9%	1.7%	TH3.1750	TH7.2240	1.1%
%RSD		1.3710	TH0.8506	TH0.9593	↑0.9224	0.9	1.8	TH0.3101	TH0.6934	1.1

SEQ-CAL8@S 6/5/2012 11:24:20 PM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:31	103.0%	0.1089	0.0163	0.0639	-2.7230	TH5625.0000	0.0887	-0.2065	1.1370	TH5006.0000	0.0718	0.0181	0.1375	-0.0312	0.3324	106.5%	0.0193	0.0231
2	23:24:43	103.7%	0.0626	0.0092	0.0638	-0.8284	TH5665.0000	0.0564	-0.2216	1.1800	TH5003.0000	0.0819	0.0046	0.1396	-0.0231	0.4698	105.8%	0.0086	0.0154
3	23:24:54	103.9%	0.0579	-0.0038	0.0544	-2.3970	TH5647.0000	0.0549	-0.2347	1.2440	TH5007.0000	0.0529	0.0000	0.1069	-0.0269	0.6000	106.5%	0.0151	0.0125
x		103.5%	0.0765	0.0073	0.0607	-1.9830	TH5646.0000	0.0667	-0.2210	1.1870	TH5005.0000	0.0689	0.0076	0.1280	-0.0270	0.4674	106.3%	0.0143	0.0170
σ		0.5%	0.0282	0.0102	0.0055	1.0130	TH20.0000	0.0191	0.0141	0.0538	TH2.1250	0.0148	0.0094	0.0183	0.0041	0.1338	0.4%	0.0054	0.0055
%RSD		0.5	36.8900	141.0000	9.0430	51.0900	TH0.3543	28.6500	6.3850	4.5330	TH0.0425	21.4300	124.7000	14.3200	15.0200	28.6400	0.4	37.5200	32.1200

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:31	0.0136	0.0859	0.8596	TH5146.0000	101.8%	99.8%	0.0670	0.1295	97.1%
2	23:24:43	0.0158	0.0639	0.8027	TH5127.0000	100.7%	99.2%	0.0525	0.1023	97.3%
3	23:24:54	0.0110	0.0448	0.8018	TH5038.0000	101.8%	100.0%	0.0465	0.0976	97.3%
x		0.0135	0.0648	0.8214	TH5104.0000	101.4%	99.7%	0.0553	0.1098	97.2%
σ		0.0024	0.0206	0.0331	TH57.6000	0.6%	0.4%	0.0106	0.0172	0.1%
%RSD		17.6100	31.7500	4.0350	TH1.1290	0.6	0.4	19.0700	15.7000	0.2

SEQ-ICV@ICV01 6/5/2012 11:28:29 PM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:41	105.8%	101.3000	102.3000	97.8600	6536.0000	102.1000	99.8500	94.2100	99.1400	193.9000	209.3000	5.9930	205.1000	9.0340	1.2730	106.8%	4.8740	99.2700
2	23:28:52	105.1%	101.4000	102.9000	99.3900	6653.0000	103.3000	100.5000	95.1000	102.0000	192.7000	212.1000	5.7930	209.7000	8.7650	1.2080	105.6%	4.9200	98.6600
3	23:29:04	106.0%	102.0000	103.6000	99.8700	6587.0000	103.8000	99.6500	95.2100	101.2000	190.1000	210.9000	5.8630	208.0000	8.4940	0.7162	105.7%	4.9390	98.0600
x		105.6%	102.575%	102.936%	101.062%	6592.0000	103.047%	101.026%	96.779%	102.840%	96.128%	105.902%	5.8830	103.280%	8.7640	1.0660	106.0%	4.9110	99.658%
σ		0.5%	n/a	n/a	n/a	58.5800	n/a	n/a	n/a	n/a	n/a	n/a	0.1011	n/a	0.2704	0.3043	0.6%	0.0334	n/a
%RSD		0.5	0.4266	0.6172	1.0570	0.8887	0.8440	0.4727	0.5770	1.4540	1.0010	0.6529	1.7190	1.1360	3.0850	28.5600	0.6	0.6805	0.6106

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:28:41	3.4230	98.0500	206.9000	98.5400	100.7%	99.7%	↑206.8000	↑205.9000	97.1%
2	23:28:52	3.4790	97.3600	210.2000	98.5600	101.0%	100.6%	↑208.3000	↑208.4000	97.4%
3	23:29:04	3.4470	98.0700	208.2000	99.3100	103.5%	101.5%	↑204.3000	↑203.5000	98.8%
x		3.4500	98.817%	105.267%	98.801%	101.7%	100.6%	↑100.726%	↑102.965%	97.8%
σ		0.0281	n/a	n/a	n/a	1.5%	0.9%	↑n/a	↑n/a	0.9%
%RSD		0.8148	0.4148	0.8126	0.4439	1.5	0.9	↑0.9693	↑1.1990	1.0

SEQ-ICB@ICB01 6/5/2012 11:32:40 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:32:52	108.4%	-0.0060	-0.0488	0.0056	-1.2200	0.0062	0.0118	-0.1705	-0.0323	-0.0335	0.0439	0.0000	-0.0366	-0.0306	0.0498	111.7%	-0.0086	0.0153
2	23:33:03	109.0%	0.0373	-0.0249	0.0099	-6.1170	0.0145	0.0106	-0.1399	-0.0406	-0.0946	0.0080	0.0044	0.0388	-0.0267	0.2447	110.3%	-0.0060	0.0091
3	23:33:15	108.1%	-0.0016	-0.0234	0.0087	-5.9470	-0.0177	0.0056	-0.1627	-0.0254	-0.1048	0.0111	0.0000	-0.0053	-0.0457	0.6439	110.1%	0.0010	0.0110
x		108.5%	0.0099	-0.0324	0.0081	-4.4280	0.0010	0.0093	-0.1577	-0.0328	-0.0776	0.0210	0.0015	-0.0010	-0.0344	0.3128	110.7%	-0.0045	0.0118
σ		0.4%	0.0238	0.0142	0.0022	2.7800	0.0167	0.0033	0.0159	0.0076	0.0386	0.0199	0.0025	0.0379	0.0100	0.3029	0.8%	0.0050	0.0032
%RSD		0.4	241.3000	43.8800	27.3400	62.7800	1666.0000	35.0200	10.0800	23.1800	49.6700	94.7300	173.2000	3685.0000	29.2000	96.8300	0.8	109.7000	26.8800

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:32:52	0.0001	0.0148	0.3676	0.0608	101.8%	102.5%	0.0166	0.0403	98.8%
2	23:33:03	-0.0003	0.0052	0.3426	0.0326	102.7%	101.7%	0.0138	0.0376	97.0%
3	23:33:15	0.0009	0.0060	0.3324	0.0291	102.7%	102.7%	0.0110	0.0363	99.2%
x		0.0003	0.0087	0.3475	0.0408	102.4%	102.3%	0.0138	0.0381	98.3%
σ		0.0006	0.0053	0.0181	0.0174	0.5%	0.5%	0.0028	0.0020	1.2%
%RSD		236.8000	61.4100	5.2010	42.6400	0.5	0.5	20.4700	5.2690	1.2

SEQ-IFA@ICSA01 6/5/2012 11:36:51 PM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:02	78.6%	0.2192	-1.0330	21.5200	1599.0000	8.9350	1.1480	5.5040	8.2920	10.9200	0.3800	0.0057	0.0783	0.0137	-0.0810	84.5%	-0.0025	0.0178
2	23:37:14	79.7%	0.3286	-0.9736	21.3600	1590.0000	8.6070	1.2050	5.5340	8.2380	10.6200	0.3931	0.0056	-0.0395	-0.0214	0.0960	85.9%	0.0101	0.0183
3	23:37:25	78.5%	0.3099	-0.9860	21.1700	1553.0000	9.0560	1.2300	5.4380	7.8770	10.9200	0.3284	0.0168	0.0731	-0.0164	0.1025	86.4%	0.0041	0.0151
x		78.9%	1.#IO%	-199.507%	101.663%	1581.0000	126.660%	119.431%	91.532%	101.697%	98.390%	367.147%	0.0094	12.437%	-0.0080	0.0392	85.6%	0.0039	1.#IO%
σ		0.7%	n/a	n/a	n/a	24.4300	n/a	n/a	n/a	n/a	n/a	n/a	0.0064	n/a	0.0190	0.1041	1.0%	0.0063	n/a
%RSD		0.8	20.4700	3.1420	0.8017	1.5450	2.6170	3.5290	0.9005	2.7720	1.5840	9.3160	68.3800	178.4000	237.4000	265.6000	1.2	161.2000	9.9940

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:37:02	1.1150	1.1500	1.5630	1.5680	77.7%	76.3%	0.0188	4.2790	70.1%
2	23:37:14	1.1320	1.0240	1.5800	1.5100	77.2%	75.6%	0.0194	4.2490	70.4%
3	23:37:25	1.1160	0.9557	1.6260	1.4440	76.1%	74.8%	0.0185	4.2910	69.3%
x		1.1210	149.035%	105.973%	125.628%	77.0%	75.6%	1.#IO%	106.834%	69.9%
σ		0.0098	n/a	n/a	n/a	0.8%	0.7%	n/a	n/a	0.6%
%RSD		0.8721	9.4200	2.0600	4.0970	1.1	1.0	2.3860	0.5056	0.8

SEQ-IFB@ICSAB01 6/5/2012 11:41:02 PM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:13	75.0%	18.2400	20.6000	42.0800	2964.0000	30.4100	20.7500	23.6400	24.8700	28.9300	20.4000	0.5126	18.2000	0.6981	0.3882	85.7%	0.9116	16.5200
2	23:41:25	74.1%	18.4600	21.0400	42.2100	2969.0000	31.0000	20.4700	24.0300	24.9600	29.0100	20.2700	0.4984	17.5300	0.8171	0.1140	85.2%	0.9258	16.4500
3	23:41:37	73.7%	18.4700	21.1000	42.3500	3003.0000	31.0400	21.0000	24.2900	24.7800	29.6400	20.5700	0.5606	18.7200	0.6818	0.4092	85.2%	0.9448	16.9900
x		74.3%	96.771%	110.084%	105.529%	2979.0000	114.127%	103.709%	99.953%	99.484%	100.665%	107.443%	0.5239	95.517%	0.7324	0.3038	85.4%	0.9274	92.526%
σ		0.7%	n/a	n/a	n/a	21.4900	n/a	n/a	n/a	n/a	n/a	n/a	0.0326	n/a	0.0739	0.1648	0.3%	0.0166	n/a
%RSD		0.9	0.7061	1.3070	0.3211	0.7217	1.1440	1.2830	1.3770	0.3656	1.3290	0.7467	6.2300	3.2780	10.0800	54.2300	0.3	1.7940	1.7510

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:41:13	1.7230	19.0500	20.5500	21.9000	76.3%	75.7%	18.9900	24.5700	67.3%
2	23:41:25	1.6640	18.5900	20.4300	21.4400	76.6%	74.5%	19.5000	24.5900	66.3%
3	23:41:37	1.7450	19.5700	21.0500	22.3100	73.4%	74.1%	18.9900	23.7400	67.2%
x		1.7110	95.352%	93.997%	99.456%	75.5%	74.7%	91.253%	97.203%	66.9%
σ		0.0419	n/a	n/a	n/a	1.8%	0.8%	n/a	n/a	0.6%
%RSD		2.4480	2.5790	1.5860	1.9890	2.3	1.1	1.5410	2.0010	0.8

SEQ-CCV@CCV01 6/5/2012 11:45:14 PM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:26	90.1%	491.9000	499.9000	504.7000	33310.0000	507.5000	↑518.7000	526.3000	479.8000	↑2557.0000	513.3000	14.4100	515.8000	21.5900	2.3120	106.3%	26.0700	64.4900
2	23:45:37	90.8%	487.6000	500.1000	509.6000	33790.0000	522.4000	↑512.5000	524.0000	481.3000	↑2571.0000	521.2000	14.6300	513.5000	21.6000	2.6750	106.9%	26.4300	65.0400
3	23:45:49	91.6%	488.3000	495.8000	500.1000	33400.0000	515.7000	↑507.2000	515.4000	475.6000	↑2543.0000	512.2000	14.6900	505.5000	21.5600	2.3750	108.2%	25.8400	63.7700
x		90.9%	97.854%	99.717%	100.954%	33500.0000	103.042%	↑102.558%	104.381%	95.780%	↑102.293%	103.108%	14.5800	102.316%	21.5800	2.4540	107.1%	26.1200	99.133%
σ		0.7%	n/a	n/a	n/a	254.7000	n/a	↑n/a	n/a	n/a	↑n/a	n/a	0.1471	n/a	0.0196	0.1941	1.0%	0.2989	n/a
%RSD		0.8	0.4729	0.4818	0.9376	0.7603	1.4470	↑1.1300	1.0960	0.6146	↑0.5443	0.9566	1.0090	1.0610	0.0906	7.9110	0.9	1.1450	0.9885

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:45:26	18.1200	541.8000	↑521.5000	↑2528.0000	98.8%	98.1%	↑504.4000	↑511.0000	97.4%
2	23:45:37	18.4800	553.2000	↑522.8000	↑2582.0000	98.4%	99.4%	↑510.7000	↑512.5000	96.9%
3	23:45:49	18.3100	542.7000	↑522.8000	↑2572.0000	97.9%	95.9%	↑494.9000	↑507.2000	97.7%
x		18.3000	109.182%	↑104.477%	↑102.421%	98.4%	97.8%	↑100.670%	↑102.052%	97.3%
σ		0.1818	n/a	↑n/a	↑n/a	0.4%	1.8%	↑n/a	↑n/a	0.4%
%RSD		0.9933	1.1590	↑0.1454	↑1.1320	0.4	1.8	↑1.5770	↑0.5401	0.4

SEQ-CCB@CCB01 6/5/2012 11:49:25 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:49:37	97.1%	0.0629	0.0274	0.0375	5.9360	0.0138	0.0348	-0.1546	-0.0425	0.0344	0.0382	0.0044	-0.0064	-0.0113	0.2226	110.9%	0.0011	0.0105
2	23:49:48	94.1%	0.0203	0.0402	0.0319	3.9210	0.0168	0.0202	-0.1255	0.0051	-0.0142	0.0204	0.0000	0.0694	0.0002	0.0130	109.8%	-0.0004	0.0095
3	23:50:00	94.9%	0.0250	0.0291	0.0276	5.8800	-0.0051	0.0173	-0.1521	-0.0421	-0.0177	0.0441	0.0000	0.0665	-0.0116	-0.0614	111.2%	0.0043	0.0120
x		95.4%	0.0361	0.0322	0.0323	5.2460	0.0085	0.0241	-0.1440	-0.0265	0.0008	0.0342	0.0015	0.0432	-0.0076	0.0581	110.7%	0.0016	0.0107
σ		1.5%	0.0234	0.0070	0.0050	1.1470	0.0119	0.0093	0.0161	0.0274	0.0292	0.0124	0.0025	0.0430	0.0067	0.1472	0.8%	0.0024	0.0012
%RSD		1.6	64.8200	21.5900	15.3400	21.8700	140.2000	38.7200	11.2000	103.3000	3537.0000	36.1700	173.2000	99.5000	88.6700	253.6000	0.7	145.7000	11.6700

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:49:37	0.0019	0.0248	0.5343	0.1481	98.1%	96.9%	0.0631	0.0507	97.3%
2	23:49:48	0.0024	0.0180	0.5178	0.1176	98.8%	97.4%	0.0566	0.0473	95.5%
3	23:50:00	0.0010	0.0193	0.5281	0.0816	99.3%	98.3%	0.0569	0.0445	96.8%
x		0.0018	0.0207	0.5267	0.1158	98.7%	97.5%	0.0589	0.0475	96.5%
σ		0.0007	0.0036	0.0083	0.0333	0.6%	0.7%	0.0037	0.0031	0.9%
%RSD		38.3100	17.5300	1.5830	28.7500	0.6	0.7	6.1980	6.5710	1.0

2052220-BLK1@PBW01@MF5WA4@42562 6/5/2012 11:53:35 PM QC Status: PASS (Initial: PASS)

2052221 DAS - 6/6/12

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:53:47	99.0%	0.0329	0.0001	0.0068	1.9200	-0.0010	0.0093	-0.1923	-0.0382	-0.0702	0.0171	0.0087	0.0090	-0.0384	0.2122	110.5%	-0.0017	0.0047
2	23:53:59	98.4%	0.0188	-0.0040	0.0004	2.7460	-0.0195	0.0065	-0.1585	-0.0695	-0.0690	0.0137	0.0000	-0.0227	-0.0150	0.3685	112.3%	-0.0081	0.0026
3	23:54:10	99.5%	-0.0005	0.0121	0.0014	1.5370	-0.0218	0.0047	-0.1641	-0.0587	-0.0832	0.0313	0.0000	-0.0237	-0.0189	0.1470	113.2%	0.0013	0.0021
x		99.0%	0.0171	0.0027	0.0029	2.0680	-0.0141	0.0068	-0.1717	-0.0554	-0.0741	0.0207	0.0029	-0.0125	-0.0241	0.2426	112.0%	-0.0028	0.0031
σ		0.5%	0.0168	0.0084	0.0034	0.6181	0.0114	0.0023	0.0181	0.0159	0.0079	0.0094	0.0050	0.0186	0.0126	0.1138	1.4%	0.0048	0.0014
%RSD		0.5	98.1900	306.3000	120.6000	29.8900	80.9500	33.3200	10.5600	28.6400	10.6400	45.1700	173.2000	149.3000	52.0700	46.9400	1.2	169.5000	44.2600

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:53:47	0.0006	0.0024	0.1592	0.0269	99.8%	98.8%	0.0201	0.0185	95.7%
2	23:53:59	0.0019	0.0113	0.1594	0.0136	96.0%	97.5%	0.0194	0.0163	97.2%
3	23:54:10	0.0002	0.0071	0.1594	0.0174	97.5%	98.1%	0.0252	0.0156	96.4%
x		0.0009	0.0069	0.1593	0.0193	97.8%	98.1%	0.0215	0.0168	96.4%
σ		0.0009	0.0044	0.0001	0.0068	1.9%	0.6%	0.0031	0.0015	0.7%
%RSD		104.6000	63.5300	0.0911	35.5200	2.0	0.6	14.6100	8.9200	0.8

2052220-BS1@LCS 6/5/2012 11:57:44 PM QC Status: PASS (Initial: FAIL) DAS 6/6/12

User Pre-dilution: 1.000 2052221

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:57:56	102.9%	9.7210	56.2700	20.6900	1424.0000	10.7200	10.3100	9.8120	18.7800	20.0400	10.6600	1.4810	53.3100	2.2430	0.2729	116.0%	0.5240	9.8110
2	23:58:07	105.1%	9.8800	55.9300	20.5400	1385.0000	10.6400	10.1500	9.6000	18.7500	19.5700	10.7600	1.5330	51.7500	2.2280	0.5971	117.2%	0.5021	9.7310
3	23:58:19	104.4%	9.8850	56.7500	20.9500	1414.0000	10.6900	10.3900	9.7350	19.2500	20.2700	11.0300	1.5470	51.5600	2.1400	0.6047	116.1%	0.5406	9.8760
x		104.2%	98.285%	112.629%	103.641%	1408.0000	106.816%	102.831%	97.159%	94.627%	99.789%	108.191%	1.5200	104.415%	2.2040	0.4916	116.4%	0.5222	98.057%
σ		1.1%	n/a	n/a	n/a	20.0100	n/a	n/a	n/a	n/a	n/a	n/a	0.0348	n/a	0.0559	0.1894	0.7%	0.0193	n/a
%RSD		1.1	0.9475	0.7277	0.9853	1.4210	0.3560	1.2190	1.1020	1.4670	1.7920	1.7640	2.2890	1.8380	2.5370	38.5300	0.6	3.6970	0.7390

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:57:56	0.3612	10.1300	20.4500	100.8000	99.0%	98.1%	9.6640	9.9430	93.6%
2	23:58:07	0.3720	9.9390	20.2800	101.3000	101.3%	100.0%	9.8990	9.8150	95.3%
3	23:58:19	0.3557	10.0900	20.6100	102.5000	100.4%	99.6%	9.6740	9.7990	95.0%
x		0.3630	100.512%	102.248%	101.567%	100.2%	99.2%	97.455%	98.519%	94.6%
σ		0.0083	n/a	n/a	n/a	1.2%	1.0%	n/a	n/a	0.9%
%RSD		2.2860	0.9809	0.8077	0.8714	1.2	1.0	1.3630	0.8022	1.0

1205240-01@MF5WA4 6/6/2012 12:01:52 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:02:03	101.6%	0.6628	29.7300	12.9000	867.1000	292.6000	3.6400	7.6330	4.6890	23.4600	1.8320	0.0381	1.0780	0.0075	0.2012	114.0%	0.1905	3.3410
2	00:02:15	102.3%	0.5617	29.6000	12.8200	862.2000	295.4000	3.6470	7.7200	4.6210	23.5400	1.7780	0.0631	0.8420	0.0113	0.4212	114.7%	0.2090	3.4920
3	00:02:26	102.3%	0.5801	29.7900	12.8100	874.2000	291.0000	3.6380	7.7890	4.6600	23.1600	1.8080	0.0749	1.1130	-0.0180	0.8247	116.0%	0.1933	3.4650
x		102.1%	0.6015	29.7100	12.8400	867.8000	293.0000	3.6420	7.7140	4.6570	23.3800	1.8060	0.0587	1.0110	0.0002	0.4823	114.9%	0.1976	3.4320
σ		0.4%	0.0539	0.0929	0.0510	6.0530	2.2430	0.0043	0.0784	0.0345	0.2007	0.0267	0.0188	0.1472	0.0160	0.3162	1.0%	0.0100	0.0807
%RSD		0.4	8.9540	0.3126	0.3972	0.6975	0.7654	0.1193	1.0160	0.7406	0.8581	1.4770	32.0000	14.5600	6424.0000	65.5600	0.9	5.0600	2.3500

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:02:03	0.0595	0.2576	0.2089	59.6900	101.3%	99.4%	0.2133	4.9940	90.3%
2	00:02:15	0.0637	0.2355	0.2291	63.7400	97.0%	97.4%	0.2194	5.0440	90.4%
3	00:02:26	0.0621	0.2364	0.2319	61.3400	99.7%	97.1%	0.2253	4.9520	90.5%
x		0.0617	0.2432	0.2233	61.5900	99.3%	98.0%	0.2193	4.9970	90.4%
σ		0.0021	0.0125	0.0125	2.0360	2.1%	1.3%	0.0060	0.0458	0.1%
%RSD		3.4380	5.1490	5.6080	3.3050	2.2	1.3	2.7440	0.9158	0.1

404
240

1205240-02@MF5WA5 6/6/2012 12:05:59 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:10	100.4%	0.4125	19.0800	22.2600	1539.0000	278.7000	16.8000	6.7450	24.5600	599.6000	2.0240	0.0597	0.3219	-0.0260	0.5562	113.2%	0.2035	15.4700
2	00:06:22	100.9%	0.3267	19.1000	22.4600	1536.0000	279.8000	17.2500	6.7240	24.4900	621.7000	2.1500	0.0212	0.2629	-0.0072	0.4979	113.6%	0.1792	15.6300
3	00:06:34	101.3%	0.3251	18.8100	21.8700	1480.0000	279.0000	16.8000	6.7050	24.2600	605.6000	2.0130	0.0460	0.3415	-0.0075	0.2739	115.4%	0.1736	15.3200
x		100.8%	0.3548	19.0000	22.2000	1518.0000	279.2000	16.9500	6.7250	24.4400	609.0000	2.0630	0.0423	0.3088	-0.0136	0.4426	114.1%	0.1855	15.4700
σ		0.4%	0.0500	0.1644	0.3003	32.8500	0.5478	0.2592	0.0202	0.1571	11.4400	0.0762	0.0195	0.0410	0.0108	0.1490	1.1%	0.0159	0.1572
%RSD		0.4	14.1000	0.8655	1.3530	2.1640	0.1962	1.5290	0.3000	0.6427	1.8790	3.6940	46.0500	13.2600	79.2100	33.6700	1.0	8.5670	1.0160

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:06:10	0.0663	0.5424	0.1909	60.5000	99.9%	98.5%	0.0610	81.5700	92.8%
2	00:06:22	0.0575	0.5478	0.1967	61.1100	96.9%	95.7%	0.0634	81.4600	91.6%
3	00:06:34	0.0663	0.5499	0.1765	59.1300	100.3%	98.1%	0.0581	82.8000	90.9%
x		0.0633	0.5467	0.1880	60.2500	99.0%	97.4%	0.0608	81.9400	91.8%
σ		0.0051	0.0039	0.0104	1.0150	1.9%	1.5%	0.0027	0.7475	1.0%
%RSD		8.0270	0.7122	5.5450	1.6850	1.9	1.5	4.3590	0.9122	1.1

1205240-03@MF5WA6 6/6/2012 12:10:07 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:10:19	98.8%	0.6296	26.9500	15.0400	1028.0000	341.7000	4.4740	9.9240	5.2880	35.8400	3.0920	0.0254	0.2334	0.0187	0.1515	113.9%	0.1720	3.7310
2	00:10:30	99.2%	0.6651	27.4800	15.3800	1039.0000	339.1000	4.4920	9.8030	5.4580	36.0500	3.2670	0.0468	0.3788	-0.0187	0.3666	113.4%	0.1638	3.7390
3	00:10:41	99.4%	0.5827	26.9600	14.7400	968.7000	331.8000	4.4050	10.0200	5.2540	35.2000	3.1580	0.0787	0.3367	0.0107	0.2128	116.5%	0.1735	3.6430
x		99.1%	0.6258	27.1300	15.0500	1012.0000	337.5000	4.4570	9.9170	5.3330	35.6900	3.1720	0.0503	0.3163	0.0036	0.2436	114.6%	0.1698	3.7040
σ		0.3%	0.0414	0.3036	0.3190	37.9800	5.1330	0.0460	0.1107	0.1095	0.4440	0.0886	0.0268	0.0748	0.0197	0.1108	1.7%	0.0052	0.0533
%RSD		0.3	6.6100	1.1190	2.1190	3.7530	1.5210	1.0310	1.1160	2.0530	1.2440	2.7930	53.2900	23.6500	551.0000	45.4800	1.4	3.0710	1.4390

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:10:19	0.0519	0.1531	0.0285	59.5600	96.4%	96.3%	0.0935	7.1930	88.7%
2	00:10:30	0.0534	0.1307	0.0346	59.1000	95.8%	96.6%	0.0899	7.0840	90.4%
3	00:10:41	0.0538	0.1596	0.0341	59.4600	99.2%	97.7%	0.0959	7.5260	87.4%
x		0.0530	0.1478	0.0324	59.3700	97.1%	96.9%	0.0931	7.2680	88.8%
σ		0.0010	0.0151	0.0034	0.2413	1.8%	0.8%	0.0031	0.2302	1.5%
%RSD		1.8920	10.2300	10.4000	0.4064	1.9	0.8	3.2900	3.1680	1.6

1205240-04@MF5WA7 6/6/2012 12:14:14 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:14:26	98.0%	0.4038	28.4600	21.4000	1441.0000	213.1000	3.3720	9.1640	10.9600	595.0000	2.5850	0.0652	0.4194	0.0118	0.2239	111.1%	0.1788	0.2374
2	00:14:38	95.2%	0.4109	28.3500	21.0000	1416.0000	209.5000	3.4690	9.2770	11.0800	603.3000	2.7140	0.0731	0.3843	-0.0148	0.5152	112.3%	0.1882	0.2339
3	00:14:49	97.1%	0.4514	28.2800	21.2200	1456.0000	213.5000	3.4610	9.1300	11.2000	604.3000	2.6230	0.0433	0.4756	-0.0075	0.1558	111.5%	0.1853	0.2246
x		96.8%	0.4220	28.3600	21.2100	1438.0000	212.0000	3.4340	9.1910	11.0800	600.9000	2.6410	0.0605	0.4264	-0.0035	0.2983	111.6%	0.1841	0.2320
σ		1.4%	0.0257	0.0894	0.2023	20.2100	2.2380	0.0541	0.0766	0.1178	5.1340	0.0660	0.0155	0.0461	0.0138	0.1909	0.6%	0.0048	0.0066
%RSD		1.5	6.0890	0.3151	0.9540	1.4060	1.0550	1.5760	0.8332	1.0630	0.8544	2.4980	25.5200	10.8000	393.4000	64.0000	0.5	2.6200	2.8630

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:14:26	0.0510	0.1788	0.0234	52.7900	96.8%	96.7%	0.0897	31.5900	92.0%
2	00:14:38	0.0584	0.2103	0.0181	54.2100	98.5%	94.2%	0.0914	31.9300	90.9%
3	00:14:49	0.0553	0.2074	0.0271	54.8300	96.4%	94.6%	0.0893	32.3900	90.7%
x		0.0549	0.1989	0.0228	53.9400	97.2%	95.2%	0.0901	31.9700	91.2%
σ		0.0037	0.0174	0.0045	1.0460	1.1%	1.3%	0.0011	0.4021	0.7%
%RSD		6.7890	8.7650	19.8300	1.9390	1.1	1.4	1.2230	1.2580	0.8

1205240-05@MF5WA8 6/6/2012 12:18:23 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:18:35	100.1%	0.4894	30.3000	13.0000	870.8000	279.2000	3.6930	8.3360	4.8550	71.8300	2.3420	0.0630	0.2865	-0.0296	0.5579	115.0%	0.1967	0.1093
2	00:18:46	100.5%	0.5066	29.8400	12.9000	880.5000	274.1000	3.8140	8.1730	4.9540	74.7600	2.2330	0.0416	0.3239	-0.0109	0.6533	116.2%	0.1912	0.1205
3	00:18:58	102.0%	0.4850	30.3400	13.0100	874.0000	278.8000	3.7510	8.1330	5.0030	72.7000	2.5220	0.0421	0.5715	0.0111	0.2815	114.8%	0.1836	0.1074
x		100.8%	0.4936	30.1600	12.9700	875.1000	277.4000	3.7530	8.2140	4.9380	73.1000	2.3660	0.0489	0.3940	-0.0098	0.4976	115.3%	0.1905	0.1124
σ		1.0%	0.0115	0.2792	0.0570	4.9560	2.8530	0.0604	0.1076	0.0753	1.5050	0.1458	0.0122	0.1549	0.0204	0.1931	0.8%	0.0066	0.0070
%RSD		1.0	2.3200	0.9258	0.4398	0.5663	1.0290	1.6100	1.3100	1.5260	2.0590	6.1620	25.0300	39.3200	208.7000	38.8100	0.7	3.4650	6.2650

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:18:35	0.0586	0.1480	0.0190	58.4800	99.8%	97.4%	0.0910	6.9770	89.3%
2	00:18:46	0.0639	0.1308	0.0240	61.5500	94.5%	93.6%	0.0953	6.8980	89.6%
3	00:18:58	0.0593	0.1360	0.0194	59.3800	97.3%	93.5%	0.0979	7.0770	88.2%
x		0.0606	0.1382	0.0208	59.8000	97.2%	94.8%	0.0947	6.9840	89.0%
σ		0.0029	0.0088	0.0028	1.5770	2.7%	2.3%	0.0035	0.0898	0.7%
%RSD		4.7220	6.3920	13.3800	2.6370	2.7	2.4	3.6630	1.2860	0.8

405
241

2052221 ABB 6/6/12

2052220-MS1@MF5WA8S 6/6/2012 12:22:31 AM QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:42	99.5%	2.8540	60.2200	24.2900	1660.0000	315.1000	26.2400	33.2400	15.9600	102.8000	4.5160	0.1979	5.1540	0.1503	1.2100	114.7%	0.3411	2.3880
2	00:22:53	100.1%	2.8200	60.0100	24.3500	1642.0000	319.9000	25.9800	32.8400	15.9200	102.2000	4.4380	0.1848	4.7430	0.1830	0.8374	114.9%	0.3156	2.3440
3	00:23:05	100.0%	2.9080	60.3200	23.9700	1656.0000	320.7000	26.1800	33.0300	15.6300	103.7000	4.6010	0.1914	5.1630	0.2431	0.0055	116.0%	0.3344	2.3420
x		99.9%	4.734%	6.005%	5.616%	1653.0000	8.245%	4.476%	4.964%	4.359%	5.965%	5.381%	0.1914	4.626%	0.1921	0.6843	115.2%	0.3304	4.491%
σ		0.4%	n/a	n/a	n/a	9.5380	n/a	n/a	n/a	n/a	n/a	n/a	0.0065	n/a	0.0471	0.6167	0.7%	0.0132	n/a
%RSD		0.4	1.5620	0.2639	0.8491	0.5772	0.9470	0.5121	0.6110	1.1360	0.7568	1.7980	3.4180	4.7730	24.5000	90.1300	0.6	3.9970	1.0930

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:42	0.1597	2.4980	0.5695	161.2000	97.3%	95.8%	2.4180	8.3710	88.3%
2	00:22:53	0.1469	2.4990	0.5606	160.0000	99.7%	97.0%	2.3260	8.2610	90.7%
3	00:23:05	0.1492	2.5120	0.5725	160.8000	96.9%	94.6%	2.3900	8.3360	87.6%
x		0.1519	4.729%	0.547%	5.043%	98.0%	95.8%	4.567%	6.694%	88.9%
σ		0.0068	n/a	n/a	n/a	1.5%	1.2%	n/a	n/a	1.6%
%RSD		4.4870	0.3216	1.0900	0.3772	1.5	1.3	1.9860	0.6748	1.8

2052221

2052220-DUP1@MF5WA8D 6/6/2012 12:26:39 AM ABB 6/6/12

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:50	102.5%	0.4682	28.4300	12.1200	821.9000	253.6000	3.5400	7.4530	4.4580	75.4900	2.3950	0.0419	0.2434	-0.0184	0.5441	115.1%	0.1887	0.1220
2	00:27:02	101.9%	0.3832	28.2100	12.1000	814.1000	251.7000	3.6170	7.6090	4.5440	76.6400	2.2230	0.0458	0.4373	0.0072	0.2770	116.0%	0.2275	0.1335
3	00:27:14	100.3%	0.5685	28.1900	12.1500	814.3000	253.8000	3.6720	7.5740	4.6120	77.2900	2.3520	0.0457	0.2532	0.0146	0.3534	116.3%	0.1923	0.1369
x		101.6%	0.4733	28.2800	12.1200	816.8000	253.0000	3.6100	7.5450	4.5380	76.4800	2.3230	0.0445	0.3113	0.0011	0.3915	115.8%	0.2028	0.1308
σ		1.2%	0.0927	0.1326	0.0274	4.4560	1.1890	0.0662	0.0819	0.0771	0.9107	0.0895	0.0022	0.1092	0.0173	0.1376	0.6%	0.0214	0.0078
%RSD		1.2	19.5900	0.4689	0.2263	0.5455	0.4699	1.8340	1.0850	1.6990	1.1910	3.8540	4.9070	35.0900	1518.0000	35.1400	0.5	10.5700	5.9790

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:26:50	0.0575	0.1500	0.0148	56.4500	100.5%	100.4%	0.0832	7.0440	89.8%
2	00:27:02	0.0613	0.1377	0.0163	56.4300	98.7%	98.2%	0.0903	7.0790	90.9%
3	00:27:14	0.0692	0.1472	0.0164	56.3900	98.3%	98.0%	0.0846	7.1870	89.2%
x		0.0626	0.1449	0.0158	56.4200	99.2%	98.9%	0.0860	7.1030	90.0%
σ		0.0060	0.0065	0.0009	0.0285	1.1%	1.3%	0.0037	0.0748	0.9%
%RSD		9.5150	4.4540	5.7430	0.0506	1.2	1.4	4.3580	1.0540	1.0

SEQ-SRD1@MF5WA8L 6/6/2012 12:30:47 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:58	106.4%	0.0829	6.0120	2.6320	175.6000	56.1800	0.7653	1.3370	0.9448	14.8800	0.5136	0.0123	0.1104	-0.0295	0.2728	117.5%	0.0429	0.0218
2	00:31:10	103.5%	0.0674	5.8970	2.5710	172.0000	54.4400	0.7616	1.4580	0.8651	15.4800	0.4059	0.0080	0.0768	-0.0043	0.1440	120.4%	0.0399	0.0270
3	00:31:21	104.1%	0.0805	5.9150	2.5600	165.3000	55.6100	0.7382	1.3510	0.9045	15.0400	0.5144	0.0040	0.0496	-0.0146	0.4836	120.5%	0.0433	0.0214
x		104.7%	0.0769	5.9420	2.5880	171.0000	55.4100	0.7550	1.3820	0.9048	15.1300	0.4780	0.0081	0.0789	-0.0161	0.3001	119.5%	0.0420	0.0234
σ		1.5%	0.0084	0.0616	0.0388	5.2000	0.8883	0.0147	0.0659	0.0399	0.3129	0.0625	0.0042	0.0304	0.0127	0.1715	1.7%	0.0018	0.0031
%RSD		1.5	10.8700	1.0370	1.4980	3.0420	1.6030	1.9490	4.7680	4.4040	2.0680	13.0600	51.2700	38.5600	78.4600	57.1300	1.4	4.3970	13.4000

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:30:58	0.0149	0.0303	-0.0047	11.9700	96.1%	96.3%	0.0147	1.3700	93.8%
2	00:31:10	0.0142	0.0261	-0.0020	12.0900	95.0%	95.1%	0.0190	1.4240	89.9%
3	00:31:21	0.0097	0.0348	-0.0022	12.2600	97.1%	97.1%	0.0180	1.4330	91.5%
x		0.0129	0.0304	-0.0030	12.1000	96.1%	96.2%	0.0172	1.4090	91.7%
σ		0.0028	0.0043	0.0015	0.1472	1.1%	1.0%	0.0022	0.0341	2.0%
%RSD		21.9700	14.2800	51.2700	1.2160	1.1	1.0	12.9400	2.4210	2.2

1205240-06@MF5WB0 6/6/2012 12:34:54 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:35:05	102.9%	0.5356	34.0300	13.0500	889.5000	302.5000	4.1190	8.5290	4.9160	70.0400	2.6720	0.0697	0.2760	0.0180	0.4115	117.7%	0.2087	0.0993
2	00:35:16	102.6%	0.4589	33.1900	12.9700	873.3000	299.9000	4.2200	8.7510	4.7680	69.7400	2.5820	0.0485	0.4472	0.0210	0.2779	119.5%	0.1813	0.0930
3	00:35:28	102.2%	0.4422	33.9000	13.2000	880.0000	307.5000	4.1700	8.3950	4.9030	69.1700	2.7160	0.0494	0.4026	-0.0218	0.6220	117.4%	0.2116	0.1004
x		102.6%	0.4789	33.7100	13.0800	880.9000	303.3000	4.1700	8.5590	4.8630	69.6500	2.6570	0.0559	0.3753	0.0057	0.4371	118.2%	0.2006	0.0976
σ		0.3%	0.0498	0.4540	0.1179	8.1720	3.8630	0.0507	0.1798	0.0818	0.4391	0.0682	0.0120	0.0888	0.0239	0.1735	1.2%	0.0167	0.0040
%RSD		0.3	10.4000	1.3470	0.9017	0.9276	1.2740	1.2160	2.1000	1.6830	0.6304	2.5680	21.5000	23.6600	418.7000	39.6900	1.0	8.3290	4.0630

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:35:05	0.0529	0.1476	0.0079	60.7700	99.0%	94.8%	0.0961	7.2440	88.5%
2	00:35:16	0.0546	0.1490	0.0087	61.2700	97.8%	97.0%	0.0885	7.2360	89.3%
3	00:35:28	0.0663	0.1586	0.0103	61.7900	98.9%	97.1%	0.0946	7.2840	87.0%
x		0.0579	0.1518	0.0090	61.2800	98.6%	96.3%	0.0931	7.2550	88.3%
σ		0.0073	0.0060	0.0012	0.5086	0.7%	1.3%	0.0040	0.0259	1.1%
%RSD		12.6100	3.9450	13.7300	0.8300	0.7	1.4	4.3230	0.3570	1.3

1205240-07@MF5WA0 6/6/2012 12:39:02 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:39:13	97.8%	0.5007	32.4900	13.9300	946.8000	373.4000	4.3470	8.8250	5.6120	25.4200	2.3700	0.0788	0.3368	0.0326	0.0054	116.5%	0.2017	0.1629
2	00:39:25	99.8%	0.5568	32.8200	14.2900	977.4000	383.2000	4.4590	9.0450	5.4410	25.9700	2.4630	0.0840	0.3717	0.0410	0.3547	114.9%	0.1862	0.1634
3	00:39:36	99.1%	0.4802	32.6400	14.1200	957.0000	374.9000	4.4780	9.1570	5.4800	25.7200	2.3790	0.0824	0.3061	-0.0036	0.6515	117.2%	0.1952	0.1517
x		98.9%	0.5125	32.6500	14.1100	960.4000	377.2000	4.4280	9.0090	5.5110	25.7000	2.4040	0.0817	0.3382	0.0233	0.3372	116.2%	0.1944	0.1593
σ		1.0%	0.0397	0.1646	0.1779	15.6000	5.2300	0.0706	0.1689	0.0895	0.2754	0.0515	0.0027	0.0329	0.0237	0.3234	1.1%	0.0078	0.0067
%RSD		1.0	7.7400	0.5042	1.2610	1.6240	1.3870	1.5940	1.8750	1.6240	1.0710	2.1410	3.2970	9.7140	101.5000	95.9100	1.0	4.0060	4.1810

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:39:13	0.0667	0.1190	0.0045	73.2600	99.1%	98.2%	0.0978	6.6690	88.4%
2	00:39:25	0.0592	0.1196	0.0069	72.0100	98.4%	95.0%	0.0976	6.4740	91.0%
3	00:39:36	0.0515	0.1369	0.0041	73.3100	96.1%	95.6%	0.1005	6.6550	89.5%
x		0.0592	0.1252	0.0051	72.8600	97.9%	96.3%	0.0986	6.5990	89.6%
σ		0.0076	0.0101	0.0015	0.7364	1.6%	1.7%	0.0016	0.1087	1.3%
%RSD		12.9000	8.0900	29.0600	1.0110	1.6	1.8	1.6190	1.6470	1.5

1205240-08@MF5WA1 6/6/2012 12:43:10 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:43:21	102.8%	0.5498	34.4900	14.5600	974.2000	354.0000	4.1990	8.8990	5.5060	26.0800	2.8740	0.0505	0.5011	-0.0145	0.6925	114.6%	0.1649	0.0896
2	00:43:33	102.8%	0.4810	34.2400	14.4500	955.4000	342.6000	4.2140	8.7440	5.3530	26.4100	2.8620	0.0825	0.2788	-0.0003	0.2774	117.0%	0.1646	0.1002
3	00:43:44	100.1%	0.4659	34.3300	14.4900	953.5000	348.2000	4.2950	9.2370	5.3190	26.6300	2.9620	0.0330	0.3902	-0.0183	0.5738	117.0%	0.1654	0.1015
x		101.9%	0.4989	34.3500	14.5000	961.1000	348.2000	4.2360	8.9600	5.3930	26.3700	2.8990	0.0554	0.3900	-0.0110	0.5146	116.2%	0.1650	0.0971
σ		1.6%	0.0447	0.1251	0.0607	11.4600	5.7000	0.0518	0.2517	0.0999	0.2767	0.0545	0.0251	0.1112	0.0095	0.2138	1.4%	0.0004	0.0065
%RSD		1.5	8.9660	0.3642	0.4188	1.1930	1.6370	1.2220	2.8100	1.8530	1.0490	1.8800	45.3700	28.5000	86.1600	41.5500	1.2	0.2332	6.7250

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:43:21	0.0523	0.1248	0.0091	67.5400	98.2%	96.3%	0.1024	6.5430	87.9%
2	00:43:33	0.0472	0.1229	0.0080	68.5300	97.8%	97.1%	0.1053	6.5900	88.2%
3	00:43:44	0.0424	0.1267	0.0122	67.3300	96.4%	94.9%	0.0974	6.7970	85.2%
x		0.0473	0.1248	0.0097	67.8000	97.5%	96.1%	0.1017	6.6430	87.1%
σ		0.0050	0.0019	0.0022	0.6415	0.9%	1.1%	0.0040	0.1349	1.7%
%RSD		10.4700	1.5280	22.3300	0.9462	0.9	1.2	3.9130	2.0310	2.0

1205240-09@MF5WA2 6/6/2012 12:47:18 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:30	100.0%	0.5321	34.9100	15.4700	1022.0000	399.2000	4.5790	9.7090	5.3460	26.7700	2.4160	0.0827	0.4055	0.0003	0.7705	116.8%	0.1995	0.0446
2	00:47:42	100.3%	0.6246	35.4400	15.5100	1030.0000	399.3000	4.6850	9.5730	5.3190	27.6300	2.2960	0.0660	0.3486	-0.0183	0.5735	117.0%	0.2172	0.0430
3	00:47:53	100.5%	0.5534	35.2200	15.6500	1024.0000	400.0000	4.6760	9.5330	5.3980	27.4900	2.3060	0.0330	0.4452	-0.0001	0.4278	117.2%	0.1996	0.0480
x		100.3%	0.5700	35.1900	15.5400	1025.0000	399.5000	4.6470	9.6050	5.3540	27.2900	2.3390	0.0606	0.3997	-0.0060	0.5906	117.0%	0.2054	0.0452
σ		0.2%	0.0485	0.2645	0.0933	3.9790	0.4199	0.0587	0.0924	0.0405	0.4628	0.0663	0.0253	0.0486	0.0106	0.1720	0.2%	0.0102	0.0026
%RSD		0.2	8.5030	0.7516	0.6001	0.3881	0.1051	1.2640	0.9618	0.7572	1.6960	2.8360	41.8000	12.1500	175.0000	29.1200	0.2	4.9590	5.7020

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:47:30	0.0640	0.1219	-0.0023	79.0300	99.3%	96.3%	0.1159	6.2880	89.3%
2	00:47:42	0.0569	0.1166	-0.0026	82.7800	96.3%	94.7%	0.1170	6.4250	86.5%
3	00:47:53	0.0653	0.1352	0.0019	80.7600	97.1%	95.7%	0.1217	6.4680	87.2%
x		0.0621	0.1246	-0.0010	80.8600	97.5%	95.6%	0.1182	6.3940	87.7%
σ		0.0045	0.0096	0.0025	1.8770	1.6%	0.8%	0.0031	0.0941	1.4%
%RSD		7.2720	7.7000	244.8000	2.3210	1.6	0.8	2.6270	1.4710	1.7

1205240-10@MF5WA3 6/6/2012 12:51:27 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:39	100.3%	0.5871	36.6900	15.6500	1076.0000	426.6000	4.6230	9.4950	5.9960	33.6100	2.3590	0.0752	0.2700	0.0110	0.2874	115.6%	0.2031	0.2228
2	00:51:50	99.9%	0.5284	37.0700	15.8200	1066.0000	428.4000	4.7080	9.6530	6.1020	34.2900	2.2450	0.0544	0.4965	-0.0110	0.5035	115.5%	0.2057	0.2196
3	00:52:02	99.5%	0.5351	36.7500	15.7100	1071.0000	427.1000	4.6150	9.8960	5.9330	34.2200	2.4540	0.0458	0.5638	-0.0073	0.5713	116.0%	0.2180	0.2293
x		99.9%	0.5502	36.8300	15.7200	1071.0000	427.4000	4.6490	9.6810	6.0110	34.0400	2.3530	0.0584	0.4434	-0.0024	0.4541	115.7%	0.2089	0.2239
σ		0.4%	0.0321	0.2067	0.0879	5.0550	0.9026	0.0514	0.2017	0.0854	0.3741	0.1051	0.0151	0.1539	0.0118	0.1483	0.3%	0.0079	0.0049
%RSD		0.4	5.8370	0.5612	0.5589	0.4720	0.2112	1.1050	2.0830	1.4200	1.0990	4.4670	25.8800	34.7100	483.9000	32.6600	0.2	3.8040	2.2010

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:39	0.0654	0.1734	0.0081	80.7700	97.0%	96.9%	0.1139	7.7080	87.7%
2	00:51:50	0.0706	0.1696	0.0056	81.1000	96.5%	95.7%	0.1043	7.6640	88.9%
3	00:52:02	0.0667	0.1407	0.0016	80.6200	97.5%	94.0%	0.1086	7.8970	87.1%
x		0.0675	0.1613	0.0051	80.8300	97.0%	95.5%	0.1089	7.7560	87.9%
σ		0.0027	0.0179	0.0033	0.2455	0.5%	1.5%	0.0048	0.1237	0.9%
%RSD		3.9860	11.1000	64.4300	0.3038	0.5	1.5	4.4330	1.5940	1.1

1205240-11@MF5WA9 6/6/2012 12:55:35 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:55:47	104.8%	0.4490	28.2700	13.8800	935.7000	275.6000	3.4440	8.5480	8.5810	55.7100	2.3630	0.0567	0.4487	-0.0111	0.4075	119.2%	0.1714	0.0766
2	00:55:58	104.4%	0.4465	28.3000	13.8700	942.0000	277.9000	3.4960	8.7800	8.5490	55.0000	2.4000	0.0161	0.4180	-0.0003	0.5467	119.9%	0.1945	0.0786
3	00:56:10	103.0%	0.4204	27.8100	13.8700	959.3000	280.1000	3.5830	8.8460	8.5240	58.1100	2.5100	0.0759	0.6569	-0.0110	0.5619	120.8%	0.1844	0.0812
x		104.1%	0.4386	28.1300	13.8700	945.7000	277.9000	3.5080	8.7250	8.5520	56.2700	2.4240	0.0496	0.5079	-0.0075	0.5054	120.0%	0.1835	0.0788
σ		0.9%	0.0158	0.2786	0.0037	12.2300	2.2290	0.0707	0.1565	0.0289	1.6280	0.0765	0.0305	0.1300	0.0062	0.0851	0.8%	0.0115	0.0023
%RSD		0.9	3.6060	0.9905	0.0269	1.2940	0.8023	2.0140	1.7940	0.3377	2.8930	3.1570	61.6000	25.5900	83.5000	16.8400	0.7	6.2930	2.9360

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:55:47	0.0528	0.2773	0.0162	55.5800	98.2%	96.1%	0.0888	13.1100	88.2%
2	00:55:58	0.0687	0.2632	0.0176	55.1800	98.2%	97.9%	0.0906	13.0700	88.2%
3	00:56:10	0.0630	0.2828	0.0160	55.6100	96.2%	95.0%	0.0821	12.9800	85.5%
x		0.0615	0.2745	0.0166	55.4600	97.6%	96.3%	0.0872	13.0500	87.3%
σ		0.0081	0.0101	0.0009	0.2387	1.1%	1.4%	0.0045	0.0652	1.6%
%RSD		13.1200	3.6900	5.2970	0.4305	1.2	1.5	5.1510	0.4995	1.8

1205240-12@MF5WB1 6/6/2012 12:59:42 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:54	106.7%	0.5295	42.8800	13.2000	899.8000	899.1000	12.2600	12.6000	3.8130	18.3100	3.8550	0.0598	0.5199	-0.0038	0.6783	121.1%	0.1897	0.0268
2	01:00:05	106.9%	0.5466	42.7400	13.2000	857.8000	894.0000	12.5000	12.4600	3.8540	18.2200	3.9350	0.0433	0.3792	0.0164	-0.0045	122.5%	0.1600	0.0310
3	01:00:17	105.9%	0.3911	43.7200	13.4700	890.1000	912.8000	12.2600	12.2300	3.8250	18.6400	3.9440	0.0441	0.3615	-0.0143	0.7561	120.4%	0.2111	0.0351
x		106.5%	0.4891	43.1200	13.2900	882.5000	901.9000	12.3400	12.4300	3.8310	18.3900	3.9110	0.0491	0.4202	-0.0006	0.4766	121.3%	0.1869	0.0310
σ		0.5%	0.0853	0.5310	0.1596	21.9900	9.7050	0.1386	0.1883	0.0214	0.2214	0.0490	0.0093	0.0868	0.0156	0.4185	1.1%	0.0257	0.0042
%RSD		0.5	17.4400	1.2310	1.2010	2.4910	1.0760	1.1230	1.5150	0.5584	1.2040	1.2530	18.8900	20.6500	2737.0000	87.8000	0.9	13.7500	13.4400

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:59:54	0.0502	0.1469	-0.0017	136.7000	97.4%	95.5%	0.1296	7.8870	83.9%
2	01:00:05	0.0588	0.1273	-0.0024	138.2000	96.3%	94.9%	0.1284	7.9570	84.0%
3	01:00:17	0.0624	0.1283	-0.0029	141.6000	96.5%	94.5%	0.1245	7.9290	83.1%
x		0.0571	0.1342	-0.0023	138.8000	96.7%	95.0%	0.1275	7.9240	83.7%
σ		0.0062	0.0110	0.0006	2.5010	0.6%	0.5%	0.0027	0.0352	0.5%
%RSD		10.8900	8.2300	26.5800	1.8010	0.6	0.5	2.0880	0.4441	0.6

1205240-13@MF5WB2 6/6/2012 1:03:50 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:04:01	104.2%	0.3068	26.2300	11.9200	811.9000	352.8000	4.2280	7.8420	5.4120	23.6200	2.4880	0.0485	0.5289	-0.0360	0.5386	119.5%	0.1659	0.0295
2	01:04:13	101.8%	0.4438	27.3000	12.2400	813.3000	359.1000	4.3010	7.9570	5.6690	23.8500	2.4970	0.0372	0.2798	0.0251	-0.0017	116.7%	0.1471	0.0321
3	01:04:24	102.1%	0.4106	26.3200	11.9300	818.7000	360.6000	4.3230	7.9520	5.5370	24.3800	2.4500	0.0571	0.3426	-0.0180	0.7725	118.4%	0.1568	0.0380
x		102.7%	0.3871	26.6100	12.0300	814.6000	357.5000	4.2840	7.9170	5.5390	23.9500	2.4780	0.0476	0.3837	-0.0096	0.4365	118.2%	0.1566	0.0332
σ		1.3%	0.0715	0.5929	0.1808	3.5960	4.1510	0.0497	0.0648	0.1285	0.3884	0.0249	0.0100	0.1295	0.0314	0.3971	1.4%	0.0094	0.0043
%RSD		1.3	18.4600	2.2280	1.5030	0.4414	1.1610	1.1600	0.8186	2.3210	1.6220	1.0060	20.9300	33.7600	326.4000	90.9800	1.2	5.9970	13.1000

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:04:01	0.0463	0.1270	-0.0069	71.8400	100.2%	97.3%	0.0823	8.3340	90.6%
2	01:04:13	0.0345	0.1205	-0.0064	72.5100	99.2%	96.2%	0.0909	8.4040	88.6%
3	01:04:24	0.0524	0.1246	-0.0049	72.1100	97.0%	97.7%	0.0925	8.5360	89.0%
x		0.0444	0.1240	-0.0061	72.1500	98.8%	97.0%	0.0886	8.4250	89.4%
σ		0.0091	0.0033	0.0010	0.3393	1.6%	0.8%	0.0055	0.1028	1.0%
%RSD		20.5200	2.6830	16.9800	0.4703	1.6	0.8	6.1880	1.2200	1.2

1205240-14@MF5WB3 6/6/2012 1:07:57 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:08:09	102.2%	0.5022	26.5400	12.1100	832.3000	316.1000	4.1630	8.3100	5.6650	25.3900	2.5710	0.0442	0.3077	-0.0041	0.3447	120.3%	0.1562	0.0361
2	01:08:20	100.5%	0.5901	27.4800	12.5400	828.8000	324.8000	4.1940	8.4410	5.9260	25.4400	2.6130	0.0492	0.5941	-0.0288	0.9021	117.8%	0.1531	0.0413
3	01:08:31	100.2%	0.4884	27.0200	12.2400	841.8000	331.0000	4.1170	8.2470	5.6460	25.4200	2.5100	0.0527	0.4488	-0.0111	0.4134	119.2%	0.1677	0.0379
x		101.0%	0.5269	27.0100	12.3000	834.3000	323.9000	4.1580	8.3330	5.7460	25.4200	2.5650	0.0487	0.4502	-0.0147	0.5534	119.1%	0.1590	0.0384
σ		1.1%	0.0552	0.4703	0.2223	6.6880	7.4720	0.0389	0.0989	0.1565	0.0246	0.0517	0.0043	0.1432	0.0127	0.3039	1.2%	0.0077	0.0026
%RSD		1.0	10.4800	1.7410	1.8070	0.8017	2.3070	0.9360	1.1870	2.7240	0.0966	2.0160	8.7910	31.8100	86.7800	54.9100	1.0	4.8150	6.8060

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:08:09	0.0551	0.1426	-0.0114	70.0300	98.9%	96.2%	0.0839	8.5740	91.6%
2	01:08:20	0.0421	0.1422	-0.0093	70.9300	100.1%	98.7%	0.0870	8.8050	90.3%
3	01:08:31	0.0475	0.1264	-0.0050	69.4000	101.0%	98.1%	0.0903	8.8230	90.5%
x		0.0482	0.1371	-0.0086	70.1200	100.0%	97.7%	0.0870	8.7340	90.8%
σ		0.0065	0.0093	0.0033	0.7656	1.0%	1.3%	0.0032	0.1385	0.7%
%RSD		13.5200	6.7710	38.0900	1.0920	1.0	1.3	3.6400	1.5850	0.8

1205240-15@MF5WB6 6/6/2012 1:12:05 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:12:17	103.0%	0.4618	30.0800	13.0100	863.8000	244.0000	3.6170	8.1690	7.2040	28.9500	2.5390	0.0496	0.3490	0.0105	0.0691	116.9%	0.1735	0.0375
2	01:12:28	101.4%	0.3995	29.0100	12.4900	846.0000	232.1000	3.6350	8.4960	6.9990	29.5500	2.7690	0.0281	0.5103	0.0138	0.4260	120.4%	0.1900	0.0427
3	01:12:40	102.9%	0.3981	30.0900	13.0000	885.8000	249.3000	3.6110	8.2920	7.1710	29.1900	2.6160	0.0456	0.2245	0.0292	0.2794	116.5%	0.1796	0.0349
x		102.4%	0.4198	29.7300	12.8300	865.2000	241.8000	3.6210	8.3190	7.1250	29.2300	2.6410	0.0411	0.3613	0.0178	0.2582	118.0%	0.1810	0.0383
σ		0.9%	0.0364	0.6205	0.2965	19.9400	8.7750	0.0125	0.1652	0.1099	0.3029	0.1167	0.0114	0.1433	0.0100	0.1794	2.2%	0.0083	0.0040
%RSD		0.9	8.6700	2.0870	2.3110	2.3040	3.6290	0.3461	1.9860	1.5420	1.0360	4.4170	27.8500	39.6600	55.9600	69.4700	1.8	4.5990	10.3400

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:12:17	0.0599	0.1569	0.0009	54.9400	97.5%	93.3%	0.0848	8.3030	89.2%
2	01:12:28	0.0548	0.1662	-0.0012	56.0100	96.7%	94.3%	0.0882	8.4460	87.1%
3	01:12:40	0.0627	0.1581	0.0067	55.3500	97.1%	95.5%	0.0872	8.3590	87.8%
x		0.0591	0.1604	0.0021	55.4300	97.1%	94.4%	0.0868	8.3690	88.1%
σ		0.0040	0.0051	0.0041	0.5404	0.4%	1.1%	0.0017	0.0725	1.1%
%RSD		6.7250	3.1730	193.8000	0.9749	0.4	1.2	1.9870	0.8665	1.2

1205240-16@MF5WB7 6/6/2012 1:16:13 AM

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:16:25	102.0%	0.5310	28.8400	12.9500	854.6000	221.4000	3.4250	7.8010	6.6970	31.0200	2.5760	0.0444	0.4055	-0.0040	0.3504	119.7%	0.1732	0.0357
2	01:16:37	101.1%	0.3960	29.0600	12.9200	860.8000	222.4000	3.5320	7.9730	6.7350	31.8900	2.6030	0.0518	0.4795	-0.0113	0.2150	121.1%	0.1849	0.0330
3	01:16:48	101.2%	0.4420	29.3400	13.0000	879.5000	225.7000	3.4700	7.9500	6.8590	31.4200	2.7230	0.0445	0.4211	0.0030	0.2067	119.3%	0.1916	0.0350
x		101.4%	0.4563	29.0800	12.9600	865.0000	223.2000	3.4760	7.9080	6.7630	31.4400	2.6340	0.0469	0.4354	-0.0041	0.2574	120.0%	0.1832	0.0346
σ		0.5%	0.0687	0.2492	0.0404	12.9800	2.2990	0.0536	0.0933	0.0850	0.4382	0.0781	0.0042	0.0390	0.0072	0.0807	1.0%	0.0093	0.0014
%RSD		0.5	15.0400	0.8571	0.3117	1.5010	1.0300	1.5430	1.1800	1.2570	1.3940	2.9670	9.0570	8.9630	174.4000	31.3500	0.8	5.0750	4.0220

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:16:25	0.0574	0.1642	0.0050	53.1200	97.5%	98.2%	0.0794	8.3450	88.4%
2	01:16:37	0.0622	0.1553	0.0105	52.6500	96.9%	94.5%	0.0806	8.4690	88.5%
3	01:16:48	0.0555	0.1514	-0.0015	52.0900	99.7%	97.8%	0.0816	8.5810	87.3%
x		0.0584	0.1570	0.0046	52.6200	98.0%	96.8%	0.0805	8.4650	88.1%
σ		0.0035	0.0065	0.0060	0.5131	1.4%	2.0%	0.0011	0.1184	0.7%
%RSD		5.9560	4.1530	129.6000	0.9752	1.5	2.1	1.4120	1.3990	0.7

SEQ-CCV@CCV02 6/6/2012 1:20:23 AM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:20:34	102.2%	495.2000	534.7000	527.9000	34680.0000	544.6000	↑538.5000	528.5000	485.8000	↑2636.0000	533.5000	14.5900	516.0000	21.8300	2.4720	120.1%	25.6700	67.2000
2	01:20:46	100.8%	509.8000	537.7000	530.8000	34530.0000	541.0000	↑553.2000	539.3000	493.6000	↑2711.0000	539.6000	15.0700	519.2000	22.2300	2.2310	119.9%	26.0700	68.0300
3	01:20:57	102.2%	503.1000	539.1000	532.3000	34770.0000	546.8000	↑548.6000	524.4000	481.1000	↑2604.0000	545.3000	15.0800	530.1000	21.8200	3.2780	119.6%	26.5000	68.0800
x		101.7%	100.536%	107.431%	106.070%	34660.0000	108.829%	↑109.354%	106.145%	97.365%	↑106.008%	107.894%	14.9100	104.355%	21.9600	2.6600	119.9%	26.0800	104.263%
σ		0.8%	n/a	n/a	n/a	120.4000	n/a	↑n/a	n/a	n/a	↑n/a	n/a	0.2820	n/a	0.2363	0.5480	0.2%	0.4149	n/a
%RSD		0.8	1.4570	0.4147	0.4233	0.3474	0.5430	↑1.3730	1.4470	1.3030	↑2.0750	1.0950	1.8910	1.4130	1.0760	20.6000	0.2	1.5910	0.7280

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:20:34	18.2100	540.5000	↑528.4000	↑2643.0000	95.7%	93.0%	↑505.3000	↑505.1000	90.9%
2	01:20:46	18.8600	546.5000	↑535.5000	↑2706.0000	93.9%	92.2%	↑502.6000	↑510.8000	91.3%
3	01:20:57	18.6900	546.4000	↑529.3000	↑2640.0000	94.2%	94.2%	↑514.6000	↑517.4000	90.2%
x		18.5900	108.892%	↑106.212%	↑106.517%	94.6%	93.1%	↑101.503%	↑102.224%	90.8%
σ		0.3400	n/a	↑n/a	↑n/a	0.9%	1.0%	↑n/a	↑n/a	0.5%
%RSD		1.8290	0.6311	↑0.7247	↑1.4170	1.0	1.1	↑1.2380	↑1.2050	0.6

SEQ-CCB@CCB02 6/6/2012 1:24:34 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:24:46	103.2%	0.0356	0.0037	0.0427	1.0900	0.0092	0.0287	-0.0626	-0.0393	0.1539	0.0458	0.0040	0.0098	-0.0186	0.1442	119.9%	-0.0017	0.0068
2	01:24:58	103.6%	0.0126	0.0083	0.0388	-1.4530	0.0147	0.0222	-0.0542	-0.0228	0.1366	0.0490	0.0000	-0.0166	0.0065	0.0679	119.2%	0.0001	0.0127
3	01:25:09	103.1%	0.0173	0.0102	0.0283	-2.4760	0.0226	0.0293	-0.0840	-0.0480	0.1212	0.0349	0.0000	0.0519	-0.0149	0.2812	119.2%	-0.0003	0.0078
x		103.3%	0.0219	0.0074	0.0366	-0.9463	0.0155	0.0267	-0.0669	-0.0367	0.1372	0.0432	0.0013	0.0150	-0.0090	0.1644	119.4%	-0.0006	0.0091
σ		0.3%	0.0122	0.0033	0.0075	1.8360	0.0067	0.0039	0.0154	0.0128	0.0164	0.0074	0.0023	0.0345	0.0135	0.1081	0.4%	0.0010	0.0032
%RSD		0.3	55.6400	45.0800	20.3500	194.1000	43.1900	14.6600	22.9700	34.7700	11.9200	17.1300	173.2000	229.5000	150.6000	65.7300	0.3	153.6000	34.7500

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:24:46	0.0006	0.0199	0.5148	0.1227	95.2%	93.2%	0.0217	0.0468	90.9%
2	01:24:58	0.0001	0.0287	0.5103	0.1204	97.5%	95.4%	0.0189	0.0460	91.5%
3	01:25:09	0.0015	0.0352	0.4938	0.1438	96.3%	94.8%	0.0239	0.0500	93.3%
x		0.0007	0.0279	0.5063	0.1290	96.3%	94.4%	0.0215	0.0476	91.9%
σ		0.0007	0.0077	0.0111	0.0129	1.1%	1.1%	0.0025	0.0021	1.2%
%RSD		90.8200	27.4800	2.1840	9.9940	1.2	1.2	11.8500	4.4940	1.3

Mass Uncorrected ICPS

SEQ-CAL1@S 6/5/2012 10:59:19 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
1	22:59:31	183381.1100	13.3333	132.6676	36.0001	52.6668	196.6688	143.3345	2363.6406	816.7034	3707.4225	5.5556	0.0000	11.1111	30.0000	13.3333	103158.6600	363.3406	113.3340
2	22:59:42	183602.1700	6.6667	119.3341	32.6667	54.6668	200.0022	116.6674	2323.6303	756.6982	4144.2777	0.0000	0.0000	6.6667	30.0000	20.0000	103354.1900	406.6758	120.0008
3	22:59:54	187871.4100	10.0000	113.3340	32.6667	55.3335	190.0020	86.6671	2533.6864	800.0352	3830.8070	2.2222	0.0000	5.5556	16.6667	16.6667	104911.8800	413.3427	100.0006
x		184951.5600	10.0000	121.7786	33.7778	54.2224	195.5577	115.5563	2406.9857	791.1456	3894.1691	2.5926	0.0000	7.7778	25.5556	16.6667	103808.2500	394.4530	111.1118
σ		2531.0764	3.3333	9.8959	1.9245	1.3878	5.0919	28.3500	111.5347	30.9746	225.2148	2.7962	0.0000	2.9397	7.6980	3.3333	960.7667	27.1496	10.1836
%RSD		1.3685	33.3333	8.1261	5.6975	2.5594	2.6038	24.5335	4.6338	3.9152	5.7834	107.8548	0.0000	37.7965	30.1227	20.0000	0.9255	6.8828	9.1652

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	22:59:31	0.0000	13.3333	363.3406	133.3343	709320.0500	732573.3000	313.3387	1070.0630	472908.5100
2	22:59:42	0.0000	13.3333	370.0075	136.6677	708837.8600	742921.2400	270.0040	963.3844	476797.2800
3	22:59:54	6.6667	20.0000	346.6733	150.0012	715187.4100	749680.4000	293.3381	950.0496	480561.2500
x		2.2222	15.5556	360.0071	140.0011	711115.1100	741724.9800	292.2269	994.4990	476755.6800
σ		3.8490	3.8490	12.0190	8.8193	3534.9488	8616.0635	21.6887	65.7791	3826.5358
%RSD		173.2051	24.7436	3.3385	6.2995	0.4971	1.1616	7.4219	6.6143	0.8026

SEQ-CAL3@S 6/5/2012 11:03:29 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	
1	23:03:41	184353.8200	663.3575	6623.7455	3947.5235	566.0176	2010.2222	14591.7010	3013.8328	7619.8588	8170.3365	341.1175	103.3339	392.2307	196.6688	26.6667	107555.8500	730.0293	148
2	23:03:52	189123.6400	876.7089	6648.4302	4086.9185	554.6836	1883.5284	14301.2400	3003.8295	7362.9805	8473.9476	391.1195	80.0004	392.2307	230.0029	36.6667	106011.1900	723.3621	150
3	23:04:04	187241.9500	770.0326	6518.3360	3971.5340	578.0184	1943.5411	14301.2400	3087.1908	7476.4064	8076.9198	401.1200	133.3343	371.1187	196.6688	23.3334	105754.9000	773.3662	153
x		186906.4700	770.0330	6596.8373	4001.9920	566.2399	1945.7639	14398.0600	3034.9510	7486.4152	8240.4013	377.7857	105.5562	385.1934	207.7802	28.8889	106440.6500	742.2526	150
σ		2402.5429	106.6757	69.0953	74.5218	11.6690	63.3761	167.6978	45.5166	128.7313	207.5803	32.1468	26.7363	12.1890	19.2455	6.9389	974.2549	27.1507	2
%RSD		1.2854	13.8534	1.0474	1.8621	2.0608	3.2571	1.1647	1.4997	1.7195	2.5191	8.5093	25.3290	3.1644	9.2624	24.0193	0.9153	3.6579	

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:03:41	270.0040	4317.6918	27889.3810	52705.6760	710565.2100	742968.1900	46053.0200	33883.0260	475744.2100
2	23:03:52	276.6709	4494.4441	27926.1600	54419.0590	730668.8000	748444.5400	45962.5640	33943.2500	479922.1100
3	23:04:04	296.6715	4284.3427	28076.6230	52749.2610	723995.2900	740101.2300	47339.6040	34445.1320	480206.5600
x		281.1155	4365.4928	27964.0550	53291.3320	721743.1000	743837.9900	46451.7290	34090.4690	478624.2900
σ		13.8782	112.9131	99.2061	976.8839	10239.2820	4239.1132	770.2506	308.6197	2498.2763
%RSD		4.9368	2.5865	0.3548	1.8331	1.4187	0.5699	1.6582	0.9053	0.5220

SEQ-CAL4@S 6/5/2012 11:07:40 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106C
1	23:07:51	191305.2500	7986.8402	13425.9070	20544.5210	2783.7595	19427.4030	149892.2900	34558.8960	37497.1730	39596.0440	3678.5219	273.3374	773.3662	453.3446	26.6667	108888.2300	4284.34
2	23:08:03	191509.4800	8146.9822	13566.7820	21059.0300	2619.0439	19414.0410	150403.9700	34880.1190	38193.3960	40356.0420	3664.0716	246.6700	737.8077	406.6758	26.6667	110119.6000	4411.06
3	23:08:14	191250.7900	7786.6667	13654.2460	20707.5570	2803.0988	19136.7870	151180.0100	34602.3940	38755.7680	40004.4930	3807.4638	266.6706	791.1455	423.3432	20.0000	109370.6400	4287.67
x		191355.1700	7973.4964	13548.9780	20770.3700	2735.3007	19326.0770	150492.0900	34680.4700	38148.7790	39985.5260	3716.6858	262.2260	767.4398	427.7879	24.4445	109459.4900	4327.69
σ		136.3819	180.5280	115.2063	262.9426	101.1446	164.0658	648.3711	174.2640	630.4827	380.3537	78.9474	13.8782	27.1583	23.6498	3.8490	620.4728	72.22
%RSD		0.0713	2.2641	0.8503	1.2660	3.6978	0.8489	0.4308	0.5025	1.6527	0.9512	2.1241	5.2924	3.5388	5.5284	15.7459	0.5669	1.66

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:07:51	2917.1346	45460.0470	141749.9000	56417.8550	724002.5000	740956.9000	484245.9200	345620.7300	474568.4100
2	23:08:03	2790.4282	45677.8010	146626.3300	55401.6340	715583.5000	744282.8000	481073.9900	343402.3200	473687.5400
3	23:08:14	2780.4251	44907.3100	144922.6700	56464.8120	732454.2500	755301.6600	494693.1600	349948.3200	481105.6000
x		2829.3293	45348.3860	144432.9700	56094.7670	724013.4200	746847.1200	486671.0300	346323.7900	476453.8500
σ		76.2059	397.1968	2474.8248	600.7298	8435.3824	7508.3190	7126.0975	3329.1507	4052.5379
%RSD		2.6934	0.8759	1.7135	1.0709	1.1651	1.0053	1.4643	0.9613	0.8506

SEQ-CAL5@S 6/5/2012 11:11:50 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh
1	23:12:02	190045.9100	38146.5330	66754.8620	103657.6200	13739.0410	95984.0510	768494.8900	150434.4700	185802.8700	194059.3700	18164.7960	1076.7304	3644.0635	1843.5202	33.3334	109013.0500
2	23:12:13	192271.9900	38976.7100	66855.5980	103410.1600	13379.1710	97122.7150	765779.4800	151190.1800	188810.5700	194389.6500	18030.0840	1006.7224	3801.9059	1746.8345	46.6668	109394.2500
3	23:12:25	190134.4000	38772.5060	66789.1120	104561.2100	13466.6340	96752.1280	769001.8500	153047.5400	188681.2600	195738.1300	18212.6700	1086.7316	3845.2575	1856.8563	36.6667	110730.2800
x		190817.4300	38631.9160	66799.8570	103876.3300	13528.2820	96619.6310	767758.7400	151557.4000	187764.9000	194729.0500	18135.8500	1056.7281	3763.7423	1815.7370	38.8890	109712.5300
σ		1260.4608	432.5766	51.2205	605.8937	187.6883	580.7804	1732.7335	1344.6846	1700.3926	889.3520	94.6720	43.5940	105.8872	60.0427	6.9389	901.7747
%RSD		0.6606	1.1197	0.0767	0.5833	1.3874	0.6011	0.2257	0.8872	0.9056	0.4567	0.5220	4.1254	2.8133	3.3068	17.8429	0.8219

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:12:02	14384.7050	229227.3400	741021.8900	284420.7000	727690.2000	756654.1500	2583844.4000	1825752.1000	478830.0600
2	23:12:13	14277.8700	226811.1900	736975.2900	279422.5700	727199.8600	752477.9600	2567708.2000	1838260.7000	483111.2100
3	23:12:25	14741.9430	231897.1100	744824.5900	282340.6800	732295.5300	756303.3500	2580470.9000	1835460.3000	486621.1900
x		14468.1730	229311.8800	740940.5900	282061.3200	729061.8700	755145.1500	2577341.2000	1833157.7000	482854.1500
σ		243.0352	2544.0162	3925.2793	2510.7506	2811.1501	2316.5074	8511.1726	6564.4672	3901.9205
%RSD		1.6798	1.1094	0.5298	0.8901	0.3856	0.3068	0.3302	0.3581	0.8081

SEQ-CAL6@S 6/5/2012 11:16:00 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83K
1	23:16:11	185677.0100	347753.1100	600764.2200	940013.6400	119462.4600	871198.8900	T 6877270.7000	1379741.0000	1718302.4000	1820094.7000	161040.5200	9458.2510	32702.0460	15930.6130	143.334
2	23:16:23	184761.9800	345215.7700	595293.3300	935188.6800	120241.3000	879881.7100	T 6908148.9000	1387306.5000	1731152.7000	1810736.0000	162706.4600	9655.1245	33333.2210	16124.2870	146.667
3	23:16:34	183217.8600	341955.9700	607689.1800	955592.4700	121228.2800	883403.2400	T 6830265.1000	1376257.5000	1713475.9000	1795549.1000	164441.7100	9665.1351	33850.6830	16184.3940	130.000
x		184552.2800	344974.9500	601248.9100	943598.2600	120310.6800	878161.2800	T 6871894.9000	1381101.6000	1720977.0000	1808793.3000	162729.5600	9592.8368	33295.3170	16079.7640	140.001
σ		1242.9110	2906.0631	6212.1228	10663.7630	884.9484	6281.4385	T 39219.2200	5648.7700	9136.8690	12387.5840	1700.7126	116.6622	575.2561	132.6194	8.819
%RSD		0.6735	0.8424	1.0332	1.1301	0.7356	0.7153	T 0.5707	0.4090	0.5309	0.6849	1.0451	1.2161	1.7277	0.8248	6.299

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:16:11	131264.2100	2179370.0000	T 6846189.0000	2691997.6000	726096.7100	742589.0100	T 23343606.0000	T 16744014.0000	475291.4200
2	23:16:23	129529.5900	2152951.2000	T 6796496.0000	2654864.2000	708895.4400	728220.2200	T 22965979.0000	T 16658279.0000	471417.3100
3	23:16:34	130743.4500	2121919.2000	T 6806294.9000	2702560.4000	711511.7900	743369.0500	T 23326587.0000	T 16738048.0000	479002.1100
x		130512.4200	2151413.4000	T 6816326.7000	2683140.7000	715501.3100	738059.4300	T 23212058.0000	T 16713447.0000	475236.9500
σ		890.0872	28756.2120	T 26321.5380	25051.2380	9268.6637	8529.9238	T 213280.0600	T 47869.9450	3792.6905
%RSD		0.6820	1.3366	T 0.3862	0.9337	1.2954	1.1557	T 0.9188	T 0.2864	0.7981

SEQ-CAL7@S 6/5/2012 11:20:10 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se
1	23:20:21	181296.5800	H 733258.7200	H 1333901.7000	H 2126730.6000	266334.3800	H 1968034.4000	TH 14604326.0000	H 2995987.0000	T 3516003.0000	T 3717098.3000	H 355117.5400	21786.0740	H 71921.1530
2	23:20:33	184091.9200	H 744698.1700	H 1348756.8000	H 2159280.7000	266842.9700	H 1980500.2000	TH 14633434.0000	H 3045345.9000	T 3534715.0000	T 3707455.8000	H 357244.0200	21512.0890	H 72677.1290
3	23:20:45	181942.6300	H 739252.8700	H 1350663.9000	H 2136887.2000	268154.0500	H 2001143.7000	TH 14691883.0000	H 3065387.9000	TH 3555926.9000	T 3741158.2000	H 361342.4300	21846.2180	H 73954.0320
x		182443.7100	H 739069.9200	H 1344440.8000	H 2140966.2000	267110.4700	H 1983226.1000	TH 14643215.0000	H 3035573.6000	TH 3535548.3000	T 3721904.1000	H 357901.3300	21714.7930	H 72850.7710
σ		1463.4868	H 5721.9192	H 9176.8206	H 16654.0350	938.8632	H 16722.1110	TH 44590.1790	H 35717.5390	TH 19974.9600	T 17357.5900	H 3164.0759	178.1043	H 1027.5033
%RSD		0.8022	H 0.7742	H 0.6826	H 0.7779	0.3515	H 0.8432	TH 0.3045	H 1.1766	TH 0.5650	T 0.4664	H 0.8841	0.8202	H 1.4104

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:20:21	273678.4000	TH 4391181.1000	TH 14525403.0000	T 5430707.7000	708121.8300	736701.0100	TH 49512167.0000	TH 35456318.0000	472487.4500
2	23:20:33	278889.9200	TH 4417280.9000	TH 14567093.0000	T 5411555.2000	696219.8400	732555.2600	TH 49093889.0000	TH 35812687.0000	470484.1200
3	23:20:45	278144.2500	TH 4433844.6000	TH 14694140.0000	T 5482041.0000	700259.8000	712793.2300	TH 48515089.0000	TH 35534037.0000	462555.7300
x		276904.1900	TH 4414102.2000	TH 14595545.0000	T 5441434.6000	701533.8200	727349.8300	TH 49040382.0000	TH 35601014.0000	468509.1000
σ		2818.3827	TH 21508.6700	TH 87892.7450	T 36446.7060	6052.4117	12775.6730	TH 500688.0100	TH 187387.9000	5252.1684
%RSD		1.0178	TH 0.4873	TH 0.6022	T 0.6698	0.8627	1.7565	TH 1.0210	TH 0.5264	1.1210

SEQ-CAL8@S 6/5/2012 11:24:20 PM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106
1	23:24:31	190427.1000	90.0004	162.0014	170.0016	46.6668	TH 10641689.0000	1376.7709	493.3467	4971.3589	TH 19645907.0000	28.8889	13.3333	21.1111	16.6667	33.3334	110591.9500	550.0
2	23:24:43	191832.8600	56.6668	155.3347	168.6682	54.0002	TH 10641060.0000	920.0466	450.0111	5094.7605	TH 19640762.0000	32.2223	3.3333	21.1111	30.0000	40.0001	109805.8400	466.6
3	23:24:54	192203.9100	53.3335	138.0011	150.0012	48.0001	TH 10684006.0000	910.0456	410.0093	5364.9159	TH 19763338.0000	22.2222	0.0000	18.8889	33.3334	46.6668	110598.7000	520.0
x		191487.9600	66.6669	151.7791	162.8904	49.5557	TH 10655585.0000	1068.9543	451.1224	5143.6785	TH 19683335.0000	27.7778	5.5556	20.3704	26.6667	40.0001	110332.1600	512.2
σ		937.2744	20.2760	12.3890	11.1822	3.9063	TH 24615.4210	266.6239	41.6798	201.2871	TH 69331.9190	5.0918	6.9389	1.2830	8.8192	6.6667	455.8212	42.2
%RSD		0.4895	30.4139	8.1625	6.8649	7.8827	TH 0.2310	24.9425	9.2391	3.9133	TH 0.3522	18.3303	124.9000	6.2984	33.0719	16.6667	0.4131	8.2

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:24:31	110.0007	400.0088	12812.3560	TH 28782036.0000	723606.0600	740303.4100	3460.6586	4591.1590	462745.0100
2	23:24:43	126.6676	300.0050	11917.8070	TH 28456945.0000	716285.7000	735430.7500	2777.0908	3627.3902	463898.2800
3	23:24:54	90.0004	216.6693	12007.9250	TH 28232099.0000	724092.6000	741776.5300	2493.6753	3537.3547	464003.4500
x		108.8896	305.5610	12246.0290	TH 28490360.0000	721328.1200	739170.2300	2910.4749	3918.6347	463548.9100
σ		18.3588	91.7960	492.5186	TH 276487.1800	4373.6363	3321.1870	497.0992	584.1604	698.1838
%RSD		16.8600	30.0418	4.0219	TH 0.9705	0.6063	0.4493	17.0797	14.9072	0.1506

SEQ-ICV@ICV01 6/5/2012 11:28:29 PM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	10
1	23:28:41	195670.0200	75687.0970	135587.6400	205807.5500	26747.2900	193763.1500	1521473.8000	300226.9600	365981.4700	771533.4500	73825.2130	4417.7398	14923.3500	7599.8420	80.0004	110834.
2	23:28:52	194318.1500	75260.2420	135067.3100	206740.3600	26928.4910	193885.7300	1529102.2000	300974.4100	372283.0900	764624.7600	73979.7960	4224.3146	15096.9700	7292.9241	76.6670	109630.
3	23:29:04	196027.6000	76466.9150	135900.2500	208002.6700	26695.1370	195080.8900	1534878.5000	303975.1500	370110.3600	765833.7800	73661.6730	4281.0077	14989.0130	7056.0706	53.3335	109768.
x		195338.5900	75804.7510	135518.4000	206850.1900	26790.3060	194243.2600	1528484.8000	301725.5100	369458.3100	767330.6600	73822.2270	4307.6874	15003.1110	7316.2789	70.0003	110078.
σ		901.6318	611.8801	420.7657	1101.6739	122.4795	727.9960	6723.6452	1983.7676	3201.0127	3689.5835	159.0826	99.4343	87.6641	272.6370	14.5298	659.
%RSD		0.4616	0.8072	0.3105	0.5326	0.4572	0.3748	0.4399	0.6575	0.8664	0.4808	0.2155	2.3083	0.5843	3.7264	20.7567	0.

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:28:41	27193.9460	439265.4700	2991551.5000	548385.7200	716001.2100	739173.4500	T 9810976.0000	T 6902936.8000	462776.5500
2	23:28:52	27631.9300	436136.7700	3041834.4000	549333.8000	718100.8500	745850.4600	T 9917690.2000	T 6984802.0000	464343.5000
3	23:29:04	27909.4430	448062.9200	3074855.8000	566025.8500	735946.7700	752752.7000	T 9869362.4000	T 7086454.0000	471255.9300
x		27578.4390	441155.0500	3036080.6000	554581.7900	723349.6100	745925.5400	T 9866009.5000	T 6991397.6000	466125.3300
σ		360.7352	6183.5436	41949.1550	9922.1742	10959.8590	6789.9367	T 53436.0420	T 91936.2070	4511.7764
%RSD		1.3080	1.4017	1.3817	1.7891	1.5152	0.9103	T 0.5416	T 1.3150	0.9679

SEQ-ICB@ICB01 6/5/2012 11:32:40 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
1	23:32:52	200490.0100	6.6667	89.3338	50.0001	55.3335	230.0029	310.0053	636.6890	706.6941	1333.4311	20.0000	0.0000	8.8889	3.3333	20.0000	115914.3100	343.3398	363.3406
2	23:33:03	201529.2800	40.0001	110.0007	58.6669	34.0001	243.3366	190.0020	740.0301	666.6911	1093.3991	6.6667	3.3333	14.4445	16.6667	30.0000	114503.2600	366.6741	263.3372
3	23:33:15	199910.8000	10.0000	112.0007	56.0002	34.6667	180.0018	190.0020	660.0240	723.3621	1046.7269	7.7778	0.0000	11.1111	20.0000	50.0001	114334.4900	420.0097	293.3381
x		200643.3700	18.8889	103.7784	54.8891	41.3334	217.7804	230.0031	678.9144	698.9158	1157.8524	11.4815	1.1111	11.4815	13.3333	33.3334	114917.3500	376.6745	306.6719
σ		820.0677	18.3586	12.5493	4.4389	12.1290	33.3896	69.2839	54.1986	29.1252	153.8359	7.3982	1.9245	2.7962	8.8192	15.2753	867.5023	39.3011	51.3178
%RSD		0.4087	97.1925	12.0924	8.0871	29.3443	15.3318	30.1230	7.9831	4.1672	13.2863	64.4355	173.2051	24.3543	66.1438	45.8258	0.7549	10.4337	16.7338

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:32:52	3.3333	83.3337	5761.8253	486.6797	724121.4300	760466.7600	1090.0653	1490.1221	471020.8700
2	23:33:03	0.0000	40.0001	5438.2928	330.0060	730463.2300	754065.0600	936.7149	1543.4643	462376.9700
3	23:33:15	10.0000	43.3334	5278.1985	310.0053	730502.9000	761534.1300	820.0370	1346.7664	472806.7500
x		4.4444	55.5557	5492.7722	375.5637	728362.5200	758688.6500	948.9391	1460.1176	468734.8700
σ		5.0918	24.1141	246.3732	96.7475	3672.9426	4039.5558	135.4286	101.7238	5578.0331
%RSD		114.5644	43.4052	4.4854	25.7606	0.5043	0.5324	14.2716	6.9668	1.1900

SEQ-IFA@ICSA01 6/5/2012 11:36:51 PM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107
1	23:37:02	145505.2000	130.0009	1186.0774	35817.7550	5212.1604	13566.7820	14835.4280	13847.2050	24790.4220	33812.7650	108.8895	3.3333	13.3333	26.6667	10.0000	87680.8060	293.3381	303.33
2	23:37:14	147469.8100	193.3354	1252.0862	36155.0860	5269.5268	13296.3830	15499.8690	14107.6050	25051.1350	33096.8040	114.4452	3.3333	6.6667	10.0000	16.6667	89165.1390	366.6741	310.00
3	23:37:25	145193.6100	180.0018	1198.7457	36060.7120	5179.4751	14064.2040	15630.0920	13663.5940	24125.3030	33494.9250	96.6672	10.0000	13.3333	13.3333	16.6667	89700.3660	326.6725	266.67
x		146056.2100	167.7794	1212.3031	36011.1840	5220.3874	13642.4570	15321.7960	13872.8010	24655.6200	33468.1650	106.6673	5.5556	11.1111	16.6667	14.4445	88848.7710	328.8949	293.33
σ		1234.0907	33.3894	35.0306	174.0341	45.5861	389.4639	426.2098	223.1093	477.4098	358.7298	9.0949	3.8490	3.8490	8.8192	3.8490	1046.2896	36.7185	23.33
%RSD		0.8449	19.9008	2.8896	0.4833	0.8732	2.8548	2.7817	1.6082	1.9363	1.0719	8.5265	69.2821	34.6410	52.9151	26.6470	1.1776	11.1642	7.95

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:37:02	6752.5069	9451.5774	17556.9370	6805.8800	552649.3100	565841.5500	850.0397	102696.8100	334260.9000
2	23:37:14	6855.9176	9104.5568	17713.9080	6532.3461	548643.9600	560679.3100	873.3753	101978.7900	335664.5600
3	23:37:25	6662.4405	8797.5881	17964.3990	6165.4233	541228.6800	555056.1700	830.0379	102117.0000	330355.2900
x		6756.9550	9117.9075	17745.0810	6501.2165	547507.3100	560525.6800	851.1510	102264.2000	333426.9200
σ		96.8152	327.1990	205.5117	321.3611	5794.5374	5394.3333	21.6901	380.9694	2751.1327
%RSD		1.4328	3.5885	1.1581	4.9431	1.0583	0.9624	2.5483	0.3725	0.8251

SEQ-IFB@ICSAB01 6/5/2012 11:41:02 PM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106C
1	23:41:13	138828.6700	9685.1564	24172.0930	71047.2100	9760.5703	46445.0070	234793.3800	54026.7300	74157.9050	84709.5000	5778.5026	303.3384	1071.1742	500.0138	26.6667	88966.5410	5458.30
2	23:41:25	137136.6100	9685.1564	24479.5810	70886.6300	9724.5317	47091.6540	229452.9200	54251.3950	74053.7270	84416.7960	5710.6820	293.3381	1026.7246	566.6843	16.6667	88495.3080	5528.34
3	23:41:37	136432.8100	9635.1032	24582.5250	71125.8210	9837.3196	47151.9660	231589.4200	54549.8400	73519.4170	84548.0070	5796.2917	330.0060	1095.6216	486.6797	26.6667	88495.3080	5471.64
x		137466.0300	9668.4720	24411.4000	71019.8870	9774.1405	46896.2090	231945.2400	54275.9880	73910.3500	84558.1010	5761.8254	308.8942	1064.5068	517.7926	23.3334	88652.3860	5486.09
σ		1231.4335	28.8982	213.5417	121.9137	57.6055	391.9142	2687.9519	262.4207	342.5413	146.6128	45.1758	18.9548	34.9290	42.8632	5.7735	272.0663	37.19
%RSD		0.8958	0.2989	0.8748	0.1717	0.5894	0.8357	1.1589	0.4835	0.4635	0.1734	0.7841	6.1363	3.2812	8.2781	24.7436	0.3069	0.67

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:41:13	10148.9950	68738.8980	221885.1700	91605.8930	542822.9800	561345.2500	629744.9800	567138.7600	320940.2100
2	23:41:25	9788.6004	67194.0800	220546.5100	89797.9890	544912.6000	552355.5700	636966.3000	562811.8900	316118.9600
3	23:41:37	9962.1221	68473.5740	219781.6500	90023.5370	522132.3100	549266.5800	627839.7300	540359.1700	320470.7500
x		9966.5726	68135.5170	220737.7800	90475.8060	536622.6300	554322.4700	631517.0000	556769.9400	319176.6400
σ		180.2387	826.0313	1064.7211	985.1598	12592.4020	6274.9549	4814.4154	14375.8650	2658.4143
%RSD		1.8084	1.2123	0.4823	1.0889	2.3466	1.1320	0.7624	2.5820	0.8329

SEQ-CCV@CCV01 6/5/2012 11:45:14 PM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	
1	23:45:26	166674.0300	314090.4300	661155.0200	1056312.5000	135455.0100	958092.9100	τ7179276.2000	1424299.1000	1759962.2000	τ9140770.0000	180198.4000	10576.1480	37347.6710	17997.7980	12
2	23:45:37	168004.8600	313724.7900	665937.9000	1072598.9000	138182.2700	991810.9300	τ7113783.0000	1429269.5000	1775560.8000	τ9221741.0000	184028.4400	10796.4070	37392.2980	18121.3760	13
3	23:45:49	169407.2000	316760.7200	668214.8900	1065611.7000	138265.5200	991017.6800	τ7053439.1000	1417708.2000	1776159.2000	τ9153170.1000	183060.2900	10976.6230	37259.5320	18298.3970	12
x		168028.7000	314858.6500	665102.6000	1064841.0000	137300.9300	980307.1700	τ7115499.4000	1423758.9000	1770560.7000	τ9171893.7000	182429.0400	10783.0590	37333.1670	18139.1910	12
σ		1366.7371	1657.3601	3603.2923	8170.4782	1599.1549	19242.2060	τ62936.1040	5799.5222	9183.4922	τ43612.0050	1991.5175	200.5705	67.5607	151.0893	
%RSD		0.8134	0.5264	0.5418	0.7673	1.1647	1.9629	τ0.8845	0.4073	0.5187	τ0.4755	1.0917	1.8601	0.1810	0.8329	

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:45:26	134632.9400	2276999.2000	τ7140215.5000	τ13517160.0000	702650.8000	727524.3500	τ23964953.0000	τ17281183.0000	464378.5600
2	23:45:37	137343.0300	2324420.8000	τ7150832.6000	τ13776869.0000	699702.5900	737227.9300	τ24186128.0000	τ17072558.0000	462117.6000
3	23:45:49	136050.4700	2279371.4000	τ7142091.4000	τ13684689.0000	696410.3000	711464.9900	τ23531414.0000	τ17287356.0000	465770.4600
x		136008.8100	2293597.1000	τ7144379.8000	τ13659573.0000	699587.9000	725405.7600	τ23894165.0000	τ17213699.0000	464088.8700
σ		1355.5248	26720.4200	τ5666.4293	τ131663.4900	3121.8338	13011.4770	τ333047.8300	τ122270.7300	1843.5755
%RSD		0.9966	1.1650	τ0.0793	τ0.9639	0.4462	1.7937	τ1.3938	τ0.7103	0.3972

412

248

SEQ-CCB@CCB01 6/5/2012 11:49:25 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
1	23:49:37	179593.2700	53.3335	197.3355	119.3341	85.3337	243.3366	520.0149	616.6876	663.3575	1483.4544	17.7778	3.3333	11.1111	26.6667	26.6667	115164.8700	393.3418	266.6706
2	23:49:48	174097.9100	23.3334	208.0024	106.0006	76.0003	246.6700	363.3406	680.0254	836.7052	1280.0901	11.1111	0.0000	16.6667	26.6667	16.6667	113983.4500	380.0079	250.0034
3	23:50:00	175569.1300	26.6667	200.0022	98.0005	85.3337	206.6690	310.0053	610.0205	666.6911	1276.7563	20.0000	0.0000	16.6667	13.3333	13.3333	115482.1900	416.6762	290.0046
x		176420.1100	34.4445	201.7800	107.7784	82.2226	232.2252	397.7869	635.5778	722.2513	1346.7669	16.2963	1.1111	14.8148	22.2223	18.8889	114876.8400	396.6753	268.8929
σ		2844.7958	16.4430	5.5512	10.7773	5.3887	22.1950	109.1601	38.6368	99.1340	118.3865	4.6259	1.9245	3.2075	7.6980	6.9389	789.7945	18.5600	20.0930
%RSD		1.6125	47.7377	2.7511	9.9995	6.5537	9.5575	27.4418	6.0790	13.7257	8.7904	28.3864	173.2051	21.6506	34.6410	36.7353	0.6875	4.6789	7.4725

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:49:37	16.6667	123.3342	7769.9857	933.3813	697829.8700	718796.0300	3273.9227	1923.5368	463957.8700
2	23:49:48	20.0000	93.3338	7516.4394	770.0326	702230.0900	722672.6800	2917.1346	1680.1552	455155.9100
3	23:50:00	10.0000	100.0006	7709.9347	580.0185	706474.0700	728753.8800	2970.4852	1756.8364	461385.1000
x		15.5556	105.5562	7665.4533	761.1441	702178.0100	723407.5300	3053.8475	1786.8428	460166.2900
σ		5.0918	15.7529	132.4967	176.8490	4322.3390	5019.4317	192.4484	124.4345	4525.7888
%RSD		32.7327	14.9237	1.7285	23.2346	0.6156	0.6939	6.3018	6.9639	0.9835

2052221

2052220-BLK1@PBW01@MF5WA4@42562 6/5/2012 11:53:35 PM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
1	23:53:47	183122.6400	33.3334	155.3347	52.0001	68.0003	213.3358	166.6682	516.6814	676.6919	1113.4015	10.0000	6.6667	12.2222	3.3333	26.6667	114668.6600	380.0079	180.0018
2	23:53:59	182027.6400	23.3334	154.0013	38.6667	72.6670	180.0018	146.6679	613.3540	566.6843	1096.7328	8.8889	0.0000	10.0000	30.0000	33.3334	116552.3900	323.3391	143.3345
3	23:54:10	183949.0800	10.0000	174.0017	41.3334	68.0003	176.6684	160.0014	603.3534	613.3540	1056.7281	15.5556	0.0000	10.0000	16.6667	23.3334	117460.6300	396.6753	136.6677
x		183033.1200	22.2223	161.1125	44.0001	69.5558	190.0020	157.7792	577.7962	618.9101	1088.9541	11.4815	2.2222	10.7407	16.6667	27.7778	116227.2200	366.6741	153.3347
σ		963.8396	11.7063	11.1822	7.0554	2.6943	20.2763	10.1837	53.1627	55.2138	29.1265	3.5717	3.8490	1.2830	13.3334	5.0918	1424.1056	38.4434	23.3337
%RSD		0.5266	52.6783	6.9406	16.0349	3.8736	10.6716	6.4544	9.2009	8.9211	2.6747	31.1086	173.2051	11.9452	80.0000	18.3303	1.2253	10.4843	15.2175

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:53:47	6.6667	26.6667	2607.0404	286.6712	710021.7800	732497.5400	1216.7481	830.0379	456185.6500
2	23:53:59	16.6667	63.3336	2530.3521	206.6690	682678.4700	723087.1100	1200.0792	816.7034	463277.8100
3	23:54:10	3.3333	46.6668	2567.0290	230.0029	693208.9700	727387.3400	1463.4511	726.6957	459671.4800
x		8.8889	45.5557	2568.1405	241.1144	695303.0700	727657.3300	1293.4261	791.1457	459711.6500
σ		6.9389	18.3587	38.3562	41.1423	13791.4170	4711.0242	147.4816	56.2121	3546.2516
%RSD		78.0625	40.2994	1.4935	17.0634	1.9835	0.6474	11.4024	7.1052	0.7714

2052221

AB 6/6/12

2052220-BS1@LCS 6/5/2012 11:57:44 PM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	
1	23:57:56	190393.0600	7082.7580	77267.6430	47327.5410	6381.5724	22310.6770	155200.2500	31440.9420	76033.3010	79200.1670	4090.9203	1186.7441	4225.4262	2066.9016	30.0000	120462.8700	431
2	23:58:07	194382.8400	7349.6364	77517.0860	47452.8590	6272.1630	22374.1660	155407.0700	31434.2520	76695.4950	79042.1340	4170.9566	1240.0846	4143.1661	2090.2403	46.6668	121655.2600	424
3	23:58:19	193051.5900	7302.9321	77899.6690	47917.2850	6338.8759	22250.5300	158465.8600	31641.6370	77922.5310	81184.2200	4233.2076	1240.0846	4087.5854	1990.2178	46.6668	120479.7600	450
x		192609.1600	7245.1089	77561.4660	47565.8950	6330.8704	22311.7910	156357.7200	31505.6100	76883.7760	79808.8400	4165.0282	1222.3044	4152.0592	2049.1199	41.1112	120865.9600	435
σ		2031.3516	142.5260	318.3417	310.6966	55.1423	61.8256	1828.6266	117.8497	958.5844	1193.7319	71.3287	30.7961	69.3494	52.3284	9.6225	683.6024	13
%RSD		1.0546	1.9672	0.4104	0.6532	0.8710	0.2771	1.1695	0.3741	1.2468	1.4957	1.7126	2.5195	1.6702	2.5537	23.4061	0.5656	

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	23:57:56	2813.7687	44478.5430	290457.1300	550947.1800	704107.2800	727445.0300	443010.8000	319866.6900	446197.8000
2	23:58:07	2963.8164	44649.3780	294566.2300	566507.8600	720536.0000	741913.7400	462317.3900	325297.7300	454560.5300
3	23:58:19	2810.4344	44940.8080	296800.4900	568237.6300	713999.2500	738678.9100	450064.9400	321071.3900	452830.6600
x		2862.6732	44689.5760	293941.2800	561897.5500	712880.8400	736012.5600	451797.7100	322078.6000	451196.3300
σ		87.6085	233.7396	3217.5250	9522.6626	8271.2692	7593.9437	9769.2332	2852.1744	4414.4216
%RSD		3.0604	0.5230	1.0946	1.6947	1.1603	1.0318	2.1623	0.8856	0.9784

2052240

1205240-01@MF5WA4 6/6/2012 12:01:52 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	
1	00:02:03	189052.1800	486.6797	40366.7560	28988.1440	3840.8112	592427.5800	60869.7690	24379.3120	19283.7640	92528.5000	693.3598	30.0000	95.5561	43.3334	26.6667	118298.0500	1840.1862	5
2	00:02:15	190423.6900	416.6762	40463.8530	29000.1820	3844.8129	601985.8600	60544.2730	24827.1890	19140.1280	91676.6010	677.8030	50.0001	77.7781	56.6668	36.6667	119084.8900	1930.2049	5
3	00:02:26	190314.7800	430.0102	41167.6690	29283.0870	3940.1870	599410.4200	60943.5940	25027.7370	19507.5740	91185.0270	696.6934	60.0002	100.0006	50.0001	56.6668	120385.1800	1846.8542	5
x		189930.2200	444.4554	40666.0930	29090.4710	3875.2704	597941.2900	60785.8790	24744.7460	19310.4890	91796.7090	689.2854	46.6668	91.1116	50.0001	40.0001	119256.0400	1872.4151	5
σ		762.3527	37.1701	437.0824	166.9188	56.2551	4945.5956	212.4679	331.9810	185.1753	679.7420	10.0827	15.2753	11.7590	6.6667	15.2753	1054.0393	50.1583	
%RSD		0.4014	8.3631	1.0748	0.5738	1.4516	0.8271	0.3495	1.3416	0.9589	0.7405	1.4628	32.7328	12.9062	13.3334	38.1882	0.8838	2.6788	

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:02:03	470.0122	1160.0740	3367.2902	332000.2800	720132.5000	737559.9800	9735.2098	153179.7400	430710.3500
2	00:02:15	490.0132	1033.3921	3547.3586	342090.9100	690041.0400	722510.5300	9998.8290	157526.4100	431157.4800
3	00:02:26	486.6797	1056.7281	3660.7369	337013.1000	709129.3300	720388.2900	10265.7930	154501.8300	431464.9000
x		482.2350	1083.3981	3525.1286	337034.7600	706434.2900	726819.6000	9999.9439	155069.3300	431110.9100
σ		10.7157	67.4207	147.9810	5045.3472	15225.6840	9361.7710	265.2934	2228.2116	379.4232
%RSD		2.2221	6.2231	4.1979	1.4970	2.1553	1.2880	2.6529	1.4369	0.0880

1205240-02@MF5WA5 6/6/2012 12:05:59 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd
1	00:06:10	186704.4000	303.3384	27502.2040	49692.1080	6725.1533	560764.3200	282797.9100	21425.2170	96799.2930	2301596.3000	761.1430	46.6668	36.6667	30.0000	43.3334	117558.5500	1913.5347
2	00:06:22	187524.3500	243.3366	27619.8940	50304.7970	6736.4950	564874.0800	288258.8000	21455.2880	96876.7790	2363912.7000	811.1473	16.6667	32.2223	43.3334	40.0001	117970.5000	1700.1590
3	00:06:34	188303.5500	243.3366	27551.6870	49725.6240	6593.7237	571850.6200	284970.8700	21488.7000	97415.8260	2340635.0000	771.1438	36.6667	38.8890	33.3334	30.0000	119753.5900	1700.1590
x		187510.7700	263.3372	27557.9280	49907.5100	6685.1240	565829.6800	285342.5200	21456.4020	97030.6330	2335381.4000	781.1447	33.3334	35.9260	35.5556	37.7779	118427.5500	1771.2842
σ		799.6598	34.6421	59.0924	344.4689	79.3578	5604.5848	2749.3510	31.7561	335.8298	31488.6150	26.4598	15.2753	3.3945	6.9389	6.9389	1166.7117	123.1925
%RSD		0.4265	13.1550	0.2144	0.6902	1.1871	0.9905	0.9635	0.1480	0.3461	1.3483	3.3873	45.8258	9.4486	19.5157	18.3677	0.9852	6.9550

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:06:10	516.6814	2393.6484	3067.1840	331955.3500	710147.7400	730318.9700	3043.8428	2646947.7000	442538.6200
2	00:06:22	440.0107	2370.3090	3080.5218	326789.8300	688730.3600	709636.7200	3107.1976	2593371.0000	436503.7700
3	00:06:34	520.0149	2440.3275	2877.1219	325974.6700	713095.6200	727322.4500	2857.1156	2630276.6000	433382.9800
x		492.2356	2401.4283	3008.2759	328239.9500	703991.2400	722426.0500	3002.7187	2623531.8000	437475.1200
σ		45.2589	35.6517	113.7783	3243.3432	13298.2450	11176.7560	130.0140	27417.7710	4654.4687
%RSD		9.1946	1.4846	3.7822	0.9881	1.8890	1.5471	4.3299	1.0451	1.0639

1205240-03@MF5WA6 6/6/2012 12:10:07 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd
1	00:10:19	183690.5900	450.0111	37006.5020	33753.2110	4538.4659	691100.4900	72575.2090	30507.7710	21619.0090	135597.1100	1166.7415	20.0000	30.0000	50.0001	23.3334	118203.5000	1630.1461
2	00:10:30	184442.2500	476.6792	37566.7930	34387.5820	4569.8150	683259.8000	72820.4920	30273.6570	22200.4070	136388.8200	1227.8607	36.6667	41.1112	26.6667	33.3334	117737.5100	1566.8017
3	00:10:41	184789.1900	420.0097	37762.9360	33855.5910	4378.3874	686551.0900	72565.1290	30996.0850	21979.8730	135248.6400	1218.9706	63.3336	38.8890	46.6668	26.6667	120922.2400	1676.8213
x		184307.3500	448.9000	37445.4100	33998.7940	4495.5561	686970.4600	72653.6100	30592.5040	21933.0960	135744.8600	1204.5243	40.0001	36.6667	41.1112	27.7778	118954.4200	1624.5897
σ		561.5859	28.3511	392.5539	340.5688	102.6745	3937.1333	144.6120	368.5926	293.5083	584.2722	33.0214	21.8582	5.8795	12.6198	5.0918	1720.0384	55.2199
%RSD		0.3047	6.3157	1.0483	1.0017	2.2839	0.5731	0.1990	1.2048	1.3382	0.4304	2.7414	54.6454	16.0349	30.6969	18.3303	1.4460	3.3990

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:10:19	393.3418	666.6911	740.0301	316219.0100	685312.6800	714114.4600	4331.0314	218620.8300	422784.3200
2	00:10:30	403.3423	570.0179	820.0370	312289.9700	681056.6700	716653.0200	4244.3239	220310.9000	430822.1300
3	00:10:41	416.6762	710.0277	836.7052	323999.2300	705646.7100	724997.2800	4384.3903	228222.5200	416922.7000
x		404.4535	648.9122	798.9241	317502.7400	690672.0200	718588.2500	4319.9152	222384.7500	423509.7200
σ		11.7068	71.6781	51.6801	5959.2523	13141.8920	5693.6631	70.6918	5125.7950	6978.0493
%RSD		2.8945	11.0459	6.4687	1.8769	1.9028	0.7923	1.6364	2.3049	1.6477

1205240-04@MF5WA7 6/6/2012 12:14:14 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd
1	00:14:26	182255.4700	290.0046	38700.8680	46848.4020	6181.4342	420519.4800	54657.1480	28026.4680	42820.6110	2223295.2000	952.2721	50.0001	43.3334	46.6668	26.6667	115293.1500	1680.1552
2	00:14:38	177067.7800	286.6712	38936.5380	46457.0680	6138.7386	417770.3200	55522.3670	27541.6570	43728.2500	2229502.3000	1010.0561	56.6668	41.1112	36.6667	40.0001	116528.7500	1750.1685
3	00:14:49	180507.7900	320.0056	38658.0200	46633.9710	6268.8273	423105.4200	55596.1500	27665.3650	43902.4200	2241477.8000	970.0518	33.3334	47.7779	26.6667	23.3334	115765.7600	1716.8288
x		179943.6800	298.8938	38765.1420	46646.4800	6196.3334	420465.0700	55258.5550	27744.4970	43483.7600	2231425.1000	977.4600	46.6668	44.0742	36.6667	30.0001	115862.5500	1715.7175
σ		2639.4492	18.3592	149.9714	195.9666	66.3118	2667.9678	522.1386	251.9067	580.8689	9242.5406	29.5958	12.0186	3.3945	10.0000	8.8192	623.4631	35.0198
%RSD		1.4668	6.1424	0.3869	0.4201	1.0702	0.6345	0.9449	0.9080	1.3358	0.4142	3.0278	25.7540	7.7018	27.2728	29.3973	0.5381	2.0411

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:14:26	386.6749	776.6998	670.0247	281068.8400	688496.9700	717265.2600	4311.0219	991781.2700	438744.5300
2	00:14:38	443.3441	913.3792	600.0198	291678.6600	700407.2000	698667.3300	4324.3616	1002370.3000	433260.6900
3	00:14:49	416.6762	893.3772	716.6949	290433.0500	685481.3800	701888.4900	4224.3146	1004162.9000	432317.3300
x		415.5651	861.1521	662.2465	287726.8500	691461.8500	705940.3600	4286.5660	999438.1700	434774.1800
σ		28.3510	73.8184	58.7252	5799.5442	7892.2666	9939.0118	54.3224	6691.3684	3470.6211
%RSD		6.8223	8.5721	8.8676	2.0156	1.1414	1.4079	1.2673	0.6695	0.7983

1205240-05@MF5WA8 6/6/2012 12:18:23 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd
1	00:18:35	186187.2900	356.6737	41473.7220	29458.9870	3890.8324	570283.2800	61228.8350	26127.4920	20112.2230	276337.0400	893.3772	50.0001	34.4445	26.6667	43.3334	119338.1800	1860.1903
2	00:18:46	187000.3900	370.0075	41322.3680	29566.0000	3975.5357	565728.1500	62158.4450	25746.4070	20723.5940	282024.4300	861.1519	33.3334	37.7779	46.6668	46.6668	120611.4900	1756.8364
3	00:18:58	189766.8400	360.0071	41465.6850	29442.2660	3898.1689	568368.7900	62400.0920	26007.1470	20663.4570	279951.8200	960.0507	33.3334	56.6668	50.0001	30.0000	119135.5500	1743.5005
x		187651.5100	362.2294	41420.5920	29489.0840	3921.5124	568126.7400	61929.1240	25960.3490	20499.7580	279437.7600	904.8599	38.8890	42.9631	41.1112	40.0001	119695.0700	1786.8424
σ		1876.5017	6.9392	85.1589	67.1336	46.9292	2287.1958	618.3865	194.8051	336.9594	2878.3282	50.4394	9.6225	11.9843	12.6198	8.8192	800.0791	63.8702
%RSD		1.0000	1.9157	0.2056	0.2277	1.1967	0.4026	0.9985	0.7504	1.6437	1.0300	5.5743	24.7436	27.8944	30.6969	22.0480	0.6684	3.5745

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:18:35	456.6781	663.3575	626.6883	320605.3700	709960.6000	722798.8100	4250.9937	215425.9000	425653.6700
2	00:18:46	480.0127	566.6843	670.0247	322034.5800	671991.2500	693920.2800	4441.0845	212170.6800	427224.8600
3	00:18:58	456.6781	603.3534	623.3547	319200.5400	691700.3000	693744.2400	4487.7741	214951.5400	420721.8700
x		464.4563	611.1317	640.0226	320613.5000	691217.3800	703487.7800	4393.2841	214182.7100	424533.4700
σ		13.4722	48.8037	26.0360	1417.0346	18989.2840	16724.0770	125.4189	1758.5367	3393.1364
%RSD		2.9006	7.9858	4.0680	0.4420	2.7472	2.3773	2.8548	0.8210	0.7993

~~414~~ 250

205 2221

2052220-MS1@MF5WA8S 6/6/2012 12:22:31 AM QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	
1	00:22:42	185262.0000	2016.8904	81946.3460	54878.4750	7339.6283	641916.9800	430203.8600	100307.0100	63974.3100	389596.4000	1714.6061	156.6680	414.4539	216.6693	73.3336	119030.8600	288
2	00:22:53	186507.0800	2006.8882	81829.9710	55164.8680	7278.9129	653213.9800	431520.7900	99750.9440	63994.4510	392445.0800	1689.0458	146.6679	383.3414	230.0029	56.6668	119321.2900	274
3	00:23:05	186384.6000	2066.9016	83018.6760	54793.2970	7411.0195	660911.5700	430140.9900	100249.7200	63410.3800	393812.3500	1766.8383	153.3346	420.0097	246.6700	16.6667	120418.9600	283
x		186051.2300	2030.2267	82264.9980	54945.5470	7343.1869	652014.1800	430621.8300	100102.5600	63793.0470	391951.2800	1723.4967	152.2235	405.9350	231.1141	48.8891	119590.3700	281
σ		686.2260	32.1527	655.2931	194.6537	66.1252	9553.9685	779.1153	305.8516	331.5525	2150.9161	39.6510	5.0918	19.7628	15.0312	29.1231	732.1258	6
%RSD		0.3688	1.5837	0.7966	0.3543	0.9005	1.4653	0.1809	0.3055	0.5197	0.5488	2.3006	3.3450	4.8685	6.5038	59.5698	0.6122	

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:22:42	1216.7481	10736.3360	8253.7451	863379.7700	691721.8500	710489.6300	105090.6000	256721.0100	420934.7200
2	00:22:53	1140.0715	10943.2490	8293.7815	875848.7600	708751.5100	719793.8600	103741.9100	260698.5000	432481.5400
3	00:23:05	1136.7377	10789.7330	8283.7724	859083.2700	689204.3400	701798.6000	103020.4400	253687.6200	417697.0600
x		1164.5191	10823.1060	8277.0997	866103.9300	696559.2300	710694.0300	103950.9800	257035.7100	423704.4400
σ		45.2623	107.4179	20.8356	8708.4030	10633.5850	8999.3716	1050.7972	3516.0196	7771.6584
%RSD		3.8868	0.9925	0.2517	1.0055	1.5266	1.2663	1.0109	1.3679	1.8342

KMR 6/6/12

205 2221

2052220-DUP1@MF5WA8D 6/6/2012 12:26:39 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	
1	00:26:50	190709.5900	350.0067	38986.7530	27509.5600	3680.7450	518612.5000	59765.8140	24055.1170	18562.2650	295409.6100	914.4904	33.3334	31.1112	36.6667	43.3334	119493.5300	1823.5162	20
2	00:27:02	189600.0800	286.6712	38974.7010	27673.3890	3674.0756	518556.0800	60648.2960	24389.3390	19046.5980	296693.7600	855.5958	36.6667	46.6668	46.6668	30.0000	120405.4500	2086.9062	22
3	00:27:14	186493.4700	413.3427	39074.4610	27880.0190	3686.0805	524548.9800	60453.6730	23884.6680	19377.2960	295802.0600	907.8231	36.6667	32.2223	56.6668	33.3334	120763.4800	1810.1802	22
x		188934.3800	350.0069	39011.9720	27687.6560	3680.3004	520572.5200	60289.2610	24109.7080	18995.3860	295968.4800	892.6365	35.5556	36.6667	46.6668	35.5556	120220.8200	1906.8675	21
σ		2185.4737	63.3358	54.4520	185.6413	6.0148	3443.8330	463.6456	256.7260	409.9220	658.0518	32.2509	1.9245	8.6781	10.0001	6.9389	654.7963	156.0606	1
%RSD		1.1567	18.0956	0.1396	0.6705	0.1634	0.6615	0.7690	1.0648	2.1580	0.2223	3.6130	5.4127	23.6675	21.4286	19.5157	0.5447	8.1841	

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:26:50	453.3446	680.0254	573.3514	312252.0300	714478.1000	744936.5600	3940.8540	219576.7900	428014.0400
2	00:27:02	476.6792	616.6876	586.6856	307142.3100	701773.4300	728155.3200	4294.3474	221287.5300	433536.7200
3	00:27:14	533.3490	653.3568	583.3521	305267.3800	699271.2200	727178.2300	3967.5322	221437.7900	425325.5000
x		487.7909	650.0233	581.1297	308220.5800	705174.2500	733423.3700	4067.5779	220767.3700	428958.7600
σ		41.1434	31.8002	6.9393	3615.0131	8153.9227	9982.6778	196.8406	1033.8054	4186.3351
%RSD		8.4346	4.8922	1.1941	1.1729	1.1563	1.3611	4.8393	0.4683	0.9759

SEQ-SRD1@MF5WA8L 6/6/2012 12:30:47 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
1	00:30:58	197018.6800	73.3336	8546.0150	6129.3990	852.7067	117450.5000	13119.4600	5438.2928	4704.5503	59594.6960	203.3356	10.0000	21.1111	13.3333	30.0000	121972.8000	710.0277	450.0111
2	00:31:10	191689.8900	60.0002	8595.3949	6139.4057	857.3738	116663.8000	12812.3560	5665.0979	4491.1091	60675.1410	165.5571	6.6667	18.8889	30.0000	23.3334	125023.8300	676.6919	523.3484
3	00:31:21	192782.6400	70.0003	8614.0792	6115.3895	827.3710	119257.1300	12535.3030	5364.9159	4657.8596	59705.4190	208.8913	3.3333	16.6667	36.6667	40.0001	125108.3200	713.3613	443.3441
x		193830.4000	67.7780	8585.1630	6128.0647	845.8171	117790.4800	12822.3730	5489.4355	4617.8397	59991.7520	192.5947	6.6667	18.8889	26.6667	31.1112	124034.9800	700.0270	472.2346
σ		2814.6687	6.9389	35.1668	12.0636	16.1444	1329.6698	292.2072	156.4896	112.2073	594.4159	23.5794	3.3333	2.2222	12.0185	8.3887	1786.4003	20.2774	44.3912
%RSD		1.4521	10.2377	0.4096	0.1969	1.9087	1.1288	2.2789	2.8507	2.4299	0.9908	12.2430	50.0000	11.7647	45.0694	26.9637	1.4402	2.8967	9.4002

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:30:58	116.6674	146.6679	286.6712	64118.6550	683292.0900	714326.8800	946.7160	44465.1450	447387.5200
2	00:31:10	110.0007	126.6676	320.0056	63893.7460	675565.4500	705351.7500	1096.7328	44023.0010	428691.5400
3	00:31:21	76.6670	166.6682	323.3391	66119.5780	690834.7200	719977.5900	1073.3967	45379.6470	436140.2600
x		101.1117	146.6679	310.0053	64710.6600	683230.7600	713218.7400	1038.9485	44622.5970	437406.4400
σ		21.4306	20.0003	20.2766	1225.3300	7634.8163	7375.6218	80.7234	691.8929	9412.0816
%RSD		21.1949	13.6365	6.5407	1.8936	1.1175	1.0341	7.7697	1.5505	2.1518

1205240-06@MF5WB0 6/6/2012 12:34:54 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	
1	00:35:05	191400.5600	400.0088	47527.9160	30305.7630	4069.5773	632664.2500	69313.2340	27454.7280	20847.2090	273043.0600	1043.3932	56.6668	34.4445	63.3336	36.6667	122232.9300	1956.8773	1
2	00:35:16	190981.8900	343.3398	47064.1790	30573.3240	4056.2381	636609.2100	70801.3030	28073.2790	20549.8670	270189.6800	1023.3909	40.0001	48.8890	60.0002	30.0000	124064.1500	1736.8326	1
3	00:35:28	190158.2200	330.0060	47189.4930	30556.6010	4012.8855	640938.0600	70089.1490	26866.3070	20723.5940	268607.1300	1056.7281	40.0001	44.4446	36.6667	46.6668	121820.7800	1973.5475	1
x		190846.8900	357.7849	47260.5290	30478.5630	4046.2336	636737.1800	70067.8950	27464.7710	20706.8900	270613.2900	1041.1707	45.5557	42.5927	53.3335	37.7779	122705.9500	1889.0858	1
σ		632.0732	37.1698	239.8907	149.8820	29.6405	4138.3902	744.2618	603.5488	149.3734	2248.0958	16.7793	9.6226	7.3982	14.5297	8.3887	1194.1480	132.1183	
%RSD		0.3312	10.3889	0.5076	0.4918	0.7325	0.6499	1.0622	2.1975	0.7214	0.8307	1.6116	21.1226	17.3696	27.2432	22.2054	0.9732	6.9938	

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:35:05	413.3427	663.3575	470.0122	331962.2700	703733.2500	703107.5000	4427.7447	218569.6200	421831.5600
2	00:35:16	423.3432	663.3575	476.6792	331191.5700	695432.9000	719401.2000	4140.9429	222636.5400	425713.0200
3	00:35:28	516.6814	710.0277	503.3473	337127.2200	703531.8500	720510.7800	4307.6870	219447.0500	414994.0600
x		451.1224	678.9143	483.3462	333427.0200	700899.3300	714339.8300	4292.1249	220217.7400	420846.2100
σ		56.9955	26.9450	17.6393	3227.5511	4735.1435	9743.2894	144.0328	2140.1947	5426.9875
%RSD		12.6341	3.9688	3.6494	0.9680	0.6756	1.3640	3.3557	0.9719	1.2895

251

1205240-07@MF5WA0 6/6/2012 12:39:02 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	
1	00:39:13	182201.0700	356.6737	45067.4330	31992.1940	4280.3408	772612.9400	70986.0680	26979.9760	23416.7870	97062.0730	915.6017	63.3336	38.8890	56.6668	16.6667	120905.3500	1873.5264	26
2	00:39:25	185908.3300	403.3423	44957.5570	32374.2090	4358.3778	782221.4400	73495.8940	28186.9630	22430.9720	100074.4700	938.9374	66.6669	41.1112	80.0004	33.3334	119307.7900	1763.5044	26
3	00:39:36	184625.9200	346.6733	45553.1780	32619.0820	4351.0410	780238.0500	73001.9380	28324.0550	23019.1070	97769.5940	924.4915	66.6669	36.6667	53.3335	46.6668	121614.7200	1796.8442	24
x		184245.1100	368.8964	45192.7230	32328.4950	4329.9199	778357.4700	72494.6340	27830.3320	22955.6220	98302.0460	926.3435	65.5558	38.8890	63.3336	32.2223	120609.2900	1811.2917	25
σ		1882.7432	30.2472	316.9609	315.9345	43.0932	5072.7923	1329.5959	739.6126	495.9640	1575.2030	11.7776	1.9245	2.2222	14.5298	15.0309	1181.6207	56.4159	1
%RSD		1.0219	8.1994	0.7014	0.9773	0.9952	0.6517	1.8341	2.6576	2.1605	1.6024	1.2714	2.9357	5.7143	22.9417	46.6475	0.9797	3.1147	

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:39:13	513.3478	530.0154	416.6762	397758.7000	704733.0900	728725.0300	4511.1190	203540.0100	421266.2300
2	00:39:25	456.6781	533.3490	450.0111	389721.6000	699706.1800	704930.9100	4611.1692	205554.5900	433854.7000
3	00:39:36	390.0084	596.6863	403.3423	388254.1000	683066.0200	708751.5100	4671.1998	204238.7600	426833.7800
x		453.3448	553.3502	423.3432	391911.4700	695835.0900	714135.8200	4597.8293	204444.4500	427318.2400
σ		61.7373	37.5671	24.0381	5116.7414	11340.3920	12778.2290	80.8698	1022.9177	6308.2043
%RSD		13.6182	6.7890	5.6782	1.3056	1.6298	1.7893	1.7589	0.5003	1.4762

1205240-08@MF5WA1 6/6/2012 12:43:10 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	
1	00:43:21	191465.2300	410.0093	47027.3220	32922.1720	4333.6994	720856.6600	70408.2680	28574.8380	22631.4680	102170.9300	1092.2878	40.0001	51.1113	46.6668	50.0001	119010.5900	1620.1444	1
2	00:43:33	191414.1700	360.0071	47627.0990	33321.6230	4338.3683	711965.3100	70710.6010	28100.0280	22477.7540	103303.6200	1110.0678	66.6669	34.4445	40.0001	30.0000	121452.5700	1613.4765	1
3	00:43:44	186469.6500	340.0064	47764.4840	33429.3510	4331.0314	723800.6700	70562.7920	28842.3480	22344.0920	101924.8600	1148.9615	26.6667	43.3334	36.6667	43.3334	121486.3500	1590.1391	1
x		189783.0200	370.0076	47472.9690	33224.3820	4334.3664	718874.2100	70560.5540	28505.7380	22484.4380	102466.4700	1117.1057	44.4446	42.9631	41.1112	41.1112	120649.8400	1607.9200	1
σ		2869.5718	36.0570	392.0064	267.2070	3.7136	6161.6963	151.1789	375.9530	143.8047	735.3615	28.9849	20.3671	8.3395	5.0918	10.1835	1419.7291	15.7555	
%RSD		1.5120	9.7449	0.8257	0.8042	0.0857	0.8571	0.2143	1.3189	0.6396	0.7177	2.5946	45.8259	19.4110	12.3854	24.7707	1.1767	0.9799	

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:43:21	406.6758	560.0172	483.3462	366283.2700	698041.9200	714431.2900	4681.2049	198735.4500	419252.9500
2	00:43:33	366.6741	550.0166	466.6786	370443.5200	695321.5100	720485.5700	4824.6132	201818.9400	420690.4600
3	00:43:44	323.3391	556.6837	516.6814	358349.6200	685793.6700	704056.9300	4331.0314	199754.0800	405980.4500
x		365.5630	555.5725	488.9021	365025.4700	693052.3600	712991.2600	4612.2832	200102.8200	415307.9500
σ		41.6794	5.0921	25.4601	6144.2810	6431.6943	8308.4485	253.9063	1571.0494	8109.7717
%RSD		11.4014	0.9165	5.2076	1.6832	0.9280	1.1653	5.5050	0.7851	1.9527

1205240-09@MF5WA2 6/6/2012 12:47:18 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	1
1	00:47:30	186357.3900	386.6749	48549.2920	35604.2520	4627.8443	827928.6500	75885.4060	30233.5240	22400.8980	103573.3300	935.6037	66.6669	44.4446	63.3336	53.3335	121202.6000	1873.5264	81
2	00:47:42	186949.3600	453.3446	49363.6600	35780.9440	4670.5328	829801.7600	76782.8950	29925.8410	22337.4090	105778.5100	891.1548	53.3335	40.0001	36.6667	43.3334	121445.8200	1966.8794	77
3	00:47:53	187224.9400	403.3423	49137.7740	36146.3850	4650.5225	832513.6800	77092.1630	29842.2340	22694.9600	105694.2000	896.7109	26.6667	47.7779	46.6668	36.6667	121638.3700	1850.1883	85
x		186843.8900	414.4539	49016.9080	35843.8600	4649.6332	830081.3600	76586.8210	30000.5330	22477.7560	105015.3500	907.8231	48.8890	44.0742	48.8890	44.4446	121428.9300	1896.8647	81
σ		443.2882	34.6960	420.4226	276.4886	21.3581	2305.2676	626.8165	206.0607	190.7640	1249.5319	24.2185	20.3671	3.9021	13.4716	8.3887	218.3715	61.7472	4
%RSD		0.2373	8.3715	0.8577	0.7714	0.4594	0.2777	0.8184	0.6869	0.8487	1.1899	2.6678	41.6599	8.8535	27.5554	18.8746	0.1798	3.2552	

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:47:30	496.6802	546.6831	323.3391	431119.0600	705988.4400	714146.8600	5338.2335	193586.1100	425824.7400
2	00:47:42	433.3437	513.3478	313.3387	439957.7700	684515.8800	702309.2000	5228.1696	193654.2000	412584.7000
3	00:47:53	500.0138	596.6863	376.6745	432526.9600	690518.6800	710000.1900	5471.6461	194505.4200	415782.2100
x		476.6792	552.2391	337.7841	434534.5900	693674.3300	708818.7500	5346.0164	193915.2400	418063.8800
σ		37.5667	41.9461	34.0492	4749.0695	11078.6410	6006.6153	121.9247	512.2413	6908.6342
%RSD		7.8809	7.5956	10.0802	1.0929	1.5971	0.8474	2.2807	0.2642	1.6525

1205240-10@MF5WA3 6/6/2012 12:51:27 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	
1	00:51:39	186891.5200	426.6767	50496.5230	35651.1020	4817.9430	875848.7600	76029.9400	29685.0540	24770.3670	128772.2800	904.4894	60.0002	33.3334	50.0001	30.0000	119986.6300	1873.5264	35
2	00:51:50	186078.4300	383.3414	50935.6290	36010.5140	4768.5837	878555.5200	77206.4600	30022.8270	25168.1240	130723.1600	860.0407	43.3334	51.1113	40.0001	40.0001	119865.0400	1883.5284	35
3	00:52:02	185377.6600	386.6749	50756.6320	35930.1970	4816.6090	880090.5500	75750.9590	30634.8640	24609.9320	130692.7300	944.4935	36.6667	56.6668	46.6668	43.3334	120425.7100	1983.5497	36
x		186115.8700	398.8977	50729.5940	35863.9380	4801.0452	878164.9500	76329.1190	30114.2480	24849.4750	130062.7200	903.0079	46.6668	47.0372	45.5557	37.7779	120092.4600	1913.5348	35
σ		757.6241	24.1150	220.7981	188.6454	28.1204	2147.6967	772.4974	481.4594	287.3813	1117.6604	42.2459	12.0186	12.1886	5.0918	6.9389	294.9373	60.8405	8
%RSD		0.4071	6.0454	0.4352	0.5260	0.5857	0.2446	1.0121	1.5988	1.1565	0.8593	4.6784	25.7540	25.9126	11.1770	18.3677	0.2456	3.1795	

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:51:39	500.0138	760.0318	463.3451	432142.6500	689893.8000	718882.4800	5168.1353	231592.8400	417990.0800
2	00:51:50	536.6825	740.0301	426.6767	431747.8700	686368.0100	709849.0400	4807.9377	235108.0200	423813.9700
3	00:52:02	510.0143	620.0211	373.3410	432743.5800	693388.5900	697172.1700	4894.6506	238918.8000	415119.6100
x		515.5702	706.6943	421.1209	432211.3600	689883.4700	708634.5600	4956.9079	235206.5500	418974.5500
σ		18.9552	75.7245	45.2585	501.3976	3510.2995	10905.9920	187.9961	3663.9762	4429.9999
%RSD		3.6766	10.7153	10.7472	0.1160	0.5088	1.5390	3.7926	1.5578	1.0573

1205240-11@MF5WA9 6/6/2012 12:55:35 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd
1	00:55:47	195200.0800	343.3398	40364.7470	32617.7440	4330.3645	583635.3200	58504.3140	28043.1870	36178.5120	219300.2400	934.4925	46.6668	48.8890	36.6667	36.6667	123746.5300	1680.1552
2	00:55:58	194311.3400	340.0064	40656.0410	32792.3710	4384.3903	591940.6800	59249.1150	28641.7150	36255.4850	215937.8400	954.4946	13.3333	46.6668	53.3335	43.3334	124462.8800	1850.1883
3	00:56:10	191856.6900	316.6722	40303.8110	33035.2470	4497.1120	600957.7300	59869.8280	28484.5560	36419.4720	224460.5800	1005.6112	63.3336	66.6669	43.3334	43.3334	125392.1900	1743.5005
x		193789.3700	333.3395	40441.5330	32815.1210	4403.9556	592177.9100	59207.7520	28389.8190	36284.4900	219899.5500	964.8661	41.1112	54.0742	44.4446	41.1112	124533.8700	1757.9480
σ		1731.7331	14.5302	188.2512	209.6794	85.0781	8663.6448	683.6959	310.3068	123.0703	4292.8644	36.6762	25.4589	10.9620	8.3887	3.8490	825.1201	85.9323
%RSD		0.8936	4.3590	0.4655	0.6390	1.9319	1.4630	1.1547	1.0930	0.3392	1.9522	3.8012	61.9268	20.2722	18.8746	9.3625	0.6626	4.8882

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:55:47	413.3427	1233.4170	586.6856	302441.9300	698401.3500	712930.0300	4104.2596	396498.7500	420407.8300
2	00:55:58	536.6825	1170.0753	606.6869	300151.1900	698613.4200	725999.3700	4190.9658	396550.9500	420700.9300
3	00:56:10	483.3462	1233.4170	573.3514	296611.1300	684368.7300	704981.2700	3704.0878	383387.2700	407736.4800
x		477.7905	1212.3031	588.9080	299734.7500	693794.5000	714636.8900	3999.7711	392145.6600	416281.7400
σ		61.8573	36.5704	16.7785	2937.6225	8163.6433	10612.5040	259.7132	7585.0296	7401.8708
%RSD		12.9465	3.0166	2.8491	0.9801	1.1767	1.4850	6.4932	1.9342	1.7781

1205240-12@MF5WB1 6/6/2012 12:59:42 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd
1	00:59:54	198680.9400	410.0093	61177.1550	31526.5710	4234.3192	1934339.9000	212109.2700	41521.2710	16835.5750	73519.4170	1546.7982	50.0001	55.5557	56.6668	50.0001	125757.1800	1816.8482
2	01:00:05	198956.8800	423.3432	61591.9420	31888.4970	4085.5845	1945285.2000	215620.4300	41139.5420	17202.9280	72904.4940	1596.8069	36.6667	44.4446	43.3334	16.6667	127183.4800	1583.4712
3	01:00:17	197158.3300	303.3384	61927.5430	31984.8340	4162.9529	1951418.3000	210720.8700	40017.8850	16782.1430	74198.2320	1572.3582	36.6667	42.2223	50.0001	53.3335	124963.0000	1960.2113
x		198265.3800	378.8969	61565.5470	31799.9680	4160.9522	1943681.1000	212816.8600	40892.9000	16940.2150	73540.7140	1571.9878	41.1112	47.4075	50.0001	40.0001	125967.8900	1786.8436
σ		968.6151	65.7744	375.8899	241.6183	74.3875	8651.4492	2525.2619	781.4518	229.0793	647.1316	25.0064	7.6980	7.1435	6.6667	20.2760	1125.1346	190.1538
%RSD		0.4885	17.3594	0.6106	0.7598	1.7878	0.4451	1.1866	1.9110	1.3523	0.8800	1.5907	18.7249	15.0682	13.3334	50.6897	0.8932	10.6419

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	00:59:54	393.3418	660.0240	333.3394	740032.6400	692354.0200	708021.0800	5605.0607	229982.7300	399903.1100
2	01:00:05	456.6781	570.0179	320.0056	741086.8800	685047.0700	704179.2100	5561.7008	231093.7100	400561.1500
3	01:00:17	483.3462	573.3514	313.3387	759486.3300	686005.4500	700827.8300	5344.9041	226636.9200	396255.1300
x		444.4554	601.1311	322.2279	746868.6200	687802.1800	704342.7100	5503.8885	229237.7800	398906.4600
σ		46.2303	51.0300	10.1839	10939.9680	3971.0284	3599.4119	139.3810	2319.8993	2319.5739
%RSD		10.4016	8.4890	3.1605	1.4648	0.5774	0.5110	2.5324	1.0120	0.5815

1205240-13@MF5WB2 6/6/2012 1:03:50 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	10
1	01:04:01	193708.6800	236.6698	37461.0240	28108.0530	3776.7844	749141.9500	72571.8490	25652.8090	23209.5900	94161.8090	986.7202	40.0001	55.5557	20.0000	43.3334	124101.3200	1656.8176	583.
2	01:04:13	189378.8700	330.0060	38008.6240	28172.9200	3694.0837	744698.1700	72222.4160	25428.8480	23697.5130	93434.3610	966.7181	30.0000	34.4445	50.0001	16.6667	121175.5800	1493.4560	616.
3	01:04:24	189831.5000	306.6718	37242.7970	27854.6080	3771.4488	758346.8500	72188.8170	25472.3030	23496.9930	94734.3780	962.2732	46.6668	40.0001	46.6668	53.3335	122911.9900	1543.4643	700.
x		190973.0200	291.1159	37570.8150	28045.1940	3747.4390	750728.9900	72327.6940	25517.9870	23468.0320	94110.1820	971.9038	38.8890	43.3334	38.8890	37.7779	122729.6300	1564.5793	633.
σ		2379.9373	48.5737	394.5416	168.2085	46.2839	6961.3659	212.1106	118.7642	245.2474	651.5444	13.0224	8.3887	10.9432	16.4430	18.9542	1471.3701	83.7027	60.
%RSD		1.2462	16.6854	1.0501	0.5998	1.2351	0.9273	0.2933	0.4654	1.0450	0.6923	1.3399	21.5710	25.2535	42.2819	50.1728	1.1989	5.3499	9.

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	01:04:01	366.6741	580.0185	263.3372	397240.0800	712393.6600	721512.4000	3920.8453	261453.0400	431817.7400
2	01:04:13	270.0040	543.3496	266.6706	396397.8200	705563.9700	713426.8200	4214.3099	256758.7200	422557.4600
3	01:04:24	403.3423	553.3502	283.3378	386745.1100	689861.4800	724467.4400	4304.3521	257914.0800	424208.4100
x		346.6735	558.9061	271.1152	393461.0000	702606.3700	719802.2200	4146.5025	258708.6100	426194.5400
σ		68.8824	18.9553	10.7155	5831.3635	11553.5840	5715.5358	200.5436	2445.9420	4939.3017
%RSD		19.8695	3.3915	3.9524	1.4821	1.6444	0.7940	4.8365	0.9454	1.1589

1205240-14@MF5WB3 6/6/2012 1:07:57 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	1
1	01:08:09	190141.2100	373.3410	38157.9140	28729.9930	3894.1672	675411.2700	69843.9400	26602.1990	24406.0500	99488.0870	1025.6134	36.6667	37.7779	40.0001	33.3334	124871.7600	1560.1339	68
2	01:08:20	187051.4200	430.0102	38643.2910	29153.3370	3799.4605	679876.3800	69729.7350	26568.7680	24970.9150	99144.3630	1021.1685	40.0001	60.0002	43.3334	60.0002	122337.6600	1540.1304	76
3	01:08:31	186462.8500	356.6737	38486.6280	28776.1380	3901.5037	700698.4000	68725.4640	25906.8620	24101.9070	99245.4570	992.2764	43.3334	48.8890	36.6667	36.6667	123726.2600	1656.8176	71
x		187885.1600	386.6749	38429.2780	28886.4890	3865.0438	685328.6900	69433.0460	26359.2760	24492.9570	99292.6360	1013.0194	40.0001	48.8890	40.0001	43.3334	123645.2300	1585.6940	71
σ		1975.8323	38.4435	247.7187	232.2459	56.9151	13496.4990	615.4390	392.1588	440.9740	176.6523	18.1010	3.3333	11.1112	3.3333	14.5297	1268.9953	62.4016	4
%RSD		1.0516	9.9421	0.6446	0.8040	1.4726	1.9693	0.8864	1.4877	1.8004	0.1779	1.7868	8.3334	22.7273	8.3334	33.5301	1.0263	3.9353	5

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	01:08:09	430.0102	640.0225	196.6688	382059.7700	703506.6800	713714.8300	4030.8934	269321.1300	436793.8800
2	01:08:20	330.0060	640.0225	226.6695	389825.9300	711515.3800	732216.1700	4120.9338	275801.1300	430549.6700
3	01:08:31	373.3410	573.3514	290.0046	384270.0600	718010.8000	727473.8700	4274.3379	275948.8500	431517.3000
x		377.7857	617.7988	237.7810	385385.2500	711010.9600	724468.2900	4142.0551	273690.3700	432953.6200
σ		50.1500	38.4926	47.6497	4001.3807	7265.2075	9609.8947	123.0889	3784.5915	3360.7735
%RSD		13.2747	6.2306	20.0393	1.0383	1.0218	1.3265	2.9717	1.3828	0.7762

1205240-15@MF5WB6 6/6/2012 1:12:05 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd
1	01:12:17	191618.4100	346.6733	41868.1900	29996.0720	3924.8471	506736.7400	60594.6060	26374.8710	29919.1530	113065.4300	984.4978	40.0001	40.0001	40.0001	20.0000	121337.7200	1676.8213
2	01:12:28	188688.0600	296.6715	41637.1330	29668.3330	3962.1966	496708.7300	60269.1200	26959.9170	29979.3510	113956.4500	1105.6228	23.3334	54.4446	60.0002	36.6667	125027.2100	1780.1743
3	01:12:40	191438.0000	300.0050	41799.8770	29866.3130	4011.5516	516095.1300	60517.4280	26725.8940	29701.7750	113726.9400	1011.1673	36.6667	30.0000	66.6669	30.0000	120986.4200	1716.8288
x		190581.4900	314.4499	41768.4000	29843.5730	3966.1984	506513.5300	60460.3850	26686.8940	29866.7590	113582.9400	1033.7626	33.3334	41.4816	55.5557	28.8889	122450.4500	1724.6081
σ		1642.2355	27.9560	118.7013	165.0489	43.4906	9695.1282	170.0758	294.4663	146.0166	462.6356	63.6453	8.8192	12.2894	13.8779	8.3887	2238.4422	52.1138
%RSD		0.8617	8.8904	0.2842	0.5530	1.0965	1.9141	0.2813	1.1034	0.4889	0.4073	6.1567	26.4576	29.6262	24.9801	29.0379	1.8280	3.0218

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	01:12:17	463.3451	696.6934	366.6741	296215.1900	693018.5700	691804.4600	3964.1975	255452.6900	425444.2000
2	01:12:28	420.0097	730.0293	333.3394	299338.3700	687689.1300	699684.6100	4024.2238	253759.5800	415269.5600
3	01:12:40	483.3462	700.0270	446.6776	297427.1500	690439.6700	708298.1300	4017.5542	254863.1500	418638.9400
x		455.5670	708.9165	382.2304	297660.2400	690382.4600	699929.0700	4001.9918	254691.8100	419784.2300
σ		32.3767	18.3600	58.2485	1574.5802	2665.1819	8249.5544	32.9003	859.4603	5183.1073
%RSD		7.1069	2.5899	15.2391	0.5290	0.3860	1.1786	0.8221	0.3375	1.2347

1205240-16@MF5WB7 6/6/2012 1:16:13 AM

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd
1	01:16:25	189708.9800	393.3418	41146.2390	30555.9320	3975.5357	470606.9000	56857.2470	24997.6550	28534.7120	120385.1800	1022.2797	36.6667	45.5557	40.0001	33.3334	124216.2100	1670.1534
2	01:16:37	187997.3000	293.3381	41965.9730	30871.6630	4053.5702	478538.6300	58477.4760	25291.8000	29046.3290	122756.5800	1045.6157	43.3334	52.2224	26.6667	26.6667	125747.0400	1743.5005
3	01:16:48	188198.0600	326.6725	41733.5740	30581.3510	4076.2470	478342.0100	57954.1410	25245.0030	29109.8650	122395.0900	1076.7304	36.6667	46.6668	40.0001	26.6667	123807.3500	1826.8502
x		188634.7800	337.7842	41615.2620	30669.6490	4035.1176	475829.1800	57762.9540	25178.1530	28896.9690	121845.6200	1048.2086	38.8890	48.1483	35.5556	28.8889	124590.2000	1746.8347
σ		935.6842	50.9194	422.4800	175.4105	52.8305	4523.6944	826.8614	158.0573	315.3275	1277.6227	27.3178	3.8490	3.5717	7.6980	3.8490	1022.4955	78.4016
%RSD		0.4960	15.0746	1.0152	0.5719	1.3093	0.9507	1.4315	0.6278	1.0912	1.0486	2.6061	9.8975	7.4182	21.6507	13.3235	0.8207	4.4882

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	01:16:25	443.3441	726.6957	423.3432	286215.7400	693571.8000	728068.7800	3710.7572	248754.0500	421660.5600
2	01:16:37	476.6792	683.3590	496.6802	281783.8000	689207.9300	700795.4800	3754.1083	257941.5100	421754.7800
3	01:16:48	433.3437	680.0254	336.6729	285648.3100	708776.6900	725245.9900	3764.1124	254085.1600	416329.7700
x		451.1223	696.6934	418.8988	284549.2800	697185.4700	718036.7500	3742.9926	253593.5700	419915.0400
σ		22.6907	26.0362	80.0962	2411.7255	10272.6880	14997.9390	28.3613	4613.4101	3105.2887
%RSD		5.0298	3.7371	19.1207	0.8476	1.4735	2.0887	0.7577	1.8192	0.7395

SEQ-CCV@CCV02 6/6/2012 1:20:23 AM QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se
1	01:20:34	189035.1600	357448.4900	797186.7200	1248233.5000	159317.2200	1161399.0000	τ.7984165.1000	1622016.6000	2012959.6000	τ.10046609.0000	211591.8600	12091.3690	42207.7550	20549.8670
2	01:20:46	186486.6600	363005.6500	800082.6300	1253705.4000	158454.3300	1152333.5000	τ.8072347.7000	1632616.6000	2043213.6000	τ.10174664.0000	213773.1200	12478.5580	42423.1990	20890.6420
3	01:20:57	188990.9200	362946.7000	800477.2000	1254199.8000	159162.5400	1161983.8000	τ.8084201.9000	1608876.3000	1986445.6000	τ.9861366.0000	215507.8100	12455.1930	43204.6440	20503.0950
x		188170.9200	361133.6200	799248.8500	1252046.2000	158978.0300	1158572.1000	τ.8046904.9000	1621169.8000	2014206.3000	τ.10027546.0000	213624.2600	12341.7070	42611.8660	20647.8680
σ		1458.7732	3191.5461	1796.7186	3311.1146	460.0832	5410.7001	τ.54656.5440	11892.8160	28404.5440	τ.157516.4100	1962.2130	217.1134	524.5410	211.5453
%RSD		0.7752	0.8838	0.2248	0.2645	0.2894	0.4670	τ.0.6792	0.7336	1.4102	τ.1.5708	0.9185	1.7592	1.2310	1.0245

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	01:20:34	138178.8800	2312470.7000	τ.7289154.6000	τ.14004797.0000	680432.4300	689541.8800	τ.22437403.0000	τ.15970948.0000	433375.9900
2	01:20:46	140758.0000	2298859.5000	τ.7260097.2000	τ.14089412.0000	667992.0300	684142.6300	τ.22387410.0000	τ.16113878.0000	435210.5900
3	01:20:57	140321.3300	2311822.7000	τ.7214375.7000	τ.13798903.0000	669848.0900	698717.6500	τ.22722560.0000	τ.16406603.0000	430189.8900
x		139752.7400	2307717.6000	τ.7254542.5000	τ.13964371.0000	672757.5200	690800.7200	τ.22515791.0000	τ.16163810.0000	432925.4900
σ		1380.3739	7678.2352	τ.37697.6280	τ.149413.9900	6711.1417	7368.6069	τ.180803.3000	τ.222077.9300	2540.4875
%RSD		0.9877	0.3327	τ.0.5196	τ.1.0700	0.9976	1.0667	τ.0.8030	τ.1.3739	0.5868

SEQ-CCB@CCB02 6/6/2012 1:24:34 AM QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.00

Run	Time	6Li	9Be	51V	52Cr	53Cl O	55Mn	59Co	60Ni	65Cu	66Zn	75As	77Se	78Se	82Se	83Kr	103Rh	106Cd	107Ag
1	01:24:46	190801.4900	36.6667	172.0016	141.3344	70.0003	253.3369	486.6797	940.0486	730.0293	1976.8816	22.2222	3.3333	13.3333	16.6667	23.3334	124452.7400	373.3410	210.0024
2	01:24:58	191615.0000	20.0000	172.6683	131.3343	58.0002	263.3372	433.3437	970.0518	793.3680	1933.5389	23.3334	0.0000	11.1111	36.6667	20.0000	123729.6400	393.3418	306.6718
3	01:25:09	190740.2300	23.3334	173.3350	106.6673	53.3335	280.0043	540.0160	873.3753	690.0262	1860.1903	17.7778	0.0000	16.6667	26.6667	30.0000	123719.5000	386.6749	226.6695
x		191052.2400	26.6667	172.6683	126.4453	60.4446	265.5594	486.6798	927.8252	737.8078	1923.5369	21.1111	1.1111	13.7037	26.6667	24.4445	123967.2900	384.4526	247.7813
σ		488.3284	8.8192	0.6667	17.8432	8.5981	13.4719	53.3362	49.4838	52.1081	58.9851	2.9397	1.9245	2.7962	10.0000	5.0918	420.4408	10.1839	51.6771
%RSD		0.2556	33.0719	0.3861	14.1114	14.2247	5.0730	10.9592	5.3333	7.0626	3.0665	13.9250	173.2051	20.4050	37.5001	20.8299	0.3392	2.6489	20.8559

Run	Time	108Cd	111Cd	121Sb	137Ba	159Tb	165Ho	205Tl	208Pb	209Bi
1	01:24:46	6.6667	100.0006	7439.7096	783.3671	677197.0600	691333.9400	1226.7494	1676.8213	433229.2400
2	01:24:58	3.3333	140.0011	7516.4394	786.7007	693022.1700	707355.4800	1110.0678	1730.1646	436315.0200
3	01:25:09	13.3333	166.6682	7212.8603	903.3782	685025.5400	702927.7000	1360.1017	1760.1704	444616.4100
x		7.7778	135.5566	7389.6698	824.4820	685081.5900	700539.0400	1232.3063	1722.3854	438053.5600
σ		5.0918	33.5553	157.8546	68.3465	7912.7000	8273.5523	125.1096	42.2156	5889.2940
%RSD		65.4654	24.7537	2.1362	8.2896	1.1550	1.1810	10.1525	2.4510	1.3444

WinHg Database 1.5

File Utility Help

RN RN

Protocol LM01 Dataset/Proto H060512A/LM01

Protocol | Line info | Cal Curve | Report | Ctrl Chart | Viewer

Reset

Calib Coeffs

New Cal

Update Coeffs

Spike Coeffs

A

B 1.28456e-4

C -3.52958e-2

Rho .999160

Type Linear

Calibrated

Accepted

Accept

µAbs. 47384

Accepted

New

Include S1 Rep 1 2 3 4 5

05-Jun-12 12:28 Conc. 6.051

S	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3
01	.00000	.0857	.0857	943	0	942		
02	.20000	.2364	.0364	2115	0%	2115		
03	.50000	.5453	.0453	4521	0%	4520		
04	1.0000	.9439	-.0561	7623	0%	7623		
05	2.0000	1.837	-.1628	14578	0%	14577		
06	6.0000	6.051	.0515	47384	0%	47384		

Ready

Start | WinHg Runner 1.5 | WinHg Database 1.5 | WinHG Rack Editor 1.0

Bonner Analytical Testing Co.

Mercury Curve Percent Difference Check

File Name: H060512A
lethod & Instrument: LM01
Analyst: BGB

Standards Prep Date: 6/5/2012
Standards Log Page No.: 6 ~~5~~
new 6/6/12

SDG No.: MF5WA4
Case No.: 42562

ID	Time	Date	Absorbance	Curve Conc.	Calc. Conc.	% Diff
S0	12:17:13	05 Jun 12	942	0	NA	NA
S0.2	12:19:14	05 Jun 12	2115	0.2	NA	NA
S0.5	12:21:10	05 Jun 12	4520	0.5	0.54532423	9%
S1	12:23:22	05 Jun 12	7623	1	0.94392245	6%
S2	12:25:54	05 Jun 12	14577	2	1.83720379	8%
S6	12:27:51	05 Jun 12	47384	6	6.05145185	1%

POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Standard: 1 Rep: 1 Seq: 1 12:17:13 05 Jun 12 HG

Hg .0000 ppb 942 S0

*** Standard: 2 Rep: 1 Seq: 2 12:19:14 05 Jun 12 HG

Hg .2000 ppb 2115 S0.2

*** Standard: 3 Rep: 1 Seq: 3 12:21:10 05 Jun 12 HG

Hg .5000 ppb 4520 S0.5

*** Standard: 4 Rep: 1 Seq: 4 12:23:22 05 Jun 12 HG

Hg 1.000 ppb 7623 S1

*** Standard: 5 Rep: 1 Seq: 5 12:25:54 05 Jun 12 HG

Hg 2.000 ppb 14577 S2

*** Standard: 6 Rep: 1 Seq: 6 12:27:51 05 Jun 12 HG

Hg 6.000 ppb 47384 S6

*** Check Standard: 2 ~~CK~~2SEQ-ICV 01 Seq: 7 12:29:47 05 Jun 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		100.7	4.028	4.000	ppb	.0000

*** Sample ID: ICB01 Seq: 8 12:31:57 05 Jun 12 HG

SEQ-ICB01

Hg .1079 ppb .0000 .1079

*** Check Standard: 3 ~~CK~~3SEQ-CCV01 Seq: 9 12:33:47 05 Jun 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		97.31	1.946	2.000	ppb	.0000

*** Check Standard: 1 ~~CK~~1SEQ-CCB01 Seq: 10 12:36:28 05 Jun 12 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		.1474	.2000	ppb	.0000

*** Sample ID: PBS01 Seq: 11 12:38:17 05 Jun 12 HG

2052222-BLK1

Hg .1231 ppb .0000 .1231

*** Sample ID: MF5WA4 Seq: 12 12:40:19 05 Jun 12 HG

1205240-01

Hg .0314 ppb .0000 .0314

[illegible]
6/6/12

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Line   Conc.  Units     SD/RSD      1       2       3       4       5
-----------------------------------------------------------------------------

*** Check Standard: 3  CK3SEQ-CCV02 Seq:  13      12:42:41 05 Jun 12   HG
Line  Flag  %Rcv.   Found    True  Units      SD/RSD
Hg          100.5    2.009   2.000  ppb        .0000
                                                                          =
*** Check Standard: 1  CK1SEQ-CCB02 Seq:  14      12:44:41 05 Jun 12   HG
Line  Flag  Found Range(+/-) Units      SD/RSD
Hg          .1412    .2000    ppb        .0000
                                                                          =
*** Sample ID: MF5WA5                Seq:  15      12:47:25 05 Jun 12   HG
                          1205240-02
Hg    .1480   ppb       .0000     .1480
                                                                          =
===============================================================================
*** Sample ID: MF5WA6                Seq:  16      12:49:36 05 Jun 12   HG
                          1205240-03
Hg    .0729   ppb       .0000     .0729
                                                                          =
===============================================================================
*** Sample ID: MF5WA7                Seq:  17      12:52:22 05 Jun 12   HG
                          1205240-04
Hg    .0586   ppb       .0000     .0586
                                                                          =
===============================================================================
*** Sample ID: MF5WA8                Seq:  18      12:54:16 05 Jun 12   HG
                          1205240-05
Hg    .0838   ppb       .0000     .0838
                                                                          =
===============================================================================
*** Sample ID: MF5WA8D               Seq:  19      12:56:10 05 Jun 12   HG
                          2052222-DUP1
Hg    .0603   ppb       .0000     .0603
                                                                          =
===============================================================================
*** Sample ID: MF5WA8S               Seq:  20      12:58:23 05 Jun 12   HG
                          2052222-MS1
Hg    2.809   ppb       .0000     2.809
                                                                          =
===============================================================================
*** Sample ID: MF5WB0                Seq:  21      13:00:34 05 Jun 12   HG
                          1205240-06
Hg    .0494   ppb       .0000     .0494
                                                                          =
===============================================================================
*** Sample ID: MF5WA0                Seq:  22      13:02:46 05 Jun 12   HG
                          1205240-07
Hg    .1018   ppb       .0000     .1018
                                                                          =
===============================================================================
```

RBB
6/6/12

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: MF5WA1 Seq: 23 13:04:40 05 Jun 12 HG
1205240-08

Hg	.0781	ppb	.0000	.0781

*** Sample ID: MF5WA2 Seq: 24 13:06:42 05 Jun 12 HG
1205240-09

Hg	.1569	ppb	.0000	.1569

*** Sample ID: MF5WA3 Seq: 25 13:08:35 05 Jun 12 HG
1205240-10

Hg	.1896	ppb	.0000	.1896

*** Sample ID: MF5WA9 Seq: 26 13:10:28 05 Jun 12 HG
1205240-11

Hg	.2436	ppb	.0000	.2436

*** Sample ID: MF5WB1 Seq: 27 13:13:12 05 Jun 12 HG
1205240-12

Hg	.2433	ppb	.0000	.2433

*** Sample ID: MF5WB2 Seq: 28 13:15:08 05 Jun 12 HG
1205240-13

Hg	.2246	ppb	.0000	.2246

*** Sample ID: MF5WB3 Seq: 29 13:17:00 05 Jun 12 HG
1205240-14

Hg	.2226	ppb	.0000	.2226

*** Sample ID: MF5WB6 Seq: 30 13:19:24 05 Jun 12 HG
1205240-15

Hg	.1831	ppb	.0000	.1831

*** Sample ID: MF5WB7 Seq: 31 13:21:20 05 Jun 12 HG
1205240-16

Hg	.2699	ppb	.0000	.2699

*** Check Standard: 3 CK3SEQ-CCV03 Seq: 32 13:23:24 05 Jun 12 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		107.4	2.149	2.000	ppb	.0000

6/4/12

Folder: H060512A
Protocol: LM01
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 1 ~~CK~~1SEQ-CCB03 Seq: 33 13:25:14 05 Jun 12 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		.1420	.2000	ppb	.0000

=

MM
6/6/12

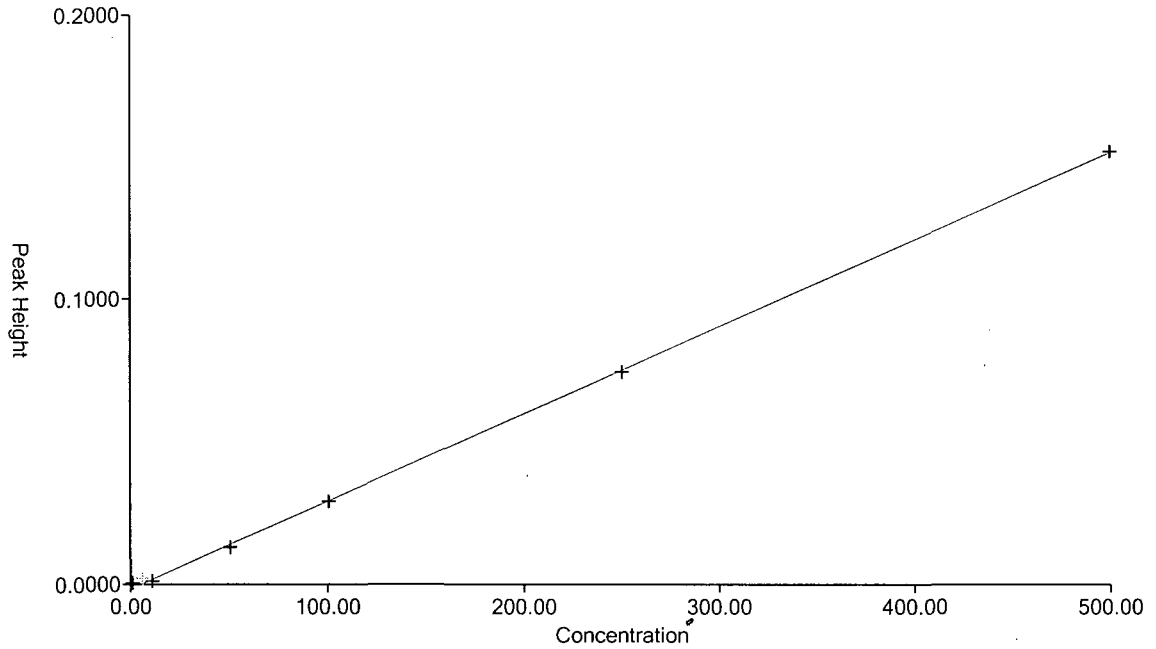
2600

Run Name: C052412A
Configuration: CN02 soil
Run date: 5/24/2012

	Position	Identifier	Type	Date	Time	Cor Ht	CN UG/L	Status
~~1~~	~~SR:1~~	~~SYNC~~	~~SYNC~~	~~5/24/2012~~	~~8:28:02 AM~~	~~0.1460~~	~~481.80~~	
2	SR:2	blk	Blank	5/24/2012	8:28:37 AM	0.0017	10.06	NP
~~3~~	~~SR:3~~	~~W~~	~~Wash~~	~~5/24/2012~~	~~8:30:02 AM~~	~~0.0019~~	~~10.56~~	~~BC,NP~~ ML 052412
4	SR:4	C1 50	Calibrant	5/24/2012	8:31:26 AM	0.0004	5.91	NP
5	SR:5	C2 55	Calibrant	5/24/2012	8:32:51 AM	0.0020	11.16	NP,DS
6	SR:6	C3 510	Calibrant	5/24/2012	8:34:16 AM	0.0011	8.25	NP
7	SR:7	C4 550	Calibrant	5/24/2012	8:35:41 AM	0.0129	46.75	NP
8	SR:8	C5 5100	Calibrant	5/24/2012	8:37:06 AM	0.0291	99.48	
9	SR:9	C6 5250	Calibrant	5/24/2012	8:38:31 AM	0.0746	248.30	
10	SR:10	C7 5500	Calibrant	5/24/2012	8:39:55 AM	0.1520	501.31	AR,RT

Curve #:	1
Curve Type:	Linear
Correlation:	0.99986
Intercept:	-0.0013787
Linear coef:	0.00030596

Calibration for CN



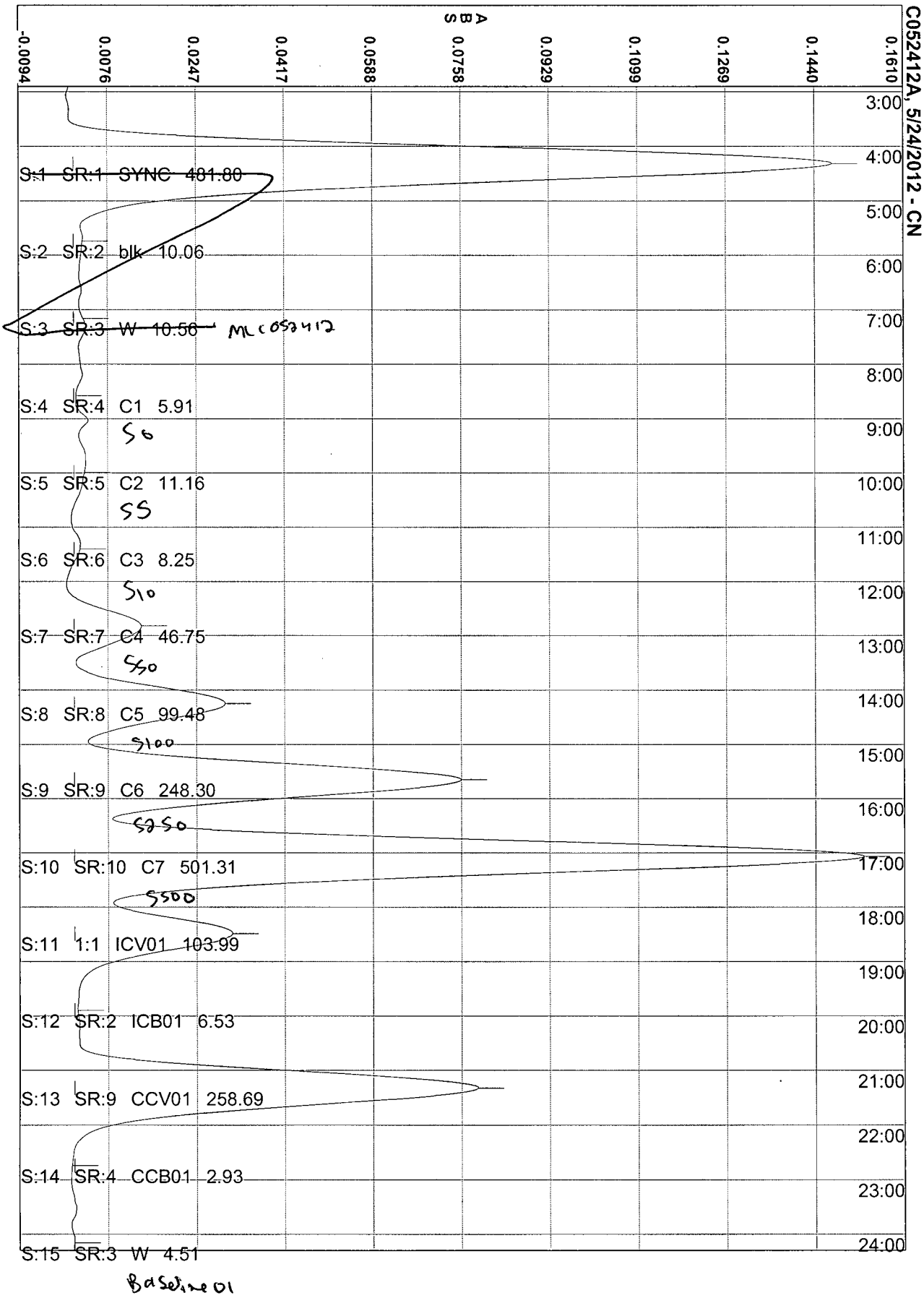
Segment 1: Equation: y = 0.0003060x + -0.001379 X Range = 0.00 to 500.00
Correlation: 0.9999 Y Range = 0.0000 to 7.2000

Position	Identifier	Type	Date	Time	Cor Ht	CN UG/L	Status

	Position	Identifier	Type	Date	Time	Cor Ht	CN UG/L	Status
11	1:1	ICV01	Unknown	5/24/2012	8:41:20 AM	0.0304	103.99	
12	SR:2	ICB01	Unknown	5/24/2012	8:42:45 AM	0.0006	6.53	NP
13	SR:9	CCV01	Unknown	5/24/2012	8:44:10 AM	0.0778	258.69	
14	SR:4	CCB01	Unknown	5/24/2012	8:45:35 AM	-0.0005	2.93	NP
15	SR:3	W Baseline01	Wash	5/24/2012	8:46:59 AM	0.0000	4.51	NP
16	1:2	PBS01	Unknown	5/24/2012	8:48:24 AM	-0.0005	2.93	NP
17	1:3	MF5WA4	Unknown	5/24/2012	8:49:49 AM	0.0001	4.96	NP
18	1:4	MF5WA5	Unknown	5/24/2012	8:51:13 AM	0.0009	7.30	NP
19	1:5	MF5WA6	Unknown	5/24/2012	8:52:38 AM	0.0038	16.83	NP
20	1:6	MF5WA7	Unknown	5/24/2012	8:54:03 AM	0.0042	18.10	NP
21	1:7	MF5WA8	Unknown	5/24/2012	8:55:28 AM	0.0006	6.44	NP
22	1:8	MF5WA8D	Unknown	5/24/2012	8:56:53 AM	0.0030	14.17	NP
23	1:9	MF5WA8S	Unknown	5/24/2012	8:58:18 AM	0.0283	97.09	
24	1:10	MF5WB0	Unknown	5/24/2012	8:59:43 AM	-0.0021	-2.28	NP
25	1:11	MF5WA0	Unknown	5/24/2012	9:01:08 AM	-0.0013	0.39	NP
26	1:12	MF5WA1	Unknown	5/24/2012	9:02:31 AM	-0.0010	1.26	NP
27	1:13	MF5WA2	Unknown	5/24/2012	9:03:56 AM	-0.0016	-0.65	NP
28	1:14	MF5WA3	Unknown	5/24/2012	9:05:21 AM	-0.0027	-4.21	NP
29	1:15	MF5WA9	Unknown	5/24/2012	9:06:46 AM	-0.0031	-5.47	NP
30	1:16	MF5WB1	Unknown	5/24/2012	9:08:11 AM	-0.0024	-3.30	NP
31	1:17	MF5WB2	Unknown	5/24/2012	9:09:36 AM	-0.0022	-2.65	NP
32	1:18	MF5WB3	Unknown	5/24/2012	9:11:01 AM	-0.0019	-1.78	NP
33	1:19	MF5WB6	Unknown	5/24/2012	9:12:26 AM	-0.0006	2.43	NP
34	1:20	MF5WB7	Unknown	5/24/2012	9:13:51 AM	0.0001	4.73	NP
35	SR:9	CCV02	Unknown	5/24/2012	9:15:15 AM	0.0707	235.43	
36	SR:4	CCB02	Unknown	5/24/2012	9:16:40 AM	-0.0024	-3.38	NP
37	SR:3	W Baseline02	Wash	5/24/2012	9:18:04 AM	0.0000	4.51	NP

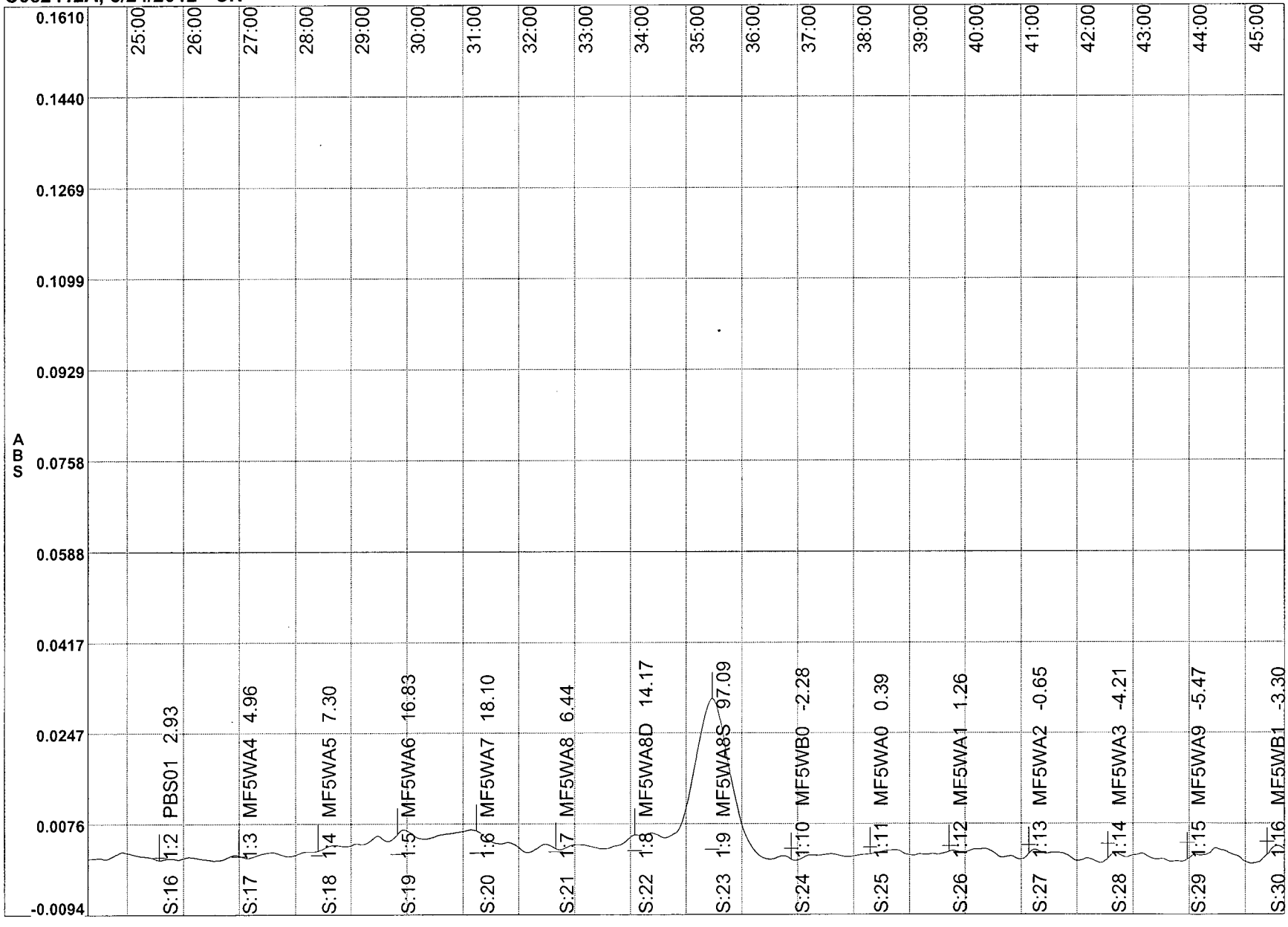
M=5-24-12

C052412A, 5/24/2012 - CN

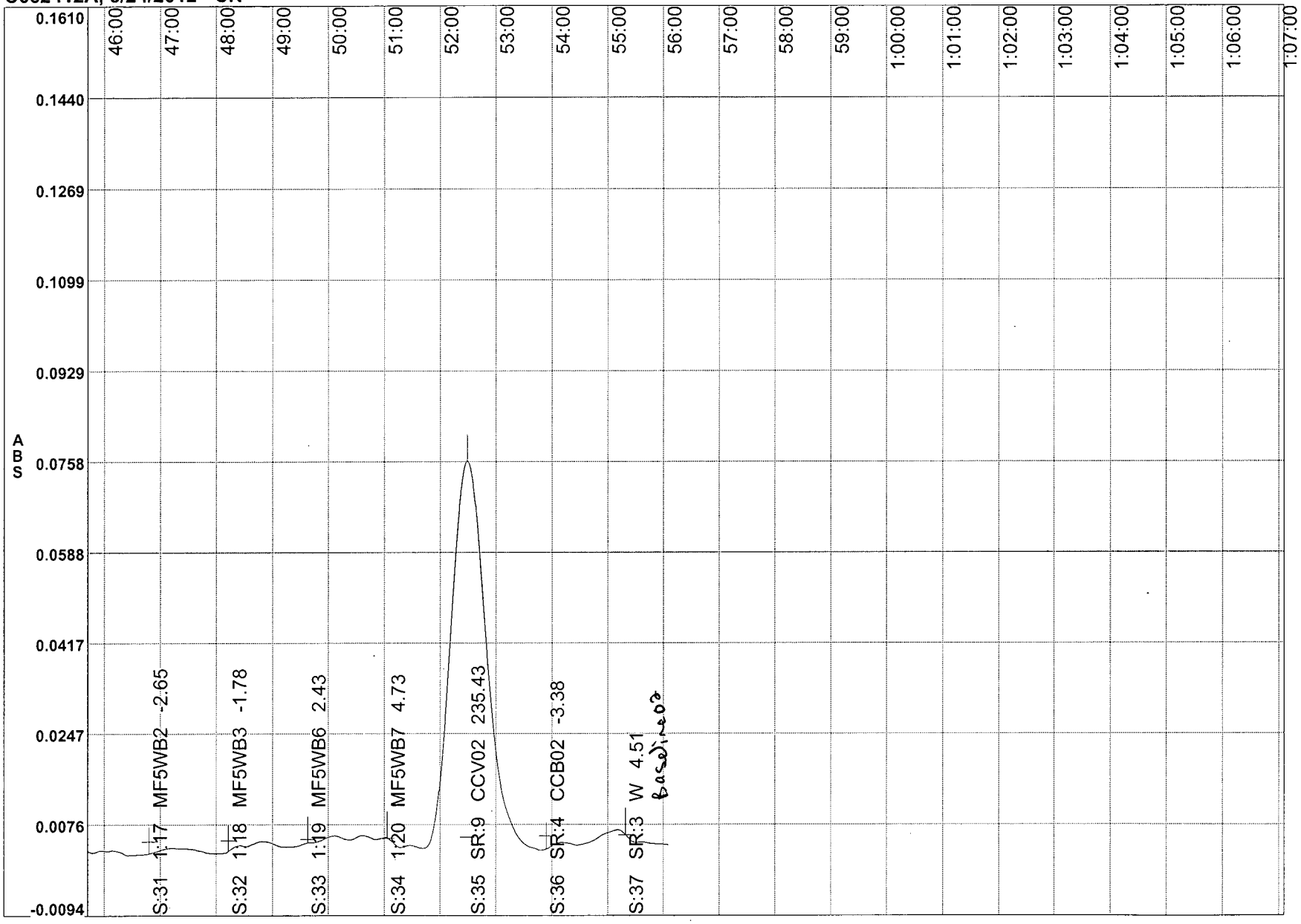


292

C052412A, 5/24/2012 - CN



C052412A, 5/24/2012 - CN



2 of 4

PREPARATION BENCH SHEET

265

2052220

Bonner Analytical Testing

Analysis: ISM013 - ICP-AES (5-10)
Prepared: 06/01/2012 10:00

CASE: 42562
SDG: MF5WA4
Work Order: 1205240

Matrix: Soil

Prepared using: METALS - 3050B

Lab Number	Sample ID	Initial (g)	Final (mL)	Spike ID	Spike Amount (uL)	Spike ID	Spike Amount (uL)	Color Before	Color After	Texture	Artifacts
1205240-01	MF5WA4	1	100					brown	yellow	medium	rocks
1205240-01RE1	MF5WA4	1	100					brown	yellow	medium	rocks
1205240-02	MF5WA5	1	100					brown	yellow	medium	rocks
1205240-03	MF5WA6	1	100					brown	yellow	medium	rocks
1205240-03RE1	MF5WA6	1	100					brown	yellow	medium	rocks
1205240-04	MF5WA7	1	100					brown	yellow	medium	plant matter
1205240-04RE1	MF5WA7	1	100					brown	yellow	medium	plant matter
1205240-05	MF5WA8	1	100					brown	yellow	medium	rocks
1205240-06	MF5WB0	1	100					brown	yellow	medium	rocks
1205240-06RE1	MF5WB0	1	100					brown	yellow	medium	rocks
1205240-07	MF5WA0	1	100					brown	yellow	medium	plant matter
1205240-08	MF5WA1	1	100					brown	yellow	medium	rocks and plant matter
1205240-09	MF5WA2	1	100					brown	yellow	medium	rocks and plant matter
1205240-10	MF5WA3	1	100					brown	yellow	medium	rocks and plant matter
1205240-11	MF5WA9	1	100					brown	yellow	medium	plant matter
1205240-11RE1	MF5WA9	1	100					brown	yellow	medium	plant matter
1205240-12	MF5WB1	1	100					brown	yellow	medium	rocks and plant matter
1205240-12RE1	MF5WB1	1	100					brown	yellow	medium	rocks and plant matter
1205240-13	MF5WB2	1	100					brown	yellow	medium	plant matter
1205240-14	MF5WB3	1	100					brown	yellow	medium	plant matter
1205240-15	MF5WB6	1	100					brown	yellow	medium	rocks and plant matter
1205240-16	MF5WB7	1	100					brown	yellow	medium	rocks
2052220-MS1	MF5WA8S	1	100	B1J0025	200	B1J0026	200	brown	yellow	medium	rocks
2052220-BS1	LCS01	1	100	B1J0097	500						
2052220-DUP1	MF5WA8D	1	100					brown	yellow	medium	rocks
2052220-DUP2	MF5WA8D	1	100					brown	yellow	medium	rocks
2052220-BLK1	PBS01	1	100								

LIMS ID#	Description	Vendor	Vendor Lot#
B1I0079	Nitric Acid, Concentrated	Fisher	1110120
B1I0080	Hydrogen Peroxide	Mallinkrodt	J28A05
B1J0025	CLPP-SPK-5	Inorganic Venture	B2-MEB263095
B1J0026	CLPP-SPK-1	Inorganic Venture	D2-MEB324145
B1J0085	Hydrochloric Acid - Neat	Mallinkrodt	4111060
B1J0097	BA-AES-CRQL-A	Inorganic Venture	E2-MEB368140
B2E0022	Nitric Acid - 1:1	Fisher	K03044
B9G0020	Distilled Water	In-House	NA

Block ID		1					
Temp. Start	Temp. Stop	95	95				
Time Start	Time Stop	1000	1430				

BGB — 06/01/2012

Perpared By — Date

Preparation Reviewed By — 6/6/12 — Date

PREPARATION BENCH SHEET

2052221

Bonner Analytical Testing

Analysis: ISM013 - ICPMS (TM)
Prepared: 06/01/2012 10:00

CASE: 42562
SDG: MF5WA4
Work Order 1205240

Matrix: Soil

Prepared using: METALS - 3050B

Lab Number	Sample ID	Initial (g)	Final (mL)	Spike ID	Spike Amount (uL)	Spike ID	Spike Amount (uL)	Color Before	Color After	Texture	Artifacts
1205240-01	MF5WA4	1	100					brown	colorless	medium	rocks
1205240-02	MF5WA5	1	100					brown	colorless	medium	rocks
1205240-03	MF5WA6	1	100					brown	colorless	medium	rocks
1205240-04	MF5WA7	1	100					brown	colorless	medium	plant matter
1205240-05	MF5WA8	1	100					brown	colorless	medium	rocks
1205240-06	MF5WB0	1	100					brown	colorless	medium	rocks
1205240-07	MF5WA0	1	100					brown	colorless	medium	plant matter
1205240-08	MF5WA1	1	100					brown	colorless	medium	rocks and plant matter
1205240-09	MF5WA2	1	100					brown	colorless	medium	rocks and plant matter
1205240-10	MF5WA3	1	100					brown	colorless	medium	rocks and plant matter
1205240-11	MF5WA9	1	100					brown	colorless	medium	plant matter
1205240-12	MF5WB1	1	100					brown	colorless	medium	rocks and plant matter
1205240-13	MF5WB2	1	100					brown	colorless	medium	plant matter
1205240-14	MF5WB3	1	100					brown	colorless	medium	plant matter
1205240-15	MF5WB6	1	100					brown	colorless	medium	rocks and plant matter
1205240-16	MF5WB7	1	100					brown	colorless	medium	rocks
2052221-MS1	MF5WA8S	1	100					brown	colorless	medium	rocks
2052221-BS1	LCS01	1	100								
2052221-DUP1	MF5WA8D	1	100					brown	colorless	medium	rocks
2052221-BLK1	PBS01	1	100								

LIMS ID#	Description	Vendor	Vendor Lot#
B1I0079	Nitric Acid, Concentrated	Fisher	1110120
B1I0080	Hydrogen Peroxide	Mallinkrodt	J28A05
B1J0094	ICP/MS - CLP-MS-SPK	Inorganic Venture	D2-MEB352099
B2A0070	ICP/MS - ISM - BAT-11	Inorganic Venture	F2-MEB407076
B2E0022	Nitric Acid - 1:1	Fisher	K03044
B9G0020	Distilled Water	In-House	NA

Block ID		1					
Temp. Start	Temp. Stop	95	96				
Time Start	Time Stop	10:00	14:30				

Comments:

BGB 06/01/2012

Perpared By Date

[signature] 6-6-12

Preparation Reviewed By Date

PREPARATION BENCH SHEET

2052222

Bonner Analytical Testing

Analysis: ISM013 - Mercury

Prepared: 06/05/2012 10:00

Case: 42562

Matrix: Soil

Prepared using: METALS - 7471B

Lab Number	Sample ID	Initial (g)	Final (mL)	Spike ID	Spike Amount (uL)	Spike ID	Spike Amount (uL)	Color Before	Color After	Texture	Artifacts
1205240-01	MF5WA4	0.5	100					brown	colorless	medium	rocks
1205240-02	MF5WA5	0.5	100					brown	colorless	medium	rocks
1205240-03	MF5WA6	0.5	100					brown	colorless	medium	rocks
1205240-04	MF5WA7	0.5	100					brown	colorless	medium	plant matter
1205240-05	MF5WA8	0.5	100					brown	colorless	medium	rocks
1205240-06	MF5WB0	0.5	100					brown	colorless	medium	rocks
1205240-07	MF5WA0	0.5	100					brown	colorless	medium	plant matter
1205240-08	MF5WA1	0.5	100					brown	colorless	medium	rocks and plant matter
1205240-09	MF5WA2	0.5	100					brown	colorless	medium	rocks and plant matter
1205240-10	MF5WA3	0.5	100					brown	colorless	medium	rocks and plant matter
1205240-11	MF5WA9	0.5	100					brown	colorless	medium	plant matter
1205240-12	MF5WB1	0.5	100					brown	colorless	medium	rocks and plant matter
1205240-13	MF5WB2	0.5	100					brown	colorless	medium	plant matter
1205240-14	MF5WB3	0.5	100					brown	colorless	medium	plant matter
1205240-15	MF5WB6	0.5	100					brown	colorless	medium	rocks and plant matter
1205240-16	MF5WB7	0.5	100					brown	colorless	medium	rocks
2052222-MS1	MF5WA8S	0.5	100	B0H0016	2500			brown	colorless	medium	rocks
2052222-DUP1	MF5WA8D	0.5	100					brown	colorless	medium	rocks
2052222-BLK1	PBS01	0.5	100								

Reagent ID	Concentration	Vendor	Lot Number
HCL	Neat	VWR	4111110
Stannous Chloride	NA	BATCO	B2E0159
HNO3	Neat	Fisher	1110120
HCL	2 %	BATCO	B2E0184
SCHS	NA	BATCO	BA-042612JMM-3
Aqua Regia	Neat	BATCO	B2E0150
Potassium Permanganate	5%	BATCO	B2E0160
DI Water	Neat	BATCO	NA

EPA ID	Std. Discription	WATER		SOIL	
		Spike V. (uL)	F.V. (mL)	Spike V. (uL)	F.V. (mL)
S0/ICB/CCB	Cal Blank/ICB/CCB	0	50	0	100
S0.2/CRI	Cal Std / CRI 0.2 ppb	100	50	200	100
S0.5	Cal Std 0.5 ppb	250	50	500	100
S1	Cal Std 1 ppb	500	50	1000	100
S2/CCV	Cal Std / CCV 2 ppb	1000	50	2000	100
S6	Cal Std 6 ppb	3000	50	6000	100
ICV	ICV 4.0 ppb	500	50	1000	100

These are the spike values used for calibration curves for Water or Soil.
See Matrix type to determine which to be used.

Block ID		2		2			
Temp. Start	Temp. Stop	97	97	97	97		
Time Start	Time Stop	10:00	10:02	10:30	11:00		

Comments:

BGB 06/05/2012 01:00

Perpared By Date

Michelle Crawford 6-6-12

Preparation Reviewed By Date

268

PREPARATION BENCH SHEET

2052305

Bonner Analytical Testing

Analysis: ISM013 - Cyanide

Prepared: 05/23/2012 14:46

Case: 42562

Matrix: Soil

ıred using: WETCHEM - Midi-distil

Lab Number	Sample ID	Initial (g)	Final (mL)	Spike ID	Spike Amount (uL)	Spike ID	Spike Amount (uL)	Color Before	Color After	Texture	Artifacts
1205240-01	MF5WA4	1	50					brown	colorless	medium	
1205240-02	MF5WA5	1	50					brown	colorless	medium	
1205240-03	MF5WA6	1	50					brown	colorless	medium	
1205240-04	MF5WA7	1	50					brown	colorless	medium	
1205240-05	MF5WA8	1	50					brown	colorless	medium	
1205240-06	MF5WB0	1	50					brown	colorless	medium	
1205240-07	MF5WA0	1	50					brown	colorless	medium	
1205240-08	MF5WA1	1	50					brown	colorless	medium	
1205240-09	MF5WA2	1	50					brown	colorless	medium	
1205240-10	MF5WA3	1	50					brown	colorless	medium	
1205240-11	MF5WA9	1	50					brown	colorless	medium	
1205240-12	MF5WB1	1	50					brown	colorless	medium	
1205240-13	MF5WB2	1	50					brown	colorless	medium	
1205240-14	MF5WB3	1	50					brown	colorless	medium	
1205240-15	MF5WB6	1	50					brown	colorless	medium	
1205240-16	MF5WB7	1	50					brown	colorless	medium	
2052305-SRM1	ICV01	1	50					colorless	colorless		
2052305-MS1	MF5WA8S	1	50	B1C0010	500			brown	colorless	medium	
2052305-DUP1	MF5WA8D	1	50					brown	colorless	medium	
2052305-BLK1	PBS01	1	50					colorless	colorless		

Reagent ID	Concentration	Vendor	Lot Number
Sulfuric Acid	18.0 N	BATCO	BA040912KLP3
Sulfamic Acid	NA	BATCO	NA
Sodium Hydroxide	0.25 N	BATCO	BA051712MLC-1
Magnesium Chloride	2.5 M	BATCO	BA050212MLC-2
Lead Carbonate	Neat	NA	NA
Ascorbic Acid	Neat	NA	NA
DI Water	Neat	BATCO	NA

EPA ID	Std. Discription	Spike V. (uL)	F.V. (mL)
S0/ICB/CCB	Cal Blank/ICB/CCB	0	50
S5	Cal Std 5 ppb	250	50
S10	Cal Std 10 ppb	500	50
S50	Cal Std 50 ppb	2500	50
S100	Cal Std 100 ppb	5000	50
S250/CCV	Cal Std/CCV 250 ppb	12500	50
S500	Cal Std 500 ppb	25000	50

Block ID		02		03		04	
Temp. Start	Temp. Stop	123	125	125	125	125	125
Time Start	Time Stop	1515	1645	1515	1645	1515	1645

Comments:

MLF 05/23/2012 14:46 [signature] 6/6/12

Perpared By Date Preparation Reviewed By Date

Bonner Analytical Testing Company

Total Solids

SDG No: MF5WA4 Case No.: 42562 Batch No.: 2060512

Date Began: 05/22/12 Time Began: 18:35 Temperature Began: 102°C

Date Finished: 05/23/12 Time Finished 8:45 Temperature Finished: 103°C

EPA Sample ID	MF5WA8		MF5WA0	MF5WA1	MF5WA2	MF5WA3	MF5WA4	MF5WA5	MF5WA6	MF5WA7	MF5WA9
Laboratory ID	1205240-05		1205240-07	1205240-08	1205240-09	1205240-10	1205240-01	1205240-02	1205240-03	1205240-04	1205240-11
Pan ID	1	1	2	3	4	5	6	7	8	9	10
Pan Weight	0.98	1.04	0.98	1.01	1.01	0.99	1.02	1.02	1.01	0.99	1.00
Pan + Sample (Initial)	6.31	8.49	7.66	6.52	7.78	8.21	6.31	6.32	8.84	7.81	9.84
Sample Weight (initial)	5.33	7.45	6.68	5.51	6.77	7.22	5.29	5.30	7.83	6.82	8.84
Pan + Sample (Final)	5.03	6.71	6.01	5.29	6.34	6.54	4.91	5.15	7.19	6.22	7.51
Sample Weight (Final)	4.05	5.67	5.03	4.28	5.33	5.55	3.89	4.13	6.18	5.23	6.51
Total Solids	76.0%	76.1%	75.3%	77.7%	78.7%	76.9%	73.5%	77.9%	78.9%	76.7%	73.6%
% RSD	0.16%										

Sample ID	MF5WB0	MF5WB1	MF5WB2	MF5WB3	MF5WB6	MF5WB7				
Laboratory ID	1205240-06	12058240-12	1205240-13	1205240-14	1205240-15	1205240-16				
Pan ID	11	12	13	14	15	16	17	18	19	20
Pan Weight	1.03	1.03	1.03	1.02	1.01	1.03				
Pan + Sample (Initial)	7.15	8.37	8.63	7.31	6.08	7.45				
Sample Weight (initial)	6.12	7.34	7.60	6.29	5.07	6.42	0.00	0.00	0.00	0.00
Pan + Sample (Final)	5.69	7.00	6.75	5.77	4.82	5.86				
Sample Weight (Final)	4.66	5.97	5.72	4.75	3.81	4.83	0.00	0.00	0.00	0.00
Total Solids	76.1%	81.3%	75.3%	75.5%	75.1%	75.2%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Weighed By MLC Date: 5/22/2012

Analyst: MLC Date: 5/23/2012

Supervisor: BGB Date: 5/23/2012

~~271~~
270
05/17/12

FedEx Express NEW Package US Airbill

FedEx Tracking Number 8758 5477 6922

Form ID No. 0200 **Recipient's Copy**

1 From

Date 5/16/12 [redacted]

Sender's Name Craig Watts Phone 512 731-2604

Company TCEQ

Address 12100 Park 35 Circle MC-136 Dept./Floor/Suite/Room

City Austin State TX ZIP 78753

2 Your Internal Billing Reference 12-10479/4441/70635

3 To

Recipient's Name Patricia Aiken Phone 601 264-2854

Company Bonner Analytical Testing Co.

Address 2703 Oak Grove Rd Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Hattiesburg State MS ZIP 39402

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

6°C

8758 5477 6922

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- [ ] NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?

One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg
- [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. [ ]

- [x] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

[redacted]

Total Packages	Total Weight	Total Declared Value†	Credit Card Auth.
1	44 lbs.	$ ____ .00	

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

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TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Signature [signature] Date 05/16/12

TNRCC-10058 (2/98)

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Signature [signature] Date 05/16/12

07/17/12

~~270~~ 271

FedEx Express NEW Package US Airbill

FedEx Tracking Number 8991 9781 6254

Form ID No. 0200

Recipient's Copy

1 From

Date 5/15/12 [redacted]

Sender's Name Craig Watts Phone 512 731-2604

Company TCEQ

Address 12100 Park 35 Circle MC 136

Dept./Floor/Suite/Room

City Austin State TX ZIP 78753

2 Your Internal Billing Reference 12-10479/4441/70635

3 To

Recipient's Name Patricia Aiken Phone ~~201~~ 601 264-2854

Company Bonner Analytical Testing Co.

Address 2703 Oak Grove Rd

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Hattiesburg State MS ZIP 39402

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

5-16-12 0908 5C

8991 9781 6254

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- [ ] NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

7 Does this shipment contain dangerous goods? One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg
- [ ] Cargo Aircraft Only

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. [ ]

- [x] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

[redacted]

Total Packages	Total Weight	Total Declared Value†	Credit Card Auth.
1	51 lbs.	$ 100 .00	

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

61

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TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Signature [signature] Date 5/15/12

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Signature [signature] Date 5/15/12

WORK ORDER

Printed: 5/21/2012 3:03:43PM

272

1205240

Bonner Analytical Testing

Client: Environmental Protection Agency, Region 6
Project: 42562

Project Manager: Chris Bonner
Project Number: 42562

Report To:
Environmental Protection Agency, Region 6
Ray Flores
10625 Fallstone Road
Houston, TC 77099-4303
Phone: (281) 983-2139
Fax: (281) 983-2248

Invoice To:
Environmental Protection Agency, Region 6
Ray Flores
10625 Fallstone Road
Houston, TC 77099-4303
Phone :(281) 983-2139
Fax: (281) 983-2248

Date Due: 06/05/2012 15:00 (14 day TAT)

Received By: Trisha Aiken
Date Received: 05/16/2012 09:08

Logged In By: Trisha Aiken
Date Logged In: 05/21/2012 14:48

Samples Received at: 5°C

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confin	No		

Analysis	Due	TAT	Expires	Comments
1205240-01 MF5WA4 [Soil] Sampled 05/08/2012 15:15 Central				
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	05/29/2012 15:15	
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	05/29/2012 15:15	
ISM013 - Mercury	06/05/2012 12:00	14	05/29/2012 15:15	
Solids, Dry Weight	06/05/2012 12:00	14	05/29/2012 15:15	
ISM013 - Cyanide	06/05/2012 12:00	14	05/20/2012 15:15	
1205240-02 MF5WA5 [Soil] Sampled 05/15/2012 15:50 Central				
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/05/2012 15:50	
ISM013 - Mercury	06/05/2012 12:00	14	06/05/2012 15:50	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/05/2012 15:50	
ISM013 - Cyanide	06/05/2012 12:00	14	05/27/2012 15:50	
Solids, Dry Weight	06/05/2012 12:00	14	06/05/2012 15:50	
1205240-03 MF5WA6 [Soil] Sampled 05/15/2012 16:26 Central				
ISM013 - Cyanide	06/05/2012 12:00	14	05/27/2012 16:26	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/05/2012 16:26	
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/05/2012 16:26	
ISM013 - Mercury	06/05/2012 12:00	14	06/05/2012 16:26	
Solids, Dry Weight	06/05/2012 12:00	14	06/05/2012 16:26	

WORK ORDER

Printed: 5/21/2012 3:03:43PM

273

1205240

Bonner Analytical Testing

Client: Environmental Protection Agency, Region 6
Project: 42562
Project Manager: Chris Bonner
Project Number: 42562

Analysis	Due	TAT	Expires	Comments
1205240-04 MF5WA7 [Soil] Sampled 05/15/2012 17:05 Central				
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/05/2012 17:05	
ISM013 - Mercury	06/05/2012 12:00	14	06/05/2012 17:05	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/05/2012 17:05	
Solids, Dry Weight	06/05/2012 12:00	14	06/05/2012 17:05	
ISM013 - Cyanide	06/05/2012 12:00	14	05/27/2012 17:05	
1205240-05 MF5WA8 [Soil] Sampled 05/15/2012 17:25 Central				
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/05/2012 17:25	
ISM013 - Mercury	06/05/2012 12:00	14	06/05/2012 17:25	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/05/2012 17:25	
ISM013 - Cyanide	06/05/2012 12:00	14	05/27/2012 17:25	
Solids, Dry Weight	06/05/2012 12:00	14	06/05/2012 17:25	
1205240-06 MF5WB0 [Soil] Sampled 05/15/2012 18:00 Central				
ISM013 - Cyanide	06/05/2012 12:00	14	05/27/2012 18:00	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/05/2012 18:00	
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/05/2012 18:00	
ISM013 - Mercury	06/05/2012 12:00	14	06/05/2012 18:00	
Solids, Dry Weight	06/05/2012 12:00	14	06/05/2012 18:00	
1205240-07 MF5WA0 [Soil] Sampled 05/16/2012 09:15 Central				
ISM013 - Mercury	06/05/2012 12:00	14	06/06/2012 09:15	
Solids, Dry Weight	06/05/2012 12:00	14	06/06/2012 09:15	
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/06/2012 09:15	
ISM013 - Cyanide	06/05/2012 12:00	14	05/28/2012 09:15	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/06/2012 09:15	
1205240-08 MF5WA1 [Soil] Sampled 05/16/2012 09:30 Central				
Solids, Dry Weight	06/05/2012 12:00	14	06/06/2012 09:30	
ISM013 - Cyanide	06/05/2012 12:00	14	05/28/2012 09:30	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/06/2012 09:30	
ISM013 - Mercury	06/05/2012 12:00	14	06/06/2012 09:30	
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/06/2012 09:30	

WORK ORDER

Printed: 5/21/2012 3:03:43PM

274

1205240

Bonner Analytical Testing

Client: Environmental Protection Agency, Region 6
Project: 42562
Project Manager: Chris Bonner
Project Number: 42562

Analysis	Due	TAT	Expires	Comments
1205240-09 MF5WA2 [Soil] Sampled 05/16/2012 10:13 Central				
ISM013 - Mercury	06/05/2012 12:00	14	06/06/2012 10:13	
ISM013 - Cyanide	06/05/2012 12:00	14	05/28/2012 10:13	
Solids, Dry Weight	06/05/2012 12:00	14	06/06/2012 10:13	
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/06/2012 10:13	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/06/2012 10:13	
1205240-10 MF5WA3 [Soil] Sampled 05/16/2012 10:36 Central				
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/06/2012 10:36	
ISM013 - Mercury	06/05/2012 12:00	14	06/06/2012 10:36	
ISM013 - Cyanide	06/05/2012 12:00	14	05/28/2012 10:36	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/06/2012 10:36	
Solids, Dry Weight	06/05/2012 12:00	14	06/06/2012 10:36	
1205240-11 MF5WA9 [Soil] Sampled 05/16/2012 11:45 Central				
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/06/2012 11:45	
Solids, Dry Weight	06/05/2012 12:00	14	06/06/2012 11:45	
ISM013 - Mercury	06/05/2012 12:00	14	06/06/2012 11:45	
ISM013 - Cyanide	06/05/2012 12:00	14	05/28/2012 11:45	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/06/2012 11:45	
1205240-12 MF5WB1 [Soil] Sampled 05/16/2012 12:12 Central				
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/06/2012 12:12	
ISM013 - Cyanide	06/05/2012 12:00	14	05/28/2012 12:12	
ISM013 - Mercury	06/05/2012 12:00	14	06/06/2012 12:12	
Solids, Dry Weight	06/05/2012 12:00	14	06/06/2012 12:12	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/06/2012 12:12	
1205240-13 MF5WB2 [Soil] Sampled 05/16/2012 12:55 Central				
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/06/2012 12:55	
ISM013 - Cyanide	06/05/2012 12:00	14	05/28/2012 12:55	
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/06/2012 12:55	
Solids, Dry Weight	06/05/2012 12:00	14	06/06/2012 12:55	
ISM013 - Mercury	06/05/2012 12:00	14	06/06/2012 12:55	

WORK ORDER

Printed: 5/21/2012 3:03:43PM

275

1205240

Bonner Analytical Testing

Client: Environmental Protection Agency, Region 6
Project: 42562
Project Manager: Chris Bonner
Project Number: 42562

Analysis	Due	TAT	Expires	Comments
1205240-14 MF5WB3 [Soil] Sampled 05/16/2012 13:13 Central				
Solids, Dry Weight	06/05/2012 12:00	14	06/06/2012 13:13	
ISM013 - Cyanide	06/05/2012 12:00	14	05/28/2012 13:13	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/06/2012 13:13	
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/06/2012 13:13	
ISM013 - Mercury	06/05/2012 12:00	14	06/06/2012 13:13	
1205240-15 MF5WB6 [Soil] Sampled 05/16/2012 14:45 Central				
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/06/2012 14:45	
ISM013 - Mercury	06/05/2012 12:00	14	06/06/2012 14:45	
Solids, Dry Weight	06/05/2012 12:00	14	06/06/2012 14:45	
ISM013 - Cyanide	06/05/2012 12:00	14	05/28/2012 14:45	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/06/2012 14:45	
1205240-16 MF5WB7 [Soil] Sampled 05/16/2012 15:00 Central				
Solids, Dry Weight	06/05/2012 12:00	14	06/06/2012 15:00	
ISM013 - Cyanide	06/05/2012 12:00	14	05/28/2012 15:00	
ISM013 - ICP-AES (5-10)	06/05/2012 12:00	14	06/06/2012 15:00	
ISM013 - ICPMS (TM)	06/05/2012 12:00	14	06/06/2012 15:00	
ISM013 - Mercury	06/05/2012 12:00	14	06/06/2012 15:00	

M Hornsby
Reviewed By

6-4-12
Date

Bonner Analytical Testing Company

SAMPLE RECEIPT FORM

23062

Client: CLP

Date: 5-16-12

Sample Type: Grab Composite

SDG#: MF5WA4

Case#: 42562

Matrix: SW (stormwater) GW (groundwater) WW (wastewater) DW (drinkingwater) SL (sludge)

SO (soil) AS (asbestos) PE (petroleum) other _____

1) Does this project fall under NPDES, RCRA, CLP, Litigation or other EPA guidelines?	NA	YES	NO
2) Did Cooler come with airbill/sticker? Circle carrier: UPS, FedEx, other:_____ If YES, enter airbill number here: 8991 9781 6254	NA	YES	NO
3) Are custody seals intact? Custody Seal#: N/A Custody Seal#: N/A	NA	YES	NO
4) Are all bottles sealed in separate plastic bags?	NA	YES	NO
5) Are samples requiring no headspace, headspace free?	NA	YES	NO
6) Packing Material: Bubblewrap, peanuts, vermiculite, ice, other:_____		YES	NO
7) Are chains of custody filled out properly? (ink, signed, dates, QC listed, etc.)		YES	NO
8) Are all bottle labels complete and agree with COC? (ID, time, date, preservation)		YES	NO
9) Were all bottles received intact?		YES	NO
10) Were correct containers used for the tests indicated? Who's: BATCO/Client		YES	NO
11) Was a sufficient aliquot of sample sent for tests indicated?		YES	NO
12) Are samples within holding times for requested analysis?		YES	NO
13) Sample Preservation?			
A) If samples were collected within 6 hours of receipt, has chilling begun?	NA	YES	NO
B) If samples were received beyond 6 hours of collection:			
1) Is there a temperature blank?	NA	YES	NO
2) Temperature 5°C			
C) Were correct preservatives added to sample/s?	NA	YES	NO

14) Describe "NO" items for the above if # 1) response is NA or YES

Soil

15) Is there a Corrective Action and/or Client Contact form attached? YES NO

Signature: Patricia Ark

Rev No. 1.4
Date: 07/15/05

Bonner Analytical Testing Company

23063

SAMPLE RECEIPT FORM

Client: CLP Date: 5-17-12

Sample Type: Grab Composite SDG#: MF5WA4 Case#: 42562

Matrix: SW (stormwater) GW (groundwater) WW (wastewater) DW (drinkingwater) SL (sludge)

SO (soil) AS (asbestos) PE (petroleum) other _____

1) Does this project fall under NPDES, RCRA, CLP, Litigation or other EPA guidelines?	NA	YES	NO
2) Did Cooler come with airbill/sticker? Circle carrier: UPS, FedEx, other: _____ If YES, enter airbill number here: 8758 5477 6922	NA	YES	NO
3) Are custody seals intact? Custody Seal#: N/A Custody Seal#: N/A	NA	YES	NO
4) Are all bottles sealed in separate plastic bags?	NA	YES	NO
5) Are samples requiring no headspace, headspace free?	NA	YES	NO
6) Packing Material: Bubblewrap, peanuts, vermiculite, ice, other: _____		YES	NO
7) Are chains of custody filled out properly? (ink, signed, dates, QC listed, etc.)		YES	NO
8) Are all bottle labels complete and agree with COC? (ID, time, date, preservation)		YES	NO
9) Were all bottles received intact?		YES	NO
10) Were correct containers used for the tests indicated? Who's: BATCO/Client		YES	NO
11) Was a sufficient aliquot of sample sent for tests indicated?		YES	NO
12) Are samples within holding times for requested analysis?		YES	NO
13) Sample Preservation?			
A) If samples were collected within 6 hours of receipt, has chilling begun?	NA	YES	NO
B) If samples were received beyond 6 hours of collection:			
1) Is there a temperature blank?	NA	YES	NO
2) Temperature 6 °C			
C) Were correct preservatives added to sample/s?	NA	YES	NO

14) Describe "NO" items for the above if # 1) response is NA or YES

Soil

15) Is there a Corrective Action and/or Client Contact form attached? YES NO

Signature: Patricia Ack

Rev No. 1.4
Date: 07/15/05

Bonner Analytical Testing Co.
Inhouse Chain of Custody
for Samples

SDG Number: MF5WA4 **Case No.:** 42562

Work Order Number: 1205240

1) MF5WA0	7) MF5WA6	13) MF5WB2	19)
2) MF5WA1	8) MF5WA7	14) MF5WB3	20)
3) MF5WA2	9) MF5WA8	15) MF5WB6	21)
4) MF5WA3	10) MF5WA9	16) MF5WB7	22)
5) MF5WA4	11) MF5WB0	17)	23)
6) MF5WA5	12) MF5WB1	18)	24)

Sample to be used for QC: MF5WA8

Name	Signature	Date &Time	Purpose
P. Aik	P. Aik	5-17-12 1410 5-16-12 1151	S
Michelle Cranford	Michelle Cranford	5-22-12 1609	W
Michelle Cranford	Michelle Cranford	5-22-12 1725	S
Michelle Cranford	Michelle Cranford	5-23-12 1418	C N
Michelle Cranford	Michelle Cranford	5-23-12 1446	S

Purpose: S - Storage; W - Weigh; DP - Disposal; TS - Total Solids; P - Pour

Bonner Analytical Testing Co.
Digestate Chain of Custody
for Samples

SDG Number: MF5WA4 **Case No.:** 42562

Work Order Number: 1205240

1) MF5WA0	7) MF5WA6	13) MF5WB2	19)
2) MF5WA1	8) MF5WA7	14) MF5WB3	20)
3) MF5WA2	9) MF5WA8	15) MF5WB6	21)
4) MF5WA3	10) MF5WA9	16) MF5WB7	22)
5) MF5WA4	11) MF5WB0	17)	23)
6) MF5WA5	12) MF5WB1	18)	24)

Sample to be used for QC: MF5WA8

Name	Signature	Date &Time	Purpose
Michelle Cranford	Michelle Cranford	5-22-12 1609	W
Michelle Cranford	Michelle Cranford	5-22-12 1725	S
Brandon Bak	BAB	6-1-12 1000	D
Max Bonner	[illegible]	6-1-12 @ 1500	S
Max Bonner	[illegible]	6/3/12 @ 1000	A
Max Bonner	[illegible]	6-3-12 @ 1600	S
Max Bonner	[illegible]	6/5/12 @ 1200	A
Max Bonner	[illegible]	6/5/12 @ 1800	S

Purpose: S - Storage; A - Analyze; DP - Disposal; D - Digest; W - Weigh; P-Pour

Bonner Analytical Testing Co.
Digestate Chain of Custody
for Samples

SDG Number: MF5WA4 **Case No.:** 42562

Work Order Number: 1205240

1) MF5WA0	7) MF5WA6	13) MF5WB2	19)
2) MF5WA1	8) MF5WA7	14) MF5WB3	20)
3) MF5WA2	9) MF5WA8	15) MF5WB6	21)
4) MF5WA3	10) MF5WA9	16) MF5WB7	22)
5) MF5WA4	11) MF5WB0	17)	23)
6) MF5WA5	12) MF5WB1	18)	24)

Sample to be used for QC: MF5WA8

Name	Signature	Date &Time	Purpose
Michelle Crawford	Michelle Crawford	5-22-12 1609	W
Michelle Crawford	Michelle Crawford	5-22-12 1725	S
Brandon Park	BPB	6-1-12 @ 10:00	D
Brandon Park	BPB	6-1-12 @ 16:00	S
Brandon Park	BPB	6-5-12 @ 0830	A
Brandon Park	BPB	6-6-12 @ 0830	S

Purpose: S - Storage; A - Analyze; DP - Disposal; D - Digest; W - Weigh; P-Pour

Bonner Analytical Testing Co.
Digestate Chain of Custody
for Samples

SDG Number: MF5WA4 **Case No.:** 42562

Work Order Number: 1205240

1) MF5WA0	7) MF5WA6	13) MF5WB2	19)
2) MF5WA1	8) MF5WA7	14) MF5WB3	20)
3) MF5WA2	9) MF5WA8	15) MF5WB6	21)
4) MF5WA3	10) MF5WA9	16) MF5WB7	22)
5) MF5WA4	11) MF5WB0	17)	23)
6) MF5WA5	12) MF5WB1	18)	24)

Sample to be used for QC: MF5WA8

Name	Signature	Date &Time	Purpose
Michelle Cranford	Michelle Cranford	5-22-12 1609	W
Michelle Cranford	Michelle Cranford	5-22-12 1725	S
Brandon G Bell	BGB	6-5-12 @ 1000	D/A
Brandon G Bell	BGB	6-5-12 @ 1700	DP

Purpose: S - Storage; A - Analyze; DP - Disposal; D - Digest; W - Weigh; P-Pour

Bonner Analytical Testing Co.
Digestate Chain of Custody
for Samples

SDG Number: MF5WA4 **Case No.:** 42562

Work Order Number: 1205240

1) MF5WA0	7) MF5WA6	13) MF5WB2	19)
2) MF5WA1	8) MF5WA7	14) MF5WB3	20)
3) MF5WA2	9) MF5WA8	15) MF5WB6	21)
4) MF5WA3	10) MF5WA9	16) MF5WB7	22)
5) MF5WA4	11) MF5WB0	17)	23)
6) MF5WA5	12) MF5WB1	18)	24)

Sample to be used for QC: MF5WA8

Name	Signature	Date &Time	Purpose
Michelle Cranford	Michelle Cranford	5-23-12 1418	W
Michelle Cranford	Michelle Cranford	5-23-12 1446	D
Michelle Cranford	Michelle Cranford	5-23-12 1700	S
Michelle Cranford	Michelle Cranford	5-24-12 824	A
Michelle Cranford	Michelle Cranford	5-24-12 1400	DP

Purpose: S - Storage; A - Analyze; DP - Disposal; D - Digest; W - Weigh; P-Pour

Metals Weekly Digestion Block Temperature Verification

Date	5/15/12		5/23/12		6/5/12			
Initials	MSB²		MSB²		MSB²			
	Temp Read Out	**Thermometer**	**Temp Read Out**	**Thermometer**	**Temp Read Out**	**Thermometer**	**Temp Read Out**	**Thermometer**
ICP Digester 01	94	94	96	95	96	96		
ICP Digester 02	113.5	95	113.5	95	113.4	94		
ICP Digester 03	96	96	97	97	95	94		
ICP Digester 04	NOT IN USE	NOT IN USE	NOT IN USE	NOT IN USE	NOT IN USE	NOT IN USE		
Reviewed/Date:	[signature]	6/15/12	[signature]	6/23/12	[signature]	6/5/12		

Date								
Initials								
	Temp Read Out	**Thermometer**	**Temp Read Out**	**Thermometer**	**Temp Read Out**	**Thermometer**	**Temp Read Out**	**Thermometer**
ICP Digester 01								
ICP Digester 02								
ICP Digester 03								
ICP Digester 04								
Reviewed/Date:								

If temperature does not agree with the certified thermometer than either recalibrate the digestion block or use the thermometer to regulate the digestion block and record the thermometer temperature on digestion logs.

A copy of this page must accompany each SDG digested during the week.

Date of certified thermometer: _____
****Cannot exceed 1 year**

REAGENTS PREPARATION LOG

ICP Reference Standards

Lims ID: B1L0026 Batch: BA-122711MSB2

Preparation Date: 12/27/2011 Prepared By: Max Bonner

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled Water	Neat	~ 5 gallons	BATCO	NA	NA	NA
Indium (Chloride)	Neat	1.97 g	Sigma-Aldrich	41796T7	8/7/2010	NA
Scandium	1,000	190 mL	SCP Science	S110725007	10/17/2011	3/8/2012
Yttrium	1,000	46.9 mL	SCP Science	S110719029	10/17/2011	3/8/112

Instrument: Thermo - iCAP

Final Volume : 5 gallons

Concentration: In @ 50 ppm; Y @ 2.5 ppm; Sc @ 10 ppm

Used For: Internal Standards for ICP

Expiration Date 1 year

Comments

Reviewed By: 1/9/12
Supervisor/Date

Rev 1.0
02/04/02
CMB

285

~~125~~

REAGENTS PREPARATION LOG

Acidified Water

Lims ID: B2D0074

Prepared By: Max Bonner

Preparation Date: 3/23/2012

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled Water	Neat	18800 mL	BATCO	NA	NA	NA
Nitric Acid	Neat	200 mL	Fischer	1110120	3/5/2011	10/1/2013
Hyrdochloric Acid	Neat	1000 mL	Fisher	4110080	6/4/2010	NA

Balance ID: NA

Instrument: ICP-AES (Thermo iCAP)

Final Volume: 20 Liters

Concentration: 1%HNO_3/5%HCl

Used For: Preparation of standards and controls

Expiration Date: 1 year

Comments:

Reviewed By: 3/24/12

Supervisor/Date

286

Bonner Analytical Testing Company
ICP-AES
ISM Standard Concentrations

Analyte	Wavelength (nm)	Stock Std. (ppm)	S1 (ppm)	S2 (ppm)	S3 (ppm)	S4/CCV (ppm)	S5 (ppm)	Stock Std. (ppm)	S6 (ppm)	S7 (ppm)	Stock Std. (ppm)	S8 (ppm)	S9 (ppm)	ICV	ICSA	ICSAB	MS Water	MS Soil (mg/kg)	CRQL
Ag	328.0	20	0.005	0.10	0.20	1.0	2.0							501	(0)	206	50	10	10
Al	396.1	400	0.10	2.00	4.00	20.0	40.0	10000	200	400				2521	244100	241100	2000		200
As	198.0	40	0.010	0.20	0.40	2.0	4.0				80		8	999	(0)	101	40	8	10
Ba	455.4	320	0.080	1.60	3.20	16.0	32.0							497	(2)	495	2000	400	200
Be	313.1	8	0.0020	0.04	0.08	0.4	0.8							495	(0)	475	50	10	5
B	249.7	40	0.010	0.20	0.40	2.0	4.0							999	(0)	101	40	8	10
Ca	318.1	1000	0.25	5.00	10.00	50.0	100.0	10000	250	500				10026	234900	231100			5000
Cd	214.4	20	0.0050	0.10	0.20	1.0	2.0							496	(0)	940	50	10	5
Co	228.6	50	0.013	0.25	0.50	2.5	5.0							499	(4)	461	500	100	50
Cr	267.7	40	0.010	0.20	0.40	2.0	4.0				400	12.5	25	490	43	511	200	40	10
Cu	324.7	100	0.025	0.50	1.00	5.0	10.0				250	20	40	492	(23)	548	250	50	25
Fe	238.2	400	0.100	2.00	4.00	20.0	40.0	10000	175	350	10000	200	400	5082	95600	94800	1000		100
K	766.4	1000	0.250	5.00	10.00	50.0	100.0	10000	150	300				10021					5000
Li	670.7	20	0.005	0.10	0.20	1.0	2.0							500	(0)	(0)	200		15
Mg	279.0	1000	0.25	5.00	10.00	50.0	100.0	10000	250	500				6074	247500	251100			5000
Mn	257.6	60	0.015	0.30	0.60	3.0	6.0				250	12.5	25	499	19	502	500	100	15
Na	589.5	1000	0.250	5.00	10.00	50 0	100.0	10000	125	250				10097	(0)				5000
Ni	231.6	80	0.020	0.40	0.80	4.0	8.0							503	(21)	984	500	100	40
Pb	220.3	40	0.010	0.20	0.40	2.0	4.0	1000	12.5	25	100	5	10	1002	10	61	20	4	10
Sb	206.8	80	0.020	0.40	0.80	4.0	8.0							994	(0)	589	100	20	60
Se	196.0	70	0.018	0.35	0.70	3.5	7.0							1029	(0)	53	50	10	35
Sn	189.9	40	0.10	2.00	4.00	20.0	40.0							999	(0)	(0)	100	100	7
Tl	190.8	80	0.020	0.40	0.80	4.0	8.0							1028	(0)	103	50	10	25
V	292.4	80	0.020	0.40	0.80	4.0	8.0							501	(0)	494	500	100	50
Zn	206.2	160	0.040	0.80	1.60	8.0	16.0				250	12.5	25	1025	(28)	1028	500	100	60

Units are in µg/L unless otherwise noted.

() Indicates analyte values that are less than the CRQL, and the value is to be used as a set point for the ± CRQL accptance criteria calculation.

STANDARD & QC LOG (ISM)

for 6/2/12 ICP 01/02/03 Daily Analysis

Description	EPA ID	Amount Spiked	Volume Made	Manufacturer	Lot#	Date Lot Expires	LIMS ID
Initial Calibration High	S9		50 mL	Inorganic Ventures	NA	72 hours	B2D0083
BAT-10		5.0 mL	Composite	Inorganic Ventures	F2-MEB414049	Apr-13	
Fe 10000 ppm		2.0 mL		Inorganic Ventures	E2-FE03139	Feb-13	
Initial Calibration High	S8		50 mL	Inorganic Ventures	NA	72 hours	B2D0082
BAT-10		2.5 mL	Composite	Inorganic Ventures	F2-MEB414049	Apr-13	
Fe 10000 ppm		1.0 mL		Inorganic Ventures	E2-FE03139	Feb-13	
Initial Calibration High	S7		50 mL	Inorganic Ventures	NA	72 hours	B2D0081
BAT-9		5.0 mL	Composite	Inorganic Ventures	F2-MEB414049	Apr-13	
Pb 1000 ppm		1.25 mL		SPC Science	S110714001	Mar-13	
Initial Calibration High	S6		50 mL	Inorganic Ventures	NA	72 hours	B2D0080
BAT-9		2.5 mL	Composite	Inorganic Ventures	F2-MEB414049	Apr-13	
Pb 1000 ppm		0.625		SPC Science	S110714001	Mar-13	
Initial Calibration High	S5		50 mL	Inorganic Ventures	NA	72 hours	B2D0079
BAT-5		5.0 mL	Composite	Inorganic Ventures	F2-MEB408014	Feb-13	
BAT-4		5.0 mL		Inorganic Ventures	F2-MEB408013	Feb-13	
Initial Calibration Mid	S4/CCV		50 mL	Inorganic Ventures	NA	72 hours	B2D0078
BAT-5		2.5 mL	Composite	Inorganic Ventures	F2-MEB408014	Feb-13	
BAT-4		2.5 mL		Inorganic Ventures	F2-MEB408013	Feb-13	
Initial Calibration Low	S3		50 mL	Inorganic Ventures	NA	72 hours	B2D0077
AT-5		0.5 mL	Composite	Inorganic Ventures	F2-MEB408014	Feb-13	
BAT-4		0.5 mL		Inorganic Ventures	F2-MEB408013	Feb-13	
Initial Calibration Low	S2	5.0 mL	50 mL	Inorganic Ventures	From S4	72 hours	B2D0076
Initial Calibration Low	S1	2.5 mL	50 mL	Inorganic Ventures	From S2	72 hours	B2D0075
Initial Calibration Blank	S0	NA	50 mL	In-house	NA	72 hours	B2D0074
Initial Calibration Verification	ICV	NA	50 mL	Inorganic Ventures	NA	72 hours	B9C0001
ICV-1		5.0mL	Composite	EPA REF Material	0307	NA	
Initial Calibration Blank	ICB	NA	50 mL	In-house	NA	72 hours	
Interelement Check Standard A	ICSA	25 mL	250 mL	EPA REF Material	1206	2 wk	B810015
Interelement Check Standard AB	ICSAB	NA	250 mL	EPA REF Material	NA	2 wk	B810016
ICS PART A		25 mL	Composite	EPA REF Material	1206	NA	
ICS PART B		25 mL		EPA REF Material	0203	NA	
Continuing Calibration Blank	CCB	NA	50 mL	In-house	NA	72 hours	
Matrix Spike	MS	NA	100 mL(soil) 50 mL (water)	Inorganic Ventures	NA	NA	
CLPP-SPK-1		200uL (soil) 50uL (water)	Composite		D2-MEB324145	Nov-12	B1J0026
CLPP-SPK-5					B2-MEB263095	Nov-12	B1J0025
Lab Control Sample	LCS	NA	100 mL(soil) 50 mL (water)	Inorganic Ventures	NA	NA	
BA-AES-CRQL-A		500uL (soil) 250uL (water)	Composite		E2-MEB368140	Dec-12	B1J0097

*Dilutions of standards are made with the same Acid Water as the S0, CCB, & ICB.

Prepared By: _____ Analyst

Reviewed By: _____ Supervisor/Date 10/4/12

BONNER ANALYTICAL TESTING CO.

CLP STANDARDS CONCENTRATION - ISM01.3

Element	Scrql	S10	S50	S500	S1000	S5000	S125000	ICV	LCS (ug/L)	LCS (mg/kg)	ICSA	ICSAB	CCV	MS (ug/L)	MS (mg/kg)
Al	20	260	1300	13000	26000		125000	504	40		(100000)	(100000)	13000		
Ag	1	1.3	6.5	65	130			100	2	1	(0)	18	65	50	5
As	1	10	50	500	1000			200	2	1	(0.1)	19	500	40	4
Ba		10	50	500	1000	5000		99	20	10	(1.2)	22	2500	2000	200
Be	1	10	50	500	1000			99	2	1	(0)	19	500	50	5
Ca	500	250	1250	12500	25000		125000	2005	1000		(100000)	(100000)	12500		
Cd	1	10	50	500	1000			99	2	1	(0.7)	20	500	50	5
Co	1	10	50	500	1000			100	2	1	1	20	500	500	50
Cr	2	10	50	500	1000			98	4	2	21	40	500	200	20
Cu	2	10	50	500	1000			98	4	2	8	25	500	250	25
Fe	200	250	1250	12500	25000		125000	1016	400		(100000)	(100000)	12500		
Mg	500	250	1250	12500	25000		125000	1215	1000		(100000)	(100000)	12500		
Mn	1	10	50	500	1000			100	2	1	7	27	500	500	50
Na	500	250	1250	12500	25000		125000	2019	1000		(100000)	(100000)	12500		
Ni	1	10	50	500	1000			101	2	1	6	24	500	500	50
Pb	1	10	50	500	1000			200	2	1	4	25	500	20	2
K	500	250	1250	12500	25000		125000	2004	1000		(100000)	(100000)	12500		
Sb	2	10	50	500	1000			199	4	2	(1.5)	22	500	100	10
Se	5	10	50	500	1000			206	10	5	(0.3)	19	500	100	10
Tl	1	10	50	500	1000			206	2	1	(0)	21	500	50	5
V	5	10	50	500	1000			100	10	5	(0.5)	19	500	500	50
Zn	2	10	50	500	1000	5000		205	4	2	11	29	2500	500	50

Units are ug/L unless noted otherwise
( ) Indicates analyte values that are less than the crql and the value is to be used as a set point for the +/-2 times the crql acceptance criteria calculations.

ICPMS01 Reference Standard

Lims ID: B2E0026

Preparation Date: 5/4/2012 Prepared By: Brandon G. Beck

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled Water	Neat	19780 mL	BATCO	NA	NA	NA
Nitric Acid	Neat	200 mL	Fisher	1110120	4/15/2011	12/1/2013
6020ISS	10	20.0 mL	Inorganic Ventures	E2-MEB398073	5/4/2012	6/1/2013
^{6}Lithium	1,000	1.20 mL	Inorganic Ventures	F2-LI02140	5/4/2012	6/1/2013
Scandium	1,000	0.30 mL	Inorganic Ventures	E2-SC02093	5/4/2012	6/1/2013
Indium	1,000	0.20 mL	Inorganic Ventures	E2-IN01081	5/4/2012	6/1/2013

Balance ID: NA

Instrument: ICPMS01

Final Volume : 20 Liter

Concentration: Bi, Ho, Rh, Tb, Y 10ppb/^{6}Li 70ppb/Sc 25ppb/In 20ppb in 1%HNO_3

Used For: Internal Standards for ICP-MS

Expiration Date 6/1/2013

Comments:

Concentration of internal standard elements should be adjusted to keep the CPS approx. 100,000 - 300,000.

Reviewed By: 5/4/12
Supervisor/Date

REAGENTS PREPARATION LOG

1% HNO_3

Lims ID: B2E0029

Preparation Date: 5/4/2012

Prepared By: Brandon G. Beck

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled H2O	Neat	19800 mL	BATCO	NA	NA	NA
Nitric Acid	Neat	200 mL	Fischer	1110120	4/15/2011	12/1/2013

Balance ID: NA

Instrument: ICPMS01

Final Volume : 5 Gallons

Concentration: 1% HNO_3

Used For: ICV, ICSA. ICSAB,TUNE, Soil Samples

Expiration Date 12 months after preparation date

Comments

Reviewed By: 5/4/12
Supervisor/Date

291 2

REAGENTS PREPARATION LOG

2% HNO_3

Lims ID:B2C0101 Batch: BA-032312BGB

Preparation Date: 3/23/2012 Prepared By: Brandon G. Beck

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled H2O	Neat	9800 mL	BATCO	NA	NA	NA
Nitric Acid	Neat	200 mL	Fisher	1110120	NA	NA

Balance ID: NA

Instrument: ICPMS01

Final Volume : 10 Liters

Concentration: 2% HNO_3

Used For: ICP-MS Rinse

Expiration Date 12 months after preparation date

Comments

Reviewed By: 03/29/12
Supervisor/Date

292 22

REAGENTS PREPARATION LOG

Acidified Water

Preparation Date: 01/17/12 Prepared By: Brandon Beck Batch No.: B2A0073

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled H2O	Neat	19700 mL	BATCO	NA	NA	NA
Nitric Acid	Neat	200 mL	Fisher	073370	4/15/11	NA
Hydrochloric Acid	Neat	100 mL	Fisher	4111080	8/16/11	NA

Instrument: ICPMS01

Final Volume : 20 Liters

Concentration: 1%HNO_3/0.5%HCL

Used For: Preparation of standards and controls

Expiration Date 1year after preparation date

Comments

Reviewed By: 1/17/12
Reviewer/Date

Bonner Analytical Testing Co.

Instrument: ICPMS01
Serial No: X0494

293 ~~39~~

for 5-30-12 ICPMS01 Daily Analysis

Description	Stock Std Conc.	EPA ID	Amount Spiked	Volume Made	Manufacturer	Lot#	Date Lot Expires	LIMs ID
BAT-11	50ppm Ca,K,Mg,Na 20ppm Fe - 2ppm Al 1ppm Ba - 0.5ppmSe,V 0.2ppm Cr,Cu,Sb,Zn 0.1ppm Ag,As,Be,Cd, Co,Mn,Ni,Pb,Tl.				Inorganic Ventures	F2-MEB407076	Feb-13	B2A0070
BAISM-MIX1	50ppm Al,As, Ba,Be,Cd,Co,Cr, Cu,,Mn,Ni,Pb, Sb,Se,Tl,V,Zn. 6.5ppm Ag				SCP Science	S120416007	Apr-13	B2E0079
BAISM-MIX2	1000ppm Ba, Mn, Zn				Inorganic Ventures	E2-MEB395062	Nov-12	B1J0073
BONNER-1	10000 ppmAl, Ca, Fe, K, Mg, Na				Inorganic Ventures	E2-MEB395063	Nov-12	B1J0072
BONNER-1	10000 ppmAl, Ca, Fe, K, Mg, Na	S125000	0.625 mL	50 mL	Inorganic Ventures	E2-MEB395063	Nov-12	B1J0075
BAISM-MIX2	1000ppm Ba, Mn, Zn	S5000	0.25 mL	50 mL	Inorganic Ventures	E2-MEB395062	Nov-12	B1J0081
BAISM-MIX1	Comp	S1000 / S25000	1.0 mL	50 mL	SCP Science	S120416007	2 Week	B2E0080
BONNER-1			0.125 mL		Inorganic Ventures	E2-MEB395063		
BAISM-MIX1	Comp	S500	25 mL	50 mL	NA	S1000/25000	2 Week	B2E0081
BAISM-MIX1	Comp	S50	2.5 mL	50 mL	NA	S1000/25000	2 Week	B2E0082
BAISM-MIX1	Comp	S10	0.5 mL	50 mL	NA	S1000/25000	2 Week	B2E0083
BAT-11	50ppm Ca,K,Mg,Na 20ppm Fe - 2ppm Al 1ppm Ba - 0.5ppmSe,V 0.2ppm Cr,Cu,Sb,Zn 0.1ppm Ag,As,Be,Cd, Co,Mn,Ni,Pb,Tl.	Scrql	0.05 mL	50 mL	Inorganic Ventures	F2-MEB407076	Feb-13	B2E0084
Calibration Blank		S0	NA	NA	In-house	NA	12 months	B7J0004
ICV-1		ICV	1.0 mL	50 mL	EPA	ICV-1 (0307)	2 weeks	B0I0075
Initial Calibration Blank		ICB	NA	NA	In-house	B0I0065	12 months	
Interelement Check Standard A		ICSA	5.0 mL	50 mL	EPA	ICS-MS (0803)	1 month	B9E0003
Interelement Check Standard AB		ICSAB	5.0 mL of A 5.0 mL of B	50 mL	EPA	ICS-MS (0803)	1 month	B9E0004
Continuing Calibration Verification		CCV					2 weeks	
BAISM-MIX1	Comp		0.5 mL	50 mL	SCP Science	S120416007	2 Week	B2E0079
Ba (1000 ppm)			0.100 mL		SCP Science	S110221022		B1L0177
Zn (1000 ppm)			0.100 mL		Inorganic Ventures	D2-ZN02065		B1F0036
Continuing Calibration Blank		CCB	NA	NA	In-house	B0I0065	12 months	
200.8TS	10ppm Be,Co, In,Mg,Pb	TUNE	0.5 mL	50 mL	Inorganic Ventures	B2-MEB236091	Nov-12	
IV-STOCK-12 (Tune A)	10ppm Ba,Bi,Ce,Co,In,Li, Ni,Pb,U		0.05 mL	50 mL	Inorganic Ventures	E2-MEB372150	Nov-12	
BONNER-CAL-5 (Tune D)	10ppm each		0.5 mL	50 mL	Inorganic Ventures	E2-MEB395065	Nov-12	
CLP-MS-SPK	200ppm Al, Ba 50ppm Co, Mn, Ni, V, Zn 25ppm Cu 20ppm Cr 10ppm Sb, Se 5ppm Ag, Be, Cd, Tl 4 ppm As 2ppm Pb	Matrix Spike	0.5 mL	50	Inorganic Ventures	D2-MEB352099	Nov-12	B1J0094
BAT-11	50ppm Ca,K,Mg,Na 20ppm Fe - 2ppm Al 1ppm Ba - 0.5ppmSe,V 0.2ppm Cr,Cu,Sb,Zn 0.1ppm Ag,As,Be,Cd, Co,Mn,Ni,Pb,Tl.	LCS	0.1 mL	50 mL	Inorganic Ventures	F2-MEB407076	Feb-13	B2A0070

* Dilutions of calibration stds, CCV, & 200.8TS are made with the same acid water as the S0, ICB & CCB
* Dilutions of ICV, ICSA, ICSAB, Tune A, & Tune D are made with 1% HNO3
* Scrql, S10000 & S125000 are good for 2 Weeks

Prepared By: _____ Analyst/Date

Reviewed By: _____ 5-30-12 Name/Date

MERCURY STANDARDS LOG

Analyst: [illegible] Date: 6-5-12

Description	EPA ID	Amount Spiked	Volume Made	Manufacturer/ ID Number	Initial Conc.	Lot#	Date Lot Expires	Final Conc.	LIMS ID
Initial Calibration Working Standard	S-WS-A	0.25 mL	25 mL	Inorganic Ventures E2-HG02085	1000 ppm	BA-060512BGB-2	Sep-12	10 ppm	B2E0089
Initial Calibration Working Standard	S-WS-B	1.0 mL	100 mL	S-SW-A	10 ppm	BA-060512BGB-1	2 weeks	100 ppb	B2E0090
Initial Calibration Blank	S0	NA	100 mL	In-house	NA	NA	1 Day	NA	B7K0018
Initial Calibration	S0.2	0.2 mL	100 mL	S-SW-B	100 ppb	NA	1 Day	0.2 ppb	B0I0017
Initial Calibration	S0.5	0.5 mL	100 mL	S-SW-B	100 ppb	NA	1 Day	0.5 ppb	B0I0015
Initial Calibration	S1	1.0 mL	100 mL	S-SW-B	100 ppb	NA	1 Day	1.0 ppb	B0I0016
Initial Calibration	S2	2.0 mL	100 mL	S-SW-B	100 ppb	NA	1 Day	2.0 ppb	B0I0018
Initial Calibration	S6	6.0 mL	100 mL	S-SW-B	100 ppb	NA	1 Day	6.0 ppb	B0I0019
Initial Calibration Verification	ICV	1.0 mL	100 mL	EPA ICV 0508	400 ppb	NA	NA	4.0 ppb	B9H0162
Initial Calibration Blank	ICB	NA	100 mL	In-house	NA	NA	1 Day	NA	NA
Continuing Calibration Verification	CCV	2.0 mL	100 mL	B9H0160	100 ppb	NA	1 Day	2.0 ppb	B0I0018
Continuing Calibration Blank	CCB	NA	100 mL	In-house	NA	NA	1 Day	NA	NA

Reviewed By: [illegible] Date: 6-6-12

HG Weekly Digestion Block Temperature Verification

Date	4/24/12		5/7/2012		5/15/2012		5/24/12	
Initials	JAM		PBB		PBB		PBB	
	Temp Read Out	Thermometer	Temp Read Out	Thermometer	Temp Read Out	Thermometer	Temp Read Out	Thermometer
HG Digester 01	55	96			N/A	N/A	N/A	N/A
HG Digester 02	53	95	53	96	65	97	62	96
HG Digester 03					N/A	N/A	N/A	N/A
Reviewed/Date:	[illegible]		[illegible] 5-8-12		[illegible] 5/16/12		[illegible] 5-24-12	

Date	6-5-12							
Initials	PBB							
	Temp Read Out	Thermometer	Temp Read Out	Thermometer	Temp Read Out	Thermometer	Temp Read Out	Thermometer
HG Digester 01	N/A	N/A						
HG Digester 02	65	97						
HG Digester 03	N/A	N/A						
Reviewed/Date:	[illegible] 6-4-12							

If temperature does not agree with the certified thermometer than either recalibrate the digestion block or use the thermometer to regulate the digestion block and record the thermometer temperature on digestion logs.

A copy of this page must accompany each SDG digested during the week.

Date of certified thermometer: 7/8/11
**Cannot exceed 1 year

295

294 2

REAGENTS PREPARATION LOG

Potassium Permanganate Solution

Preparation Date: 5/30/2012 Prepared By: [signature] LIMs ID: B2E0160

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled Water	Neat	2000mL	BATCO	NA	NA	NA
Potassium Permanganate	Neat	100g	Fisher	113843	NA	6/30/13

Balance ID: Sartorius I

Instrument: Leeman Hydra Hg

Final Volume: 2L

Concentration: 5%

Used For: Mercury Prep.

Expiration Date 6 Months

Comments: 100 grams for 2000 mL Deionized Water

Reviewed By: [signature] 5-30-12
Supervisor/Date

Rev 1.1
2/9/2012
BGB

297

REAGENTS PREPARATION LOG

2% Hydrochloric Acid

Preparation Date: 5/22/12 Prepared By: [illegible] LIMs ID: B2E0184

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled Water	Neat	19600 mL	BATCO	NA	NA	NA
Hyrdochloric Acid	Neat	400 mL	Fisher	4111080	2-DEC	NA

Balance ID: N/A

Instrument: Leeman Hydra Hg

Final Volume : 20L

Concentration: 2%

Used For: Mercury Preparation

Expiration Date Prepare immediately before use

Comments

Reviewed By: [illegible] 5-29-12
Supervisor/Date

Rev 1.1
2/9/2012
BGB

REAGENTS PREPARATION LOG

Sodium Chloride Hydroxylamine Sulfate

000085

Preparation Date: 4/26/12 Prepared By: James McGlothlin Batch No.: BA- 042612JMM- 3

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled Water	Neat	2000.0 ml	BATCO	NA	NA	NA
Hydroxylamine Sulfate	Neat	240.00 g	Fisher	097120 A	1/20/11	NA
Sodium Chloride	Neat	240.00 g	Fisher	034102	10/19/11	NA

Balance ID Mettler TV

Instrument: Leeman Hydra HG

Final Volume : 2L

Concentration: 24%

Used For: Mercury Preparation

Expiration Date 6 months

Comments

Reviewed By: Michelle Crawford 4-26-12
Supervisor/Date

REAGENTS PREPARATION LOG

Stannous Chloride Solution

Preparation Date: 5/31/2012 Prepared By: Brandon G. Bk LIMs ID: B2E0159

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Distilled Water	Neat	900mL	BATCO	NA	NA	NA
Stannous Chloride	Neat	100.00g	fisher	112260	10/12/11	NA
Hydrochloric Acid	Neat	100mL	VWR	4111110	4/3/12	12/25/14

Balance ID: Mettler IV

Instrument: Leeman Hydra Hg

Final Volume: 1L

Concentration: NA

Used For: Mercury Prep.

Expiration Date 6 Months

Comments: 100 grams stannous chloride to final volume 1L 10% HCl

Reviewed By: [illegible] 5-31-12
Supervisor/Date

Rev 1.1
2/9/2012
BGB

300

~~34~~

STANDARDS LOG

for C052312 Astoria 01 / 02 Daily Analysis

Analyst: Michelle Crawford Date: 5-23-12

Description	EPA ID	Amount Spiked	Volume Made	Manufacturer	Initial Conc.	Lot#	Date Lot Expires	Final Conc.
Initial Calibration Working Standard	S-WS-A	1.0 mL	100 mL	Inorganic Ventures	1000 ppm	02-MEB ~~351081~~ E 391088	Feb-12	10 ppm
Initial Calibration Working Standard	S-WS-B	10.0 mL	100 mL	S-WS-A	10 ppm	NA	24 hours	1 ppm
Initial Calibration Blank	S0	NA	50 mL	In-house	NA	BA-051712 MLC-1	NA	NA
Initial Calibration	S5	0.25 mL	50 mL	S-WS-B	1 ppm	NA	24 hours	5.0 ppb
Initial Calibration	S10	0.50 mL	50 mL	S-WS-B	1 ppm	NA	24 hours	10 ppb
Initial Calibration	S50	2.5 mL	50 mL	S-WS-B	1 ppm	NA	24 hours	50 ppb
Initial Calibration	S100	5.0 mL	50 mL	S-WS-B	1 ppm	NA	24 hours	100 ppb
Initial Calibration	S250	12.5 mL	50 mL	S-WS-B	1 ppm	NA	24 hours	250 ppb
Initial Calibration	S500	25.0 mL	50 mL	S-WS-B	1 ppm	NA	24 hours	500 ppb
Initial Calibration Verification	ICV	0.5 mL	50 mL	EPA	9900 ppb	0400	NA	99 ppb
Initial Calibration Blank	ICB	NA	50 mL	In-house	NA	BA-051712 MLC-1	Weekly	NA
Continuing Calibration Verification	CCV	12.5 mL	50 mL	S-WS-B	1 ppm	NA	24 hours	250 ppb
Continuing Calibration Blank	CCB	NA	50 mL	In-house	NA	BA-051712 MLC-1	Weekly	NA
Laboratory Control Standard - Soil B9H0171	LCSS	1 gram	1 gram	EPA	9.6 mg/kg	LCS-CN (0899)	NA	9.6 mg/kg

Reviewed By: Supervisor Date: 5/29/12

Rev 1.1
02/24/10
CMB

CN Weekly Distiller Block Temperature Verification

Date	4/19/12		4-26-12		5-3-12		5-18-12	
Initials	KCP		MLC		MLC		MLC	
	Temp Read Out	**Thermometer**	**Temp Read Out**	**Thermometer**	**Temp Read Out**	**Thermometer**	**Temp Read Out**	**Thermometer**
CN Distiller 01	125	125	126	127	127	127	125	125
CN Distiller 02	124	125	125	125	124	123	123	123
CN Distiller 03	125	126	125	125	125	125	125	125
CN Distiller 04	125	125	125	125			125	126
CN Distiller 05	Not in use		—	—				
Reviewed/Date:	4/25/12		4/26/12		5/7/12		5/24/12	

Date	5-21-12							
Initials	MLC							
	Temp Read Out	**Thermometer**	**Temp Read Out**	**Thermometer**	**Temp Read Out**	**Thermometer**	**Temp Read Out**	**Thermometer**
CN Distiller 01	125	125						
CN Distiller 02	125	125						
CN Distiller 03	125	127						
CN Distiller 04	125	126						
CN Distiller 05								
Reviewed/Date:	5/24/12							

If temperature does not agree with the certified thermometer than either recalibrate the digestion block or use the thermometer to regulate the digestion block and record the thermometer temperature on digestion logs.

A copy of this page must accompany each SDG digested during the week.

Date of certified thermometer: 7/8/11
**Cannot exceed 1 year

Revision 1
12/12/11 MLC

302 6

REAGENTS PREPARATION LOG

0.25N Sodium Hydroxide Solution

LIMS B2E0172

Preparation Date: 5-17-12 Prepared By: Michelle Crawford Batch No.: BA-051712MLC-1

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Deionized Water	Neat	9000mL	BATCO	NA	NA	NA
Sodium Hydroxide	Neat	90.00g	Fisher	115786	2-27-12	6-30-13

Balance ID: Mettler IV

Instrument: CN01/CN02 & Distillation

Final Volume: 9L

Concentration: 0.25N

Used For: Cyanide Distillation & Development

Expiration Date: NA

Comments: 10 grams to 1 Liter Filter.

Reviewed By: 5/24/12
Supervisor/Date

303 ~~13~~

REAGENTS PREPARATION LOG

1.25N Sodium Hydroxide Solution

LIMS B2E0173

Preparation Date: 5-17-12 Prepared By: Michelle Crawford Batch No.: BA-051712MLC-2

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Deionized Water	Neat	100mL	BATCO	NA	NA	NA
Sodium Hydroxide	Neat	5.00g	Fisher	115786	2-27-12	6-30-13

Balance ID: Mettler IV

Instrument: CN01 / CN02 & Distillation

Final Volume: 100 mL

Concentration: 1.25 N

Used For: Standards Preparation

Expiration Date: NA

Comments: 5.0 grams to 100 mL = 1.25N.

Reviewed By: [signature] 5/24/12
Supervisor/Date

304 14

REAGENTS PREPARATION LOG

18N Sulfuric Acid Solution

Preparation Date: 4/9/12 Prepared By: Kurt Perron Batch No.: BA- 040912 KP.3

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Deionized Water	Neat	1000 ml.	BATCO	NA	NA	NA
Sulfuric Acid	Neat	1000 ml.	Mallinckrodt	509F01	4/15/11	

Balance ID: NA

Instrument: Distillation

Final Volume: 2L

Concentration: 18 Normal / 50%

Used For: Cyanide Distillation

Expiration Date: 6 Months

Comments: ***Add 500 mL Acid to 500 mL Water***

Reviewed By: 4/16/12

Supervisor/Date

305 28

REAGENTS PREPARATION LOG

Chloramine-T Solution

LIMS B2E0177

Preparation Date: 5-24-12 Prepared By: Michelle Cranford Batch No.: BA-052412 MLC-1

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Deionized Water	Neat	100 mL	BATCO	NA	NA	NA
Chloramine	Neat	0.40 g	Aldrich	13031CD	10-5-05	6-30-13

Balance ID: Sartorius 1

Instrument: CN01/CN02

Final Volume: 100 mL

Concentration: 0.40%

Used For: Cyanide Development

Expiration Date NA

Comments: 0.4 grams to 100mL

Reviewed By: 5/29/12
Supervisor/Date

306 37

REAGENTS PREPARATION LOG

Magnesium Chloride Solution

Preparation Date: 5-7-12 Prepared By: Michelle Crawford Batch No.: BA-050212MLC-2

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Deionized Water	Neat	980mL	BATCO	NA	NA	NA
Magnesium Chloride - 6 H20	Neat	500.00g	Fisher	103009	9-30-10	11-30-10

Balance ID:

Instrument: Distillation

Final Volume:

Concentration: NA

Used For: Cyanide Distillation

Expiration Date: 3 Months

Comments: Add 500 grams to 980 mLs of DI Water.

Reviewed By: 5/7/12
Supervisor/Date

307 41

REAGENTS PREPARATION LOG

Phosphate Buffer

LIMS B2E0179

Preparation Date: 5-18-12 Prepared By: Michelle Crawford Batch No.: BA-051812MLC-2

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Deionized Water	Neat	500mL	BATCO	NA	NA	NA
Sodium Phosphate	Neat	69.00g	Fisher	101168	9-2-10	6-30-12
Brig-35	30%	3 mL	Astoria Pacific	240702	NA	6-30-12

Balance ID: Sartorios 1

Instrument: CN01 /CN02

Final Volume: 503 mL

Concentration: NA

Used For: Cyanide Development

Expiration Date 3 Months

Comments: Add 69 g. to 500 mL DI H2O. Filter with 0.45 Nylon then add 3 ml Brij-35

Reviewed By: 5/09/12
Supervisor/Date

308 45

REAGENTS PREPARATION LOG

Pyridine-barbituric Acid Solution

LIMS 82E0180

Preparation Date: 5-18-12 Prepared By: Michelle Crawford Batch No.: BA-051812MLG-3

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Deionized Water	Neat	455 mL	BATCO	NA	NA	NA
Barbituric Acid	Neat	7.50g	Fisher	085272A	NA	6-30-13
Pyridine	Neat	37.5mL	Fisher	K050619	1/23/12 ~~7-15-11~~ MLC	1-23-14 ~~6-30-13~~ MLC
Hydrochloric Acid	Neat	7.5mL	Fisher	411.1080	12-7-11	12-7-13

Balance ID: Satorious 1

Instrument: CN01 / CN02

Final Volume: 500 mL

Concentration: NA

Used For: Cyanide Development

Expiration Date: 1 Week

Comments: Dissolve 7.5g Barbituric to minimal DI water. Add 37.5 ml Pyridine then 7.5 ml HCl Dilute to 500 mLs. Filter.

Reviewed By: 5/24/12
Supervisor/Date

309 ~~50~~

REAGENTS PREPARATION LOG

Start Up Solution

LIMS B2C0182

Preparation Date: 5-18-12 Prepared By: Michelle Crawford Batch No.: BA-051812MCC-4

Reagents	Conc. mg/L	Amount	Supplier	Lot Number	Received Date	Expiration Date
Deionized Water	Neat	500mL	BATCO	NA	NA	NA
Brij - 35	30%	3mL	Astoria Pacific	240702	NA	6-30-3

Balance ID: NA

Instrument: CN01 / CN02

Final Volume : 503 mL

Concentration: NA

Used For: Development

Expiration Date 1 Month

Comments Add 3 mLs Brij-35 to 500 ml DI Water

Reviewed By: 5/29/12
Supervisor/Date

Bonner Analytical Testing Co. Metals Analytical Run Log 310

File Name: MF5WA4 SDG No.: MF5WA4 Standards Prep Date: 6/2/12

Instrument: iCAPP02 Case No.: 42562 Standards Log Page No.: 114

Analyst: MSB2

Lab ID	EPA Sample #	Date&Time	Elements circled for S0-S# were used throughout this run unless otherwised noted. Al, As, Sb, Ba, Be, Ca, Cd, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn
BF20514-CAL1	S0	6/3/12 11:35	
BF20514-CAL2	S	6/3/12 11:39	
BF20514-CAL3	S	6/3/12 11:43	
BF20514-CAL4	S	6/3/12 11:47	
BF20514-CAL5	S	6/3/12 11:51	
BF20514-CAL6	S	6/3/12 11:56	
BF20514-CAL7	S	6/3/12 12:00	
BF20514-CAL8	S	6/3/12 12:04	Al, Ca, Mg, K & Na
BF20514-CAL9	S	6/3/12 12:09	Fe only
BF20514-CALA	S	6/3/12 12:13	NA
BF20514-ICV1	ICV01	6/3/12 12:18	
BF20514-ICB1	ICB01	6/3/12 12:22	
BF20514-IFA1	ICSA01	6/3/12 12:26	
BF20514-IFB1	ICSAB01	6/3/12 12:30	
BF20514-CCV1	CCV01	6/3/12 12:35	
BF20514-CCB1	CCB01	6/3/12 12:39	
BF20514-CCV2	CCV02	6/3/12 12:52	
BF20514-CCB2	CCB02	6/3/12 12:56	
BF20514-CCV3	CCV03	6/3/12 13:18	
BF20514-CCB3	CCB03	6/3/12 13:22	
2052220-BLK1	PBS01	6/3/12 13:27	
2052220-BS1	LCS01	6/3/12 13:31	
1205240-01	MF5WA4	6/3/12 13:35	Minus Ca
1205240-02	MF5WA5	6/3/12 13:40	
1205240-03	MF5WA6	6/3/12 13:44	Minus Ca
1205240-04	MF5WA7	6/3/12 13:48	Minus Fe
1205240-05	MF5WA8	6/3/12 13:52	
2052220-MS1	MF5WA8S	6/3/12 13:56	
2052220-DUP1	MF5WA8D	6/3/12 14:01	Minus Ca
BF20514-SRD1	MF5WA8L	6/3/12 14:05	
1205240-06	MF5WB0	6/3/12 14:09	Minus Ca
1205240-07	MF5WA0	6/3/12 14:14	
1205240-08	MF5WA1	6/3/12 14:18	
1205240-09	MF5WA2	6/3/12 14:22	
1205240-10	MF5WA3	6/3/12 14:27	
1205240-11	MF5WA9	6/3/12 14:31	Minus Ca
1205240-12	MF5WB1	6/3/12 14:35	"
1205240-13	MF5WB2	6/3/12 14:40	
1205240-14	MF5WB3	6/3/12 14:44	
1205240-15	MF5WB6	6/3/12 14:48	

File Name: MF5WA4 SDG No.: MF5WA4 Standards Prep Date: 6/2/12

Instrument: iCAPP02 Case No.: 42562 Standards Log Page No.: 114

Analyst: MSB2

Lab ID	EPA Sample #	Date&Time	Elements circled for S0-S# were used throughout this run unless otherwised noted.
			Al, As, Sb, Ba, Be, Ca, Cd, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn
1205240-16	MF5WB7	6/3/12 14:52	↓
BF20514-CCV4	CCV04	6/3/12 14:57	↓
BF20514-CCB4	CCB04	6/3/12 15:01	↓
1205240-01RE1	MF5WA4	6/3/12 15:05	Cu only
1205240-03RE1	MF5WA6	6/3/12 15:09	"
2052220-DUP2	~~MBA1D5D~~ MF5WA8	6/3/12 15:14	"
1205240-06RE1	MF5WB0	6/3/12 15:18	"
1205240-11RE1	MF5WA9	6/3/12 15:22	"
1205240-12RE1	MF5WB1	6/3/12 15:26	"
BF20514-CCV5	CCV05	6/3/12 15:31	↓
BF20514-CCB5	CCB05	6/3/12 15:35	↓

PKD 6/6/12

File Name: MF5WA4 SDG No.: MF5WA4 Standards Prep Date: 6/2/12

Instrument: iCAPP02 Case No.: 42562 Standards Log Page No.: 114

Analyst: MSB2

Lab ID	EPA Sample #	Date&Time	Elements circled for S0-S# were used throughout this run unless otherwised noted. Al, As, Sb, Ba, Be, Ca, Cd, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn
2052220-BS1	LCS01	6/3/12 13:31	
2052220-MS1	~~MF5WA28~~ 4/5	6/3/12 13:56	
BF20515-CAL1	S0	6/5/12 7:20	
BF20515-CAL2	S	6/5/12 7:24	
BF20515-CAL3	S	6/5/12 7:28	
BF20515-CAL4	S	6/5/12 7:32	
BF20515-CAL5	S	6/5/12 7:37	
BF20515-CAL6	S	6/5/12 7:41	
BF20515-CAL7	S	6/5/12 7:45	
BF20515-CAL8	S	6/5/12 7:49	NA
BF20515-CAL9	S	6/5/12 7:54	Fe only
BF20515-CALA	S	6/5/12 7:58	NA
BF20515-ICV1	ICV01	6/5/12 8:03	
BF20515-ICB1	ICB01	6/5/12 8:07	
BF20515-IFA1	ICSA01	6/5/12 8:11	
BF20515-IFB1	ICSAB01	6/5/12 8:16	
BF20515-CCV1	CCV01	6/5/12 8:20	
BF20515-CCB1	CCB01	6/5/12 8:24	
BF20515-CCV2	CCV02	6/5/12 9:37	
BF20515-CCB2	CCB02	6/5/12 9:42	
BF20515-CCV3	CCV03	6/5/12 9:54	
BF20515-CCB3	CCB03	6/5/12 9:59	
1205240-04RE1	MF5WA7	6/5/12 10:21	
BF20515-IBL1	ZZZZZZ	6/5/12 10:25	
BF20515-CCV4	CCV04	6/5/12 10:29	
BF20515-CCB4	CCB04	6/5/12 10:34	

Bonner Analytical Testing Co

Metals Analytical Run Log

313

File Name: M060512b.xls SDG No.: MF5WA4 Standards Prep Date: 5/30/12

Instrument: ICPMS01 Case No.: 42562 Standards Log Page No.: 35

Analyst: BGB

Lab ID	EPA Sample #	Date&Time	Elements circled for S0-S# were used throughout this run unless otherwised noted. Al, As, Sb, Ba, Be, Ca, Cd, Cr, Co, Cu, Fe, Pb, Mg, Mn, Ni, K, Se, Ag, Na, Tl, V, Zn	
BF20614-TUN1	TUNE01	6/5/12 22:46		
BF20614-CAL1	S	6/5/12 22:59		
BF20614-CAL3	S	6/5/12 23:03		
BF20614-CAL4	S	6/5/12 23:07		
BF20614-CAL5	S	6/5/12 23:11		
BF20614-CAL6	S	6/5/12 23:16		
BF20614-CAL7	S	6/5/12 23:20		
BF20614-CAL8	S	6/5/12 23:24	Ba & Mn only	
BF20614-ICV1	ICV01	6/5/12 23:28		
BF20614-ICB1	ICB01	6/5/12 23:32		
BF20614-IFA1	ICSA01	6/5/12 23:36		
BF20614-IFB1	ICSAB01	6/5/12 23:41		
BF20614-CCV1	CCV01	6/5/12 23:45		
BF20614-CCB1	CCB01	6/5/12 23:49		
2052221-BLK1	PBS01	6/5/12 23:53		
2052221-BS1	LCS01	6/5/12 23:57		
1205240-01	MF5WA4	6/6/12 0:01		
1205240-02	MF5WA5	6/6/12 0:05		
1205240-03	MF5WA6	6/6/12 0:10		
1205240-04	MF5WA7	6/6/12 0:14		
1205240-05	MF5WA8	6/6/12 0:18		
2052221-MS1	MF5WA8S	6/6/12 0:22		
2052221-DUP1	MF5WA8D	6/6/12 0:26		
BF20614-SRD1	MF5WA8L	6/6/12 0:30		
1205240-06	MF5WB0	6/6/12 0:34		
1205240-07	MF5WA0	6/6/12 0:39		
1205240-08	MF5WA1	6/6/12 0:43		
1205240-09	MF5WA2	6/6/12 0:47		
1205240-10	MF5WA3	6/6/12 0:51		
1205240-11	MF5WA9	6/6/12 0:55		
1205240-12	MF5WB1	6/6/12 0:59		
1205240-13	MF5WB2	6/6/12 1:03		
1205240-14	MF5WB3	6/6/12 1:07		
1205240-15	MF5WB6	6/6/12 1:12		
1205240-16	MF5WB7	6/6/12 1:16		
BF20614-CCV2	CCV02	6/6/12 1:20		
BF20614-CCB2	CCB02	6/6/12 1:24		

File Name: H060512A SDG No.: MF5WA4 Standards Prep Date: 6/5/12

Instrument: LM01 Case No.: 42562 Standards Log Page No.: 6

Analyst: BGB

Lab ID	EPA Sample #	Date&Time	Elements circled for S0-S# were used throughout this run unless otherwised noted. Hg
BF20615-CAL1	S0	6/5/12 12:17	
BF20615-CAL2	S0.2	6/5/12 12:19	
BF20615-CAL3	S0.5	6/5/12 12:21	
BF20615-CAL4	S1	6/5/12 12:23	
BF20615-CAL5	S2	6/5/12 12:25	
BF20615-CAL6	S6	6/5/12 12:27	
BF20615-ICV1	ICV01	6/5/12 12:29	
BF20615-ICB1	ICB01	6/5/12 12:31	
BF20615-CCV1	CCV01	6/5/12 12:33	
BF20615-CCB1	CCB01	6/5/12 12:36	
2052222-BLK1	PBS01	6/5/12 12:38	
1205240-01	MF5WA4	6/5/12 12:40	
BF20615-CCV2	CCV02	6/5/12 12:42	
BF20615-CCB2	CCB02	6/5/12 12:44	
1205240-02	MF5WA5	6/5/12 12:47	
1205240-03	MF5WA6	6/5/12 12:49	
1205240-04	MF5WA7	6/5/12 12:52	
1205240-05	MF5WA8	6/5/12 12:54	
2052222-DUP1	MF5WA8D	6/5/12 12:56	
2052222-MS1	MF5WA8S	6/5/12 12:58	
1205240-06	MF5WB0	6/5/12 13:00	
1205240-07	MF5WA0	6/5/12 13:02	
1205240-08	MF5WA1	6/5/12 13:04	
1205240-09	MF5WA2	6/5/12 13:06	
1205240-10	MF5WA3	6/5/12 13:08	
1205240-11	MF5WA9	6/5/12 13:10	
1205240-12	MF5WB1	6/5/12 13:13	
1205240-13	MF5WB2	6/5/12 13:15	
1205240-14	MF5WB3	6/5/12 13:17	
1205240-15	MF5WB6	6/5/12 13:19	
1205240-16	MF5WB7	6/5/12 13:21	
BF20615-CCV3	CCV03	6/5/12 13:23	
BF20615-CCB3	CCB03	6/5/12 13:25	

File Name: C052412A SDG No.: MF5WA4 Standards Prep Date: 5-23-12

Instrument: CN02 Case No.: 42662 Standards Log Page No.: 54

Analyst: MLF

Lab ID	EPA Sample #	Date&Time	Elements circled for S0-S# were used throughout this run unless otherwised noted. CN
BE22906-CAL1	S0	5/24/12 8:31	
BE22906-CAL2	S5	5/24/12 8:32	None Reported
BE22906-CAL3	S10	5/24/12 8:34	
BE22906-CAL4	S50	5/24/12 8:35	
BE22906-CAL5	S100	5/24/12 8:37	
BE22906-CAL6	S250	5/24/12 8:38	
BE22906-CAL7	S500	5/24/12 8:39	
BE22906-ICV1	ICV01	5/24/12 8:41	
BE22906-ICB1	ICB01	5/24/12 8:42	
BE22906-CCV1	CCV01	5/24/12 8:44	
BE22906-CCB1	CCB01	5/24/12 8:45	
BE22906-RES1	BASELINE01	5/24/12 8:46	
2052305-BLK1	PBS01	5/24/12 8:48	
1205240-01	MF5WA4	5/24/12 8:49	
1205240-02	MF5WA5	5/24/12 8:51	
1205240-03	MF5WA6	5/24/12 8:52	
1205240-04	MF5WA7	5/24/12 8:54	
1205240-05	MF5WA8	5/24/12 8:55	
2052305-DUP1	MF5WA8D	5/24/12 8:56	
2052305-MS1	MF5WA8S	5/24/12 8:58	
1205240-06	MF5WB0	5/24/12 8:59	
1205240-07	MF5WA0	5/24/12 9:01	
1205240-08	MF5WA1	5/24/12 9:02	
1205240-09	MF5WA2	5/24/12 9:03	
1205240-10	MF5WA3	5/24/12 9:05	
1205240-11	MF5WA9	5/24/12 9:06	
1205240-12	MF5WB1	5/24/12 9:08	
1205240-13	MF5WB2	5/24/12 9:09	
1205240-14	MF5WB3	5/24/12 9:11	
1205240-15	MF5WB6	5/24/12 9:12	
1205240-16	MF5WB7	5/24/12 9:13	
BE22906-CCV2	CCV02	5/24/12 9:15	
BE22906-CCB2	CCB02	5/24/12 9:16	
BE22906-RES2	BASELINE02	5/24/12 9:18	

Bonner Analytical Testing Company

316
6450

Corrective Action

Topic: C N MFSWAY 42562 Date: 5-24-12

Nature of Problem: SS not used in calibration curve

Action Requested:

1 New Sample Requested: YES NO

2 Retest or Reanalysis Necessary: ~~YES~~ MLC NO

3 Other Action:

Submitter

Signature: [signature] Date: 5-24-12

Corrective Action Taken: none taken

Was the problem resolved: YES NO

Responder

Signature: [signature] Date: 5/24/12

Possible Missing Items from Region Packet:

Case# 42562

SDG MF5WA4

~~316~~
317

07/07/12

Trisha Aiken

From: Trisha Aiken <taiken@batco.com>
Sent: Monday, May 21, 2012 3:44 PM
To: Jackie Blackmon (jblackmon3@fedcsc.com)
Cc: maxbonner@batco.com
Subject: Region 6 | Case 42562 | Sample Receipt

Jackie;

On May 16, 2012 we received 6 soils via FedEx air bill 8991 9781 6254. Custody seals were present and intact. Cooler temp was determined to be 5°C. Samples were in condition with no discrepancies.

Thanks;
Tricia Aiken
Bonner Analytical

~~317~~
318

Trisha Aiken

07/17/12

From: Trisha Aiken <taiken@batco.com>
Sent: Monday, May 21, 2012 3:47 PM
To: Jackie Blackmon (jblackmon3@fedcsc.com)
Cc: maxbonner@batco.com
Subject: Region 6 | Case 42562 | Sample Receipt

Jackie;

On May 17, 2012 we received 10 soils via FedEx air bill 8758 5477 6922. Custody seals were present and intact. Cooler temp was determined to be 6°C. Samples were in condition with no discrepancies.

Thanks;
Tricia Aiken
Bonner Analytical

270

FedEx Express NEW Package US Airbill

FedEx Tracking Number 8758 5477 6922

Form ID No. 0200 **Recipient's Copy**

1 From

Date 5/16/12

Sender's Name Craig Wells Phone 512 731-2604

Company TCEQ

Address 12100 Park 35 Circle MC-136 Dept./Floor/Suite/Room

City Austin State TX ZIP 78753

2 Your Internal Billing Reference 12-10479/4441/70635

3 To

Recipient's Name Patricia Aiken Phone 601 264-2854

Company Bonner Analytical Testing Co.

Address 2703 Oak Grove Rd Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Hattiesburg State MS ZIP 39402

☐ HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

☐ HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

6°C f. Ack 5-17-12

4 Express Package Service * To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. For packages over 150 lbs., use the new FedEx Express Freight US Airbill.

Next Business Day

☐ FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

☐ NEW FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.

☐ FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐ FedEx Box ☐ FedEx Tube ☒ Other

6 Special Handling and Delivery Signature Options

☐ SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.

☐ No Signature Required — Package may be left without obtaining a signature for delivery.

☐ Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*

☐ Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?

One box must be checked.

☒ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

☐ Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip. Acct. No. ☐

☒ Sender Acct. No. in Section 1 will be billed. ☐ Recipient ☐ Third Party ☐ Credit Card ☐ Cash/Check

Total Packages 1 Total Weight 44 lbs. Total Declared Value† $ ____ .00 Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

8758 5477 6922

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TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Signature [signature] Date 05/16/12

TNRCC 10058 (2/98)

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Signature [signature] Date 05/16/12

271

FedEx Express **NEW** Package US Airbill

FedEx Tracking Number 8991 9781 6254

Form ID No. 0200

1 From

Date 5/15/12

Sender's Name Craig Watts Phone 512 731-2604

Company TCEQ

Address 12100 Park 35 Circle MC-150

Dept./Floor/Suite/Room

City Austin State TX ZIP 78753

2 Your Internal Billing Reference 12-10479/4441/70635

3 To

Recipient's Name Patricia Aiken Phone ~~201~~ 601 264-2654

Company Bonner Analytical Testing Co.

Address 2703 Oak Grove Rd

We cannot deliver to P.O. boxes or P.O. ZIP codes. Dept./Floor/Suite/Room

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Hattiesburg State MS ZIP 39402

HOLD Weekday FedEx location address REQUIRED. NOT available for FedEx First Overnight.

HOLD Saturday FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

5-16-12 0908 5C

8991 9781 6254

4 Express Package Service • To most locations.

NOTE: Service order has changed. Please select carefully.

Packages up to 150 lbs. *For packages over 150 lbs., use the new FedEx Express Freight US Airbill.*

Next Business Day

- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [x] FedEx Priority Overnight — Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Standard Overnight — Next business afternoon.* Saturday Delivery NOT available.

2 or 3 Business Days

- [ ] **NEW** FedEx 2Day A.M. — Second business morning.* Saturday Delivery NOT available.
- [ ] FedEx 2Day — Second business afternoon.* Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.
- [ ] FedEx Express Saver — Third business day.* Saturday Delivery NOT available.

5 Packaging • Declared value limit $500.

- [ ] FedEx Envelope*
- [ ] FedEx Pak*
- [ ] FedEx Box
- [ ] FedEx Tube
- [x] Other

6 Special Handling and Delivery Signature Options

- [ ] SATURDAY Delivery — NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express Saver.
- [ ] No Signature Required — Package may be left without obtaining a signature for delivery.
- [ ] Direct Signature — Someone at recipient's address may sign for delivery. *Fee applies.*
- [ ] Indirect Signature — If no one is available at recipient's address, someone at a neighboring address may sign for delivery. For residential deliveries only. *Fee applies.*

Does this shipment contain dangerous goods?

One box must be checked.

- [x] No
- [ ] Yes — As per attached Shipper's Declaration.
- [ ] Yes — Shipper's Declaration not required.
- [ ] Dry Ice — Dry ice, 9, UN 1845 ____ x ____ kg

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below. Obtain recip Acct. No. [ ]

- [x] Sender — Acct. No. in Section 1 will be billed.
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check

Total Packages 1 Total Weight 51 lbs. Total Declared Value† $ 100 .00 Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the current FedEx Service Guide for details.

612

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TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Signature [signature] Date 5/15/12

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Signature [signature] Date 5/15/12